AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

ELECTRICITY COMPETITION—Volume 1

HEARINGS

BEFORE THE

SUBCOMMITTEE ON ENERGY AND POWER

OF THE

COMMITTEE ON COMMERCE
HOUSE OF REPRESENTATIVES

ONE HUNDRED SIXTH CONGRESS

FIRST SESSION

MARCH 18, 1999—EVOLVING FEDERAL AND STATE ROLES
APRIL 22, 1999—RELIABILITY AND TRANSMISSION IN COMPETITIVE ELECTRICITY MARKETS
MAY 6, 1999—MARKET POWER, MERGERS, AND PUHCA

Serial No. 106–63

Printed for the use of the Committee on Commerce

U.S. GOVERNMENT PRINTING OFFICE
55–641CC WASHINGTON : 1999

COMMITTEE ON COMMERCE

TOM BLILEY, Virginia, *Chairman*

W.J. "BILLY" TAUZIN, Louisiana
MICHAEL G. OXLEY, Ohio
MICHAEL BILIRAKIS, Florida
JOE BARTON, Texas
FRED UPTON, Michigan
CLIFF STEARNS, Florida
PAUL E. GILLMOR, Ohio
Vice Chairman
JAMES C. GREENWOOD, Pennsylvania
CHRISTOPHER COX, California
NATHAN DEAL, Georgia
STEVE LARGENT, Oklahoma
RICHARD BURR, North Carolina
BRIAN P. BILBRAY, California
ED WHITFIELD, Kentucky
GREG GANSKE, Iowa
CHARLIE NORWOOD, Georgia
TOM A. COBURN, Oklahoma
RICK LAZIO, New York
BARBARA CUBIN, Wyoming
JAMES E. ROGAN, California
JOHN SHIMKUS, Illinois

JOHN D. DINGELL, Michigan
HENRY A. WAXMAN, California
EDWARD J. MARKEY, Massachusetts
RALPH M. HALL, Texas
RICK BOUCHER, Virginia
EDOLPHUS TOWNS, New York
FRANK PALLONE, Jr., New Jersey
SHERROD BROWN, Ohio
BART GORDON, Tennessee
PETER DEUTSCH, Florida
BOBBY L. RUSH, Illinois
ANNA G. ESHOO, California
RON KLINK, Pennsylvania
BART STUPAK, Michigan
ELIOT L. ENGEL, New York
THOMAS C. SAWYER, Ohio
ALBERT R. WYNN, Maryland
GENE GREEN, Texas
KAREN McCARTHY, Missouri
TED STRICKLAND, Ohio
DIANA DeGETTE, Colorado
THOMAS M. BARRETT, Wisconsin
BILL LUTHER, Minnesota
LOIS CAPPS, California

JAMES E. DERDERIAN, *Chief of Staff*
JAMES D. BARNETTE, *General Counsel*
REID P.F. STUNTZ, *Minority Staff Director and Chief Counsel*

SUBCOMMITTEE ON ENERGY AND POWER

JOE BARTON, Texas, *Chairman*

MICHAEL BILIRAKIS, Florida
CLIFF STEARNS, Florida
Vice Chairman
STEVE LARGENT, Oklahoma
RICHARD BURR, North Carolina
ED WHITFIELD, Kentucky
CHARLIE NORWOOD, Georgia
TOM A. COBURN, Oklahoma
JAMES E. ROGAN, California
JOHN SHIMKUS, Illinois
HEATHER WILSON, New Mexico
JOHN B. SHADEGG, Arizona
CHARLES W. "CHIP" PICKERING, Mississippi
VITO FOSSELLA, New York
ED BRYANT, Tennessee
ROBERT L. EHRLICH, Jr., Maryland
TOM BLILEY, Virginia, (Ex Officio)

RALPH M. HALL, Texas
KAREN McCARTHY, Missouri
THOMAS C. SAWYER, Ohio
EDWARD J. MARKEY, Massachusetts
RICK BOUCHER, Virginia
FRANK PALLONE, Jr., New Jersey
SHERROD BROWN, Ohio
BART GORDON, Tennessee
BOBBY L. RUSH, Illinois
ALBERT R. WYNN, Maryland
TED STRICKLAND, Ohio
PETER DEUTSCH, Florida
RON KLINK, Pennsylvania
JOHN D. DINGELL, Michigan, (Ex Officio)

CONTENTS

Page

Hearings held:
- March 18, 1999 1
- April 22, 1999 149
- May 6, 1999 239

Testimony of:
- Clark, Susan F., Commissioner, Florida Public Service Commission 99
- Cordaro, Matthew, President and Ceo, Nashville Electric Service 217
- Glazer, Craig A., Chairman, Ohio Public Utility Commission 94
- Gordon, Kenneth, Senior Vice President, National Economic Research Associates 355
- Hoecker, Hon. James J., Chairman, Federal Energy Regulatory Commission 160
- Hunt, Hon. Isaac C., Jr., Commissioner, Securities and Exchange Commission 270
- Iannucci, Joseph, Distributed Utility Associates 212
- Kahn, Joshua A., Kahn Mechanical Contractors 342
- Kanner, Marty, Coalition Coordinator, Consumers for Fair Competition 335
- King, Chris, Chief Executive Officer, Utility.com 312
- Kurtz, Michael L., General Manager, Gainesville Regional Utilities 320
- McCoy, Paul D., Senior Vice President, Commonwealth Edison 187
- Melamed, A. Douglas, Principal Deputy Attorney General, Antitrust Division, Department of Justice 254
- Moler, Elizabeth Anne, Vinson & Elkins 18
- Naeve, Clifford M., Skadden, Arps, Slate, Meagher and Flom 37
- Nevius, David R., Vice President, North American Electric Reliability Council, Princeton Forrestal Village 200
- Persico, Vincent A., Co-Chair, Special Committee on Electric Utility Deregulation, Illinois General Assembly 81
- Quain, John M., Chairman, Pennsylvania Public Utility Commission 90
- Rogers, James E., Vice Chairman, President and Chief Executive Officer, Cinergy Corporation 306
- Rose, Kenneth, Senior Institute Economist, National Regulatory Institute 347
- Schmidt, Fred, Chief of Bureau of Consumer Protection, Office of Attorney General, State of Nevada 182
- Smith, Douglas W., General Counsel, Federal Energy Regulatory Commission 276
- Smith, Marsha H., Commissioner, Idaho Public Utility Commission 105
- Stalon, Charles G., Cape Girardeau, Missouri 31
- Stuntz, Linda G., Stuntz, Davis & Staffier 24
- Szwed, Stanley F., Vice President, Transmission, First Energy 190
- Thompson, Hon. Mozelle W., Commissioner, Federal Trade Commission 261
- Tighe, Mary Elizabeth, Vice President, Statoil Energy, Inc 329
- Utter, Trudy, Vice President and General Manager, Tenaska Power Services Company 196
- Yurek, Gregory J., President and CEO, American Superconductor Corporation 205

Material submitted for the record by:
- American Public Power Association, prepared statement of 147
- Edwards, T. Graham, Chairman, Large Public Power Council, letter dated November 23, 1999, enclosing response for the record 499
- Farmer, Richard M., prepared statement on behalf of the SEC Roundtable Group 393
- Hoecker, Hon. James J., Chairman, Federal Energy Regulatory Commission, letter dated June 11, 1999, to Hon. John D. Dingell, enclosing response for the record 231
- Nevius, David R., Vice President, North American Electric Reliability Council, Princeton Forrestal Village:
  - Letter dated September 2, 1999, enclosing response for the record 422
  - Response to questions of Hon. John D. Dingell 490
- Repeal PUHCA Now! Coalition, prepared statement of 385
- Szwed, Stanley F., Vice President, Transmission, First Energy, letter dated September 3, 1999, enclosing response for the record 493

EVOLVING FEDERAL AND STATE ROLES

THURSDAY, MARCH 18, 1999

HOUSE OF REPRESENTATIVES,
COMMITTEE ON COMMERCE,
SUBCOMMITTEE ON ENERGY AND POWER,
Washington, DC.

The subcommittee met, pursuant to notice, at 11:06 a.m., in room 2123, Rayburn House Office Building, Hon. Joe Barton (chairman) presiding.

Members present: Representatives Barton, Tauzin, Bilirakis, Stearns, Largent, Burr, Whitfield, Norwood, Rogan, Shimkus, Wilson, Shadegg, Pickering, Fossella, Bryant, Ehrlich, Bliley (ex officio), Hall, McCarthy, Sawyer, Pallone, Wynn, and Strickland.

Also Present: Representative Barrett.

Staff present: Catherine Van Way, majority counsel; Joe Kelliher, majority counsel; Donn Salvosa, legislative clerk; Sue D. Sheridan, minority counsel; Rick S. Kessler, minority professional staff member

Mr. BARTON. The Subcommittee of Energy and Power of the Energy and Commerce Committee will come to order.

We know that there are still individuals who are trying to get into the room, and we would hope that that process would continue in an orderly fashion. We are about 7 minutes past the scheduled start time. A quorum is present. We wish to begin.

Today's hearing is entitled Electricity Competition: The Evolving Role Between the Federal and State Governments. Today, the Subcommittee on Energy and Power is holding the first of a series of hearings on electricity restructuring. It is very important that the subcommittee hear from the witnesses that we are going to hear from today. I personally believe that market competition is coming, and I personally believe that that is a good thing.

Today's hearing will focus on the Federal and States regulatory role. It will review whether the dramatic changes that have been occurring in the States and within the industry require changes to Federal law, and if so, it will consider what elements perhaps should be included in any Federal legislative changes.

Dramatic changes have occurred since the subcommittee first began considering electricity deregulation legislation in 1995. Since that time, 18 Statesn, with 45 percent of the country's population, have decided to open their retail markets. Another 12 States, with 23 percent of the population, including my home State of Texas, are going down that road. Just yesterday, the Texas Senate passed, in a bipartisan and overwhelming fashion, a comprehensive bill to deregulate the electricity markets in the great State of Texas.

If all 12 of the States that are considering legislation open their markets this year, 68 percent of the national retail market will be opened. Given the competition among States for economic development and jobs, that figure can only grow. I personally believe that this activity is due, in large part, to the hard work in the past of full committee Chairman Bliley and former subcommittee Chairman Dan Schaeffer of Colorado along with ranking member Ralph Hall. They set the ball in motion 4 years ago, and I doubt that anyone in this room had any idea so much change could occur so rapidly in such a short amount of time.

We hope to examine the effects of those changes between the States and the Federal Government today. There is substantial consensus on how to approach some of the core Federal issues. I hope consensus can be reached on other issues in the hearings in the coming weeks ahead. I plan to work closely with my good friend Ralph Hall and all other subcommittee members to forge a bipartisan agreement on the elements of electricity legislation. I intend to draft, at the conclusion of these hearings, if there is consensus, a comprehensive bill to open the United States' electrical generation and transmission system to true open market competition.

Today, we have two distinguished panels of witnesses. Our first panel is composed of experts who were Federal electric policymakers earlier in their professional careers. We will hear from a former FERC chairman; a former Department of Energy deputy secretary; another Department of Energy deputy secretary; and two other former FERC commissioners. One of our witnesses led the Bush Administration's National Energy Strategy, which resulted in the Energy Policy Act of 1992. Another developed the FERC's open access policy and led the Clinton Administration's development of comprehensive electricity legislation.

These witnesses have decades of experience in electricity policy matters. Their testimony will help the subcommittee focus on the core Federal issues that can only be addressed by the U.S. Congress.

Our second panel is composed of prominent State regulators and legislators, who represent a wide range of views on electricity restructuring. Some of the witnesses come from States that have opened their markets; one comes from a State that is grappling with the question of whether or not to open its retail market, and still others come from States who want to continue to rely on regulation rather than on competition.

This panel, the second panel, will help the subcommittee learn how the States have been changing their emphasis, and they will help us to determine which issues the States are in the best position to address. Today's hearing is the start of a serious evaluation of the prospects for enacting comprehensive legislation opening our power generation and transmission to real market competition. The witnesses' testimony and their answers to the numerous questions of the subcommittee members will determine if the time is right for Federal legislation in this area.

I am hopeful—and yes, I am optimistic—that the answer is yes. I look forward to hearing the testimony of the witnesses. With that, I would welcome an opening statement from my distinguished ranking member, Mr. Hall.

Mr. HALL. Mr. Chairman, I thank you for convening the hearing here today and for the very cooperative effort and thrust that you have extended. I think this is our first hearing in about 18 months. I know you and I have had other hearings and private hearings and discussions, and we have even been out of State to visit with groups. You have been very kind and generous with your time, and I think you are a great chairman. We have nine other new members of the subcommittee who were not exposed to the education that we received during the hearings in the last Congress, so profound changes in utility regulation are continuing to take place in the States and at the Federal level since this subcommittee last met on this issue. We need to update ourselves, I think, on all that has happened since then, and that means that it is going to have to be a working committee, and you have certainly indicated your willingness to give us that leadership.

Let me give you an example from the table of contents of one of the major trade publications out last week. The headings read, and I quote, Texas bill modified with new stranded cost provisions; Arkansas lawmakers schedule vote on reform legislation; deregulation bill passes New Mexico Senate, may raise environmental concerns; Maryland legislators and counties at odds over deregulated tax provisions; and finally, Virginia Legislature passes reform plan; Governor expected to sign. Mr. Chairman, you have relayed the actions of the Texas Senate as of yesterday, and I liked the way you put it. Mr. Pallone questioned the way you put it. You entitled it the great State of Texas, and he wondered why we always put the great State of Texas, and I must take a half a minute to tell him about one of the real Texas heroes, Ensign Gay of Torpedo Squadron 8, who was the sole survivor of the Battle of Midway. The Battle of Midway won the war in the Pacific.

Ensign Gay was from Texas, but he always said do not ever ask anybody if they are from Texas, because if they are, they will tell you.

And if they are not, there is not any reason to embarrass them.

But Mr. Pallone is a good member of this committee and would make a good Texan, and we certainly would take him anytime.

Mr. BARTON. He is an honorary Texan just by being here today.

Mr. HALL. Right.

With nearly half the States having already gone forward on restructuring and others, obviously, in the pipeline, I think it is clear that the States are willing and able to move forward. A lot of credit should go to our former Chairman, Dan Schaeffer, for building the fire that set these State activities in motion, and it seems to me that we should now shift our focus away from the States and concentrate maybe more on what needs to be done within our current jurisdiction over electricity at the Federal level to facilitate rather than to interfere with whatever decisions the States are going to make.

In our early discussions, I think you set the right approach for these hearings by posing this question: is there a need for Federal electric restructuring legislation, and if so, what should it contain? I do not know how you could cover it any better than that. I heartily agree that these hearings should go forward and with that premise, as we gather the facts, and by conducting thorough and

objective hearings, we will determine whether there is member sentiment now to move the legislation and the direction we move it and how we move it.

I agree with another of your earlier statements to the effect that if there is to be legislation, we want it to be a member-driven bill. I must also say, though, that other than being a member-driven bill, we need the input of these good people who are testifying before us here today and both of the groups that will be testifying. We need the input of the men and women of industry, whom we are going to have to make this go once we put it onto the books of this country.

We want a business decision—I do, and I think the chairman does and most of us do—rather than a Congressional decision, and we will get that by having these hearings, having this testimony, having you all work together to bring us some decisions that we can put into the act and pass.

To your goals and objectives, I would add that in all of our deliberations, it is kind of silly almost to say this, but we need to be fair. You know, fairness needs to enter into it. I never saw anything that I did not really believe could be deregulated. I am sorry for what happened to the airlines, and I think greed caused a lot of that not to go exactly the way we wanted it to, but I believe in deregulating. If we are fair to the customers of investor-owned cooperative and public power systems, fair to the utility stockholders and citizens of public power systems in their capacity as owners and the owner-members of the rural electric cooperatives and fair to all of their employees, fairness is something that as a chairman, I know that has been your goal and the golden rule that you have followed since you have been chairman and since you have been on the committee.

We just need to be fair to the new entrants in the utility business, the non-utility generators; the marketers of electric power and those who are promoting the new technologies. It is these new entrants who create the promise of more efficient markets and lower electric costs to our constituents; that must be our goal. Fundamental fairness will require a delicate balancing of interests and ensure a good outcome. If we adhere to these goals and objectives, Mr. Chairman, I believe that if we choose to do a bill, it will be one we can all be proud of.

So today, we embark on an effort to find the answers to those questions with a slate of witnesses who know more about the intricacies of these issues than any of us will ever know or probably will want to know or be able to know. The first panel consists of men and women who have had distinguished careers in public service and have learned and dealt with the public policy issues of electricity from inside the government and are now in the private sector. So that gives them two views of it.

The second panel, with one exception, is made up of State regulators, people who are on the front lines in this ongoing debate of whether to restructure the electric utilities. These two panels will give us different perspectives of utility restructuring. For those of us who have participated in the hearings of the last Congress, we will be listening carefully to understand better the changes that have occurred since this subcommittee last dealt with this issue.

For those members new to the committee, I hope the witnesses will help you to understand better the tough and difficult questions that are raised in utility restructuring at the Federal level.

Before I close, let me say a word to the first panel. In asking you to share your expertise, we are kind of putting you in an awkward position in some ways. You have client interests, many who have strongly held opinions about the content of restructuring legislation. It is extraordinarily difficult to find individuals of your character who are not already employed or retained by someone with an issue in this case to come and share your opinions with us today. We invited you here—the chairman invited you here—not as advocates but to help the committee learn. You are men and women of the highest integrity, and I know that you will do your best job you can, and for that, you have my deepest appreciation.

Mr. Chairman, with that, let me yield back the balance of my time and thank you for this beginning today on a rough and rocky road but a very important road that can lead to lower rates for all the people all across this country.

I yield back my time.

Mr. BARTON. Thank you.

Some of you may know that Congressman Hall has been a little under the weather lately, but I can tell that he is getting back on his feet. That is the longest opening statement he has made in about a month.

Mr. HALL. I yielded back my time.

Mr. BARTON. He is feeling better.

The Chair would recognize the distinguished full committee chairman, the Honorable Tom Bliley of Virginia for an opening statement.

Chairman BLILEY. Thank you, Mr. Chairman, and thank you for holding this timely hearing on electric utility restructuring. I believe this is the Congress when we will pass a customer choice bill, so it is important that we begin examining this issue early. Make sure there is no doubt about where I am coming from. I will state up front that I believe retail competition in electricity markets is good.

Through competition, consumers see lower prices, better service and greater investment and innovation in technology. I further believe all consumers should be given the ability to choose their own power companies, regardless of the size of the consumer or who they are served by today. I also believe that they should be given that choice sooner rather than later. The energy marketplace has evolved a great deal since the Energy Policy Act of 1992, and consumers have benefited from those changes. However, it will not be able to continue to evolve, and consumers will continue to be denied benefits, as long as Federal and State laws are standing in the way.

Since the Commerce Committee first began its consideration of electric utility restructuring in 1995, those who are fearful of competition have worked hard to try to stop it or slow it down. These forces have argued that there are no benefits from retail competition and that we are moving too fast. Well, since we have been working on this for 5 years now, we can hardly be accused of mov-

ing too fast, and the fact that retail competition benefits consumers and lowers prices has been shown over and over again.

The Department of Energy said last year competition would save consumers $20 billion per year; others have estimated more. More importantly, this is not merely theory but reality. Consumers who have choice, in States like Pennsylvania and California, are already saving money with even greater savings likely when each of those States is through the transition period. However, there are still those who oppose Federal action, and I am sure they will come up with lots of new reasons why we should not move this year. To them, I say what are you waiting for? Retail competition is inevitable. Rather than continuing to fight, it is time for everyone to end the rhetoric, roll up their sleeves and get to work on passing a plan which will benefit all Americans.

I want to hear people's concerns and make sure we get it right, but I do not think there is any concern so great or difficult that it should keep us from moving forward. Now is the time to act; I look forward to hearing the testimony of the witnesses, and I thank you, Mr. Chairman, for yielding me the time.

Mr. BARTON. We thank the distinguished chairman. We would recognize the distinguished gentleman from New Jersey, Mr. Pallone, for an opening statement.

Mr. PALLONE. Thank you, Mr. Chairman.

Since my good friend Mr. Hall started talking about the great State of Texas, I have to tell a little story. It has taken me awhile, Ralph, to get to the point where I understand this Texas phenomenon, but I was thinking when you mentioned that about when I was first elected or a couple years after I was elected. Greg Laughlin was here then, and he had just had a child, or his wife had just had a child, and I was just having my first child, and he was horrified because I told him that my daughter was going to be born in Washington, at Columbia Hospital, and he, like, looked at me horrified, and he said you cannot do that; you cannot do that. You have to put your wife on a plane and bring her back to the State of New Jersey, because, you know, I could never have a child who was not born in the State of Texas; it is absolutely necessary that you get her on this plane.

And I tried to explain to him that it did not matter.

Mr. BARTON. What is funny about that?

Mr. PALLONE. I think I will stop there, Mr. Chairman.

I am beginning to understand this phenomenon. It takes awhile.

Anyway, I just wanted to thank the chairman and the ranking member for holding this hearing, and I was pleased to see the chairman mention that this was the first in a series of hearings on this topic, because I think it is important to have several hearings this Congress on the issue of electricity restructuring.

And let me also say, to emphasize, if I could, the care with which we need to consider the issues before us. Americans spend about $220 billion each year on electricity. Thus, decisions Congress makes with respect to electric industry restructuring will affect the lives of all Americans and must be made with attention to potential impacts on industry and consumers alike.

Electric industry restructuring has the potential to deliver real benefits to our economy and to our citizens in the form of lower

costs, better technologies, more choice and new products and services, and we also can help our basic industries better compete in global markets. There are, however, Mr. Chairman, some difficult public policy issues involved in how this potential is realized, and the basic tenets that I feel that I bring to the restructuring debate focus on environmental and consumer protection. We must ensure that any and all decisions we make with respect to restructuring at the Federal level do not require consumers to choose between cheaper energy and a degraded environment, and no consumer, whether a resident of an inner city or a rural township, should be disenfranchised.

Along those same lines, all utility workers and share owners should be treated equitably; further, all consumers deserve full disclosure from energy providers about the price, source and environmental content of the energy products and services that they are purchasing.

I wanted to talk a little bit about my home State of New Jersey, which recently enacted legislation that will deregulate the electric market. All residents in New Jersey will be able to choose their electricity suppliers by August 1 of this year, and the New Jersey legislation requires the State utilities to cut rates by 10 percent over a 3-year transition period and directs the State Board of Public Utilities to set shopping credits that are designed to encourage competition and allow for greater consumer savings.

I hope that our witnesses will provide their perspective on the effectiveness of mandating price cuts and whether the anticipated benefits outweigh the associated costs. The New Jersey plan also provides for stranded cost recovery; maintains a social safety net through a societal benefits charge; and recognizes the nexus between the electric power industry and the environment through a renewable energy mandate and environmental disclosure rules for energy providers. But I have to say that, in my opinion, New Jersey's law does not go far enough to protect the environment and consumers and, for these reasons, as long as the Federal Government continues to attempt to address restructuring, it must, as part of its consideration, provide some national measures to protect the health, welfare and environment of the entire Nation.

We also must determine the most effective and appropriate methods for ensuring national reliability as well as equitable transmission provisions and, at the same time, we must, of course, ensure that we do not undo the progress that States have made. In the last Congress, I introduced legislation aimed at implementing uniform environmental standards that would apply to all electric generators, regardless of where they are located, and I was very pleased that every member of the New Jersey House delegation, both the Democrats and Republicans, cosponsored this bill, H.R. 2909, and that the bill attracted more cosponsors and bipartisan support than any other electric industry restructuring legislation.

And I think this support reflects the concerns of constituents and electric consumers everywhere. Consumers want to realize the economic benefits of electric industry competition but not at the expense of being exposed to dirtier air or living with a system that translates weak, unfair environmental standards and the ability to pollute into a competitive advantage.

Now, I am going to be reintroducing an updated version of this legislation during this Congress. In addition to uniform environmental standards for all utilities nationwide, the bill will include tough, meaningful and enforceable disclosure provisions, a kind of truth-in-labelling law for electric energy, among other provisions.

We will hear today from representatives of the States from different regions of the country who have different priorities. Individual States clearly have the right and responsibility to establish their own game plans for introducing energy competition, and I want to hear from States that believe they need our help as to what kind of assistance they would need from the Federal Government and which, if any, of the legislative proposals that have been introduced might serve as a vehicle for addressing their concerns.

And finally, if I could say, as more and more States move toward competition, it seems to me that the Federal Government should examine whether and work to ensure that competition is fair; reliability is maintained; and the rules include environmental standards. I am looking forward to the witnesses today, and I hope that they will clarify the capacity in which they are speaking before our subcommittee and the perspectives they bring.

I strongly believe that we have a responsibility to adequately represent the public interest, and I certainly hope my concerns will be heeded in determining appropriate witnesses for future hearings. I think you know, Mr. Chairman, that there was some concern today that the environmental and consumer protection interests were not represented on the panel, and I do not want to dwell on that, but I hope that in future hearings that we will make sure that we do include them.

Mr. BARTON. Well, I thank the gentleman from New Jersey, and we will certainly guarantee that this is not the only hearing, and we will let you suggest witnesses, and I am almost certain we will put them before the subcommittee. So we want a comprehensive set of hearings, and that means all interests must be heard from.

The Chair wants to gently remind members who have not yet made an opening statement that technically, they are supposed to be 3 minutes or less. We are not going to hold you to that today, because this is a very serious hearing issue that we are undertaking, so we want to give every member an opportunity to have their full views, but it would be nice if they could generally come within the 3 to 4 minute period.

With that, we want to hear from the gentleman from the gorgeous State of Georgia. It will take him 3 minutes to say hello probably. Mr. Norwood.

Mr. NORWOOD. You are right, Mr. Chairman, but thank you, however, for giving me some time. I am honored to be on your subcommittee, and I am pleased that you are having these hearings. It is going to be a pleasure to serve with you as we try to solve these problems. I guess I would like to associate myself with your opening remarks, where you said I personally think market competition is coming; and then, you went on to say I personally think that is a good thing, and I certainly do agree with you, other than to say that competition is here; it is not just coming, and that is one of the reasons that the great State of Georgia has a 21 percent

rate less than the national average, because we are already dealing with competition.

And then, I would like to associate myself with the remarks of my friend Mr. Hall. He pointed out numerous times that any final bill that we had had to be fair, and I want to just say up front any final bill where we use a one-size-fits-all situation that tends to lower the electric rates in New Jersey at the expense of raising the electric rates in Georgia will not fall under the heading of fair, and it will tend to make me real pillish on this subject, and I hope we do not get into a situation like that.

Last, I want to associate my remarks with the chairman of the full committee, Mr. Bliley. Mr. Bliley said that he thought every American should be able to choose his own power company, and I agree with him, and I believe he wants to do that because it promotes competition, and I am glad to hear him come out with that. That actually promotes what the whole Commerce Committee is about. We are promoting choice in the Energy and Power Subcommittee, Mr. Chairman, but over in the Health and Environment Subcommittee, we are promoting choice there, saying that actually, every American ought to be able to choose his own doctor, and I am sure that if they want to choose their power companies, he is going to agree with me that they would probably want to be able to at least choose their own doctors as well.

So the Commerce Committee is moving in the right direction, Mr. Chairman. Let me thank the panel witnesses for being here and taking their time. I know they are busy, and their input, clearly, on electricity deregulation is going to be appreciated by all of us. They are experts in the area, and we need to hear from them.

Now, what is expected to be a series of hearings, I am sort of pleased that we are hearing the States' perspective first. In my view, that is the most important perspective. Like on so many issues of national concerns, the States have already taken the lead on electricity deregulation, and that is certainly, in my view, how it ought to be. Whenever we, in Congress, try to fix something from up here, whether it is educating our children or policing the streets or deregulating the electric utility industry, we tend to drift, and we drift always, it seems to me, toward a one-size-fits-all solution, and I fear greatly that that is not going to work real well for electricity restructuring.

Certainly, the approach that California wishes to pursue is not necessarily the best approach for Georgia, where, again, I repeat that our rates are 21 percent below the national average. The point is that at least 18 States are now in the process of opening up their electricity markets to competition at their own pace. The consequences of that, both good and bad, are now becoming evident, and States are able to make judgments as they see fit. With Federal mandates on timelines and other restrictions, this experimentation would not at all be possible. I also strongly believe that a date certain on implementation amounts to a Federal mandate on the States.

When it comes to retail competition, the best thing that we can do at the Federal level, generally, is to stay out of the States' way. Of course, there are things that we can and should do at the Federal level. Even the Securities and Exchange Commission agrees

that PUHCA should be repealed, and PURPA is a Jimmy Carter-era liberal nightmare that, frankly, never should have been put into place the first time.

We also need to find a way to help the utilities to recover stranded costs, and we need to clarify exactly what is Federal and what is State jurisdiction, but the Federal involvement should be focused and should be limited.

Now, Mr. Chairman, these are very important issues. They need to be addressed. I am excited about the possibility that we are going to do this under your leadership, and I thank you once again for having this hearing and the many others I know you will have in the future. Thank you, Mr. Chairman, for that extra minute.

Mr. BARTON. Thank you for that soft-spoken, moderate statement, Mr. Norwood.

Mr. HALL. Mr. Chairman, if I have any time left, could I yield it to the gentleman from Georgia?

Mr. BARTON. I think the gentleman from California, Mr. Rogan, has an inquiry of the Chair.

Mr. ROGAN. Thank you, Mr. Chairman.

In that I have another hearing that I must run off to, in the event that I am unable to return during the base of opening statements, may I have unanimous consent from this committee to allow my opening statement to be submitted for the record?

Mr. BARTON. Without objection, so ordered.

Mr. ROGAN. Thank you, Mr. Chairman.

[The prepared statement of Hon. James E. Rogan follows:]

PREPARED STATEMENT OF HON. JAMES E. ROGAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

I thank the Chairman for holding this hearing on electricity restructuring, which is one in a series of such hearings. I trust we will have a constructive dialogue today and throughout this process on how to protect and enhance a free market system in our nation's electricity industry.

Mr. Chairman, I join you in your desire to see changes in our electricity industry makeup. The federal government should seek greater competition and increased opportunities for families and businesses to save on their electricity bills. Only by breaking the barriers established by our current system can our electricity industry keep up with the market and technological changes expected in the 21st century.

For some time, I have worked to see this goal realized, and protected, in California. Just a few short years ago, California's electricity industry suffered with rates that were 50 percent higher than the national average. Entrepreneurs and businesses were fleeing the state. Further, efforts to protect our state's environment were suffering due to uncertainty about the timing and structure of competition in electricity markets.

California is ahead of Washington on many issues, and our progress in creating a competitive electricity market is no exception. In 1996, as Majority Leader of the California State Assembly, I worked to pass AB 1890.

This bill established a four-year changeover period in California's electricity industry. It was intended to protect the reliability of electric services and the interests of large and small consumers. Further, it was designed to enhance the ability of market participants to transition into the new market in a way that would keep rates consistent. I note for the record that AB 1890 passed both houses of the California Legislature with no dissenting votes.

In two weeks, Mr. Chairman, we will celebrate the one-year anniversary of my state's shift from the monopolistic electricity industry of old to an open competitive market. And one year later, I am pleased to report that the shift is working well. Electricity customers have reliable and innovative options of service. We have taken steps to protect our environment, and we are moving into the competitive market phase.

Businesses are returning to California to reap the benefits of a competitive electricity market. Large and small consumers have access to competitively-priced elec-

tricity rates. In addition, all consumers have the ability to monitor the price of power. Residential and small consumers are enjoying a ten percent decrease in rates, and even greater savings are projected when the transition is completed in the year 2002.

In California, and in 17 other states, large investments have been made in an effort to create a new, competitive electricity market. As we have seen in California, the dividends from these investments are being realized by our families, businesses, and environment. I am sure my colleagues from other states can attest to similar results.

Mr. Chairman, it is my hope that the success of California's electricity restructuring legislation serves as inspiration to those states who have not yet embraced this concept. The entire nation should be afforded the same benefits. However, as we work to craft federal legislation to this end, it is key that we not undo the progress made in California and other states. Let us not punish those progressive states who have seen the future and responded to it.

Mr. Chairman, as we embark down the road of providing all Americans a competitive electricity market, I urge that we work together to protect the great strides California has made through state law.

I thank the Chairman.

Mr. BARTON. The Chair would recognize the gentleman from Ohio, the Honorable Tom Sawyer, for a statement.

Mr. SAWYER. Thank you, Mr. Chairman.

I notice that a number of our membere s are feeling better this morning.

Mr. BARTON. That is true; very true.

Mr. SAWYER. I am going to be brief. I just want to thank you for beginning this series of hearings. I absolutely agree with virtually all of my colleagues in recognizing the importance of those hearings and the work that we are undertaking here.

In no small way, what we are really doing is to ask ourselves to deal with an enormously complex mix of policy and practice and law and regulation that has evolved in 50 different States and nationally across this country for the entire century of the electric industry. That evolution that has brought us to the current juncture has yielded the most reliable, universal, accessible electric industry in the world, and it did not happen by accident, and I would submit that it did not happen through a series of bad business decisions that leave us, today, at an untenable juncture but, rather, that were brought to where we are today as much as anything because of the enormous change that has taken place within the electric industry and the change in technology that has made it possible for this to happen.

In short, restructuring is happening today not because it must but, for the first time, because it can. I absolutely agree that this enormous diversity and mix of generating capacity and distribution and transmission across this country does not lend itself to one size fits all, but it all has to be done within a national framework that makes it possible, for the first time, for what used to be specific State jurisdictions and even specific service territories to operate together in a way that benefits industrial and residential and commercial consumers; but more than that, not just the consumers but the fabric of the economy of which electricity is such an important part: the communities and the regions that are the kind of economic beneficiaries that Mr. Norwood spoke of in his statement.

In short, I think what it really comes down to is what the chairman of the full committee said, and that is our first obligation is

not only to do it within a foreseeable period of time but to do it well and to take care to get it right. It is our first obligation.

With that, Mr. Chairman, I thank you again for this hearing and yield back the balance of my time.

Mr. BARTON. We thank the gentleman from Ohio.

We would now like to recognize the lady from the Land of Enchantment, the great State of New Mexico, the Honorable Heather Wilson, for an opening statement.

Ms. WILSON. Thank you, Mr. Chairman.

I am looking forward to this hearing and particularly the issue of the interrelationship between Federal legislation and what the States are already doing in leading the way with respect to State deregulation and how, in an environment of competition, this will change those State and Federal roles with respect to things like reliability; what are the standards for entering into the grid; reciprocity with respect to States that are deregulated or are not deregulated and may have companies who are selling power to other States, which is clearly an interstate commerce issue and also the question of access to reliable, low-cost power for all customers and consumers.

We talk about the great benefits of competition, and I, too, believe there are tremendous benefits to competition. We also need to make sure that people have access to those benefits. It is great if we can get reliable, low-cost power to manufacturers, but if you cannot get power in Truth or Consequences, New Mexico at a low-cost rate or even a high cost rate, then we have not served the citizens that we were elected to serve. So all of these things require thought and balance, and I am looking forward to hearing the testimony today.

Thank you.

Mr. BARTON. Thank you.

We would now like to hear from the gentleman from the Volunteer State, Mr. Bryant of Tennessee.

Did Mr. Bryant leave? He volunteered to leave, did he not?

I think it is time to go to the Sooner State of Oklahoma, then, and hear from Mr. Largent.

Mr. LARGENT. Thank you, Mr. Chairman.

I will submit my entire statement for the record and just make a few brief remarks. This is a big issue. Close to $250 billion a year is spent on electricity, and it is going to be hard; I do not think there is any question about that. The old saying, though, is that anything worth having is worth working for, and I think creating a competitive market in the retail electric industry is worth working for, and I can tell you that as a professional athlete, my foot speed was often referred to as glacial, and the electric deregulation bill has moved at glacial speed over the last Congress, but I sense that it is roiling to a slow boil in this Congress, and I look forward to working in a bipartisan manner on this issue.

We have been in an effort to meet with all of the members on this subcommittee, Democrat and Republican alike, to develop a member-driven bill on electricity deregulation and have met with a very positive and favorable response from members on both sides of the aisle. You have heard a lot about competition already in the opening statements, and I think I know just a little bit about com-

petition. We talk a lot about competition driving prices down and creating better service and more choice, more opportunities, more technological advances, and I believe all of that will happen in the electric industry.

In fact, one of the things and buzzwords that you heard in telcom deregulation that you are now hearing in electricity is about creating the level playing field, and I know just a little bit about playing on a level playing field, because I, in fact, for 14 years, played on a perfectly level playing field, and there are tremendous benefits in doing that, and I think that that is a worthy goal as we talk about moving to a competitive field in the electric industry.

This is an issue that is going to be great for all Americans, regardless of their party stripe or where they live, and I think that the effort has to be made at the Federal level. I think that it is great that the States are continuing to move forward. But what would have happened if we had moved forward in a piecemeal fashion on the airline deregulation or telcom deregulation, where we deregulated long distance calls or airline prices one State at a time? It is absolutely untenable and not defensible at all.

And so I think it is important that here at this hearing, we have an opportunity to discuss what role the Federal Government plays in moving toward a restructured market. And with that, Mr. Chairman, I would just say, again, thanks for the opportunity to be here, and I look forward to this hearing.

[The prepared statement of Hon. Steve Largent follows:]

PREPARED STATEMENT OF HON. STEVE LARGENT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OKLAHOMA

Mr. Chairman, I want to thank you for holding the first in a number of hearings on electricity restructuring. Bringing retail competition to every American is one of the most exciting and substantial courses of action we can take to impact peoples lives for the better.

I believe that kicking things off with a discussion of what the state's are already doing to bring competition to their customers is a good way to open the debate. However, it is just as important to recognize that a number of substantial issues exist over which states simply do not have jurisdiction. Inevitably, the debate will be centered around those issues in which both the federal government and the states share jurisdiction and how those issues are resolved. These broad questions of jurisdiction are among those I am sure our panelists will make clearer in their testimony today.

As complex as the issue of restructuring can be, I am glad that in my discussions with all the members of the subcommittee I have found that partisanship does not appear to be among the challenges we will face. We may share different views on restructuring given where we are geographically, but not based on where we fall on the political spectrum. Any debate focused on resolving policy differences, and not exacting political pain, is a debate that can result in changes that make America a better place.

While I am very excited about restructuring and optimistic about our chances for success this Congress, I understand that there are those who oppose allowing monopolies to compete and customers to choose who they buy their electricity from. We all remember making calls to Grandma on a black rotary phone for $1 a minute and paying 3 times more to fly to go see her over Christmas. Competition has given us cellular phones (with clearer connections) for 10 cents a minute and all kinds of supersaver airline rates for you to choose from. These are exactly the type of innovations and cost savings we have to look forward to from deregulating our electricity monopolies.

Removing the federal restrictions and making other changes necessary to allow states to continue to move toward competition will not be easy. It can be like a Rubik's Cube sometimes with all the competing issues and constituencies, but there are not many things in this world worthwhile doing that come easy. I am committed to doing everything in my power to help the Chairman get this done, and get it done

right. I look forward to hearing from our distinguished panelists as to how we may get it done and get it done right. Thank you, Mr. Chairman.

Mr. BARTON. Good; we certainly plan on the all-NFL Hall of Famer going deep numerous times as these hearings progress.

We would like to hear from the all-star third baseman from the Congressional baseball team from the State of more Miss Americas than any other State in the Union, the great State of Mississippi, Mr. Pickering.

Mr. PICKERING. Mr. Chairman, after that introduction, I do not know if I should say anything else, but when Texas and Mississippi align together, we can do great things.

I do want to commend the chairman for having this hearing but also for the approach that he is taking on this issue, an open process where everyone has a seat at the table, getting all of the industry representatives, consumers as well as, on a bipartisan basis, all members involved. I look forward to listening to all of the panels today and working through that open process to reach the consensus necessary to pass legislation to get to the eventual objective of competition and choice but to do it in a way that maximizes State flexibility and the role there as well as to address the issues that we must solve as we move forward, removing the barriers; conforming Federal policy where necessary; and getting to the end objective of competition and choice, lower price and eventual legislation.

I thank the chairman again.

Mr. BARTON. We thank Mr. Pickering.

We would like to hear from the last person in the Congressional All-Star Game to actually hit a home run, the catcher, from the fighting State of the Illini, Mr. Shimkus of Illinois.

Mr. SHIMKUS. Thank you, Mr. Chairman.

I, too, would like to submit my full text for the record and just want to say we have had numerous hearings on this in the last Congress, and, you know, I hope we have many hearings this Congress but not nearly as many as we had in the last Congress.

And I really wanted to welcome State Representative Vince Persico, who is going to be on the second panel, and encourage my colleagues to hear his whole statement and stay around for questions. Illinois has moved, and it is a process that I think people will want to hear about how Illinois addressed this issue, and it may be a guideline from which to move State-by-State and also, eventually, find the areas in which the Federal Government needs to move in that area.

I will also question other panelists on the price spikes of last year in the Midwest and ask some questions on how, maybe, Federal regulation could avert another similar activity as what we saw last year.

Again, I would like to thank Representative Persico for traveling all the way from Illinois, and I yield back the balance of my time.

[The prepared statement of Hon. John Shimkus follows:]

PREPARED STATEMENT OF HON. JOHN SHIMKUS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Good morning Chairman Barton and to the two panels of witnesses. It is good to be here this morning. I am very interested in hearing the testimony today and learning what issues are to be governed by the States, the federal government and by both.

Before I continue, however, I want to welcome one of the panel witnesses. State Representative Vince Persico. Representative Persico serves in the Illinois General Assembly and was a key player in Illinois' efforts to restructuring its industry. His role as Co-Chairman of the Special Committee on Electric Utility Deregulation will provide our panel with much needed incite. On behalf of the Energy and Power Subcommittee, welcome Vince and thanks for flying out to DC this week.

Mr. Chairman, as I mentioned earlier, I want to learn today exactly what role the States play in restructuring and what role the federal government will play. I also understand that some roles will be shared. I know these issues are complex, but we must begin to sort it all out. I also hope that today's hearing will answer some question I have on price-spikes. As most people in this room know, last summer the Midwest experienced power shortages and price spikes that cost our utilities millions and threatened the reliable flow of electric power. I plan to explore with our witnesses today whether or not federal electricity reforms will enhance or hinder the chances for price spikes and power shortages in the Midwest.

Some key questions I have are: Are the states doing all they can to encourage new generation? Are the states promoting interstate transmission rules that develop competitive markets? And what is the role for the federal government in siting transmission, if any?

Mr. Chairman, FERC studied the price spikes last year and released its report which stated that lack of generation capacity and transmission constraints were two key factors which likely caused our crisis. My theme today is to investigate how or if federal electric restructuring can help the Midwest avoid price spikes in the future. I yield back the balance of my time.

Mr. BARTON. We thank the gentleman.

We would now like to hear from the distinguished vice-chairman from the great State of Florida and the home of the prior national championship Florida Gators, although Congressman Stearns did not go to Florida, he represents them well.

Mr. Stearns?

Mr. STEARNS. Well, thank you, Mr. Chairman.

After listening to the introduction of the gentleman from Mississippi, I thought there was nowhere else to go but down.

I think what is important to realize is we have had a big debate about energy deregulation now in the last Congress, but you know, and I say this to all of my colleagues on both sides, we have accomplished a lot in terms of developing a consensus with the distinguished gentleman from Colorado, Mr. Schaeffer; we had all of those hearings.

But I think all of us have a better understanding now how to deal with PUHCA and PURPA, and I think there is almost unanimous opinion that these should be repealed. We now have a better feel with stranded costs, how to deal with that, and I think we are left with, perhaps, out of all of the issues, there are two issues that perhaps are paramount, and that is dealing with transmissions, ISOs, and the second thing is market power: what do you do with a company that has and owns and operates the transmission lines, and how do you continue to deregulate when you have market power in place?

So I think if we have these discussions and these debates and these hearings, Mr. Chairman, we will be able to develop a consensus on these, and then, I think we will be ready to start deregulation, but I think, as many members have pointed out, we have 18 States with 45 percent of the country's population have already enacted laws or adopted final regulatory orders opening up their retail markets, so, in some many cases, we have the States moving forward, and the Federal Government, I think, can provide incentives to continue that deregulatory process, because States histori-

cally, historically, have had the principal responsibility to address all of these regulatory electrical issues, including consumer protection, public benefits, universal service; and so, frankly, my colleagues, I think we are poised to develop a bill, and I thank the chairman for the hearing.

Mr. BARTON. I thank the gentleman.

We would like to hear from the distinguished gentleman from Maryland for an opening statement, Mr. Wynn.

Mr. WYNN. Thank you, Mr. Chairman.

I am very appreciative of this hearing, and I am anxious to hear from the witnesses, so I am going to forego an opening statement. I would like permission to submit at a later date.

Mr. BARTON. Without objection.

We would like to hear from another gentleman from the Terrapin State, Mr. Ehrlich, for an opening statement.

Mr. EHRLICH. Sweet 16.

Mr. BARTON. The Sweet 16; that is true.

Mr. EHRLICH. Winner this evening, Mr. Chairman.

I can take a hint from the chairman as well, and I will submit an opening statement for the record.

Mr. BARTON. I thank the gentleman.

We now go to the great State of Arizona. Is Mr. Shadegg still here? He is missing in action. He was here.

Then, Mr. Fossella? Mr. Fossella of New York.

Mr. FOSSELLA. I have nothing to add.

Mr. BARTON. That is the first time New York has had nothing to add; I can tell you that.

All right; Mr. Burr of North Carolina, the Tarheel State.

Mr. BURR. Mr. Chairman, in an effort not to give away where I am on this position, I think I will forego any opening statement.

But I do thank the chairman for his willingness to start these hearings back up, and I hope that every member, on both sides of the aisle, will take this challenge in a serious way. This is not an easy issue. There are some very tough decisions, and hopefully, through these hearings, we can, for once, find the right solutions to them, and I yield back.

Mr. BARTON. We would now like to hear from the distinguished subcommittee chairman of Health and Environment, also from the great State of Florida, Mr. Bilirakis.

Mr. BILIRAKIS. Thank you, Mr. Chairman.

Mr. Chairman, first, I would like to take a moment to welcome Susan Clark, a commissioner of the Florida Public Service Commission, to the subcommittee this morning and welcome Ms. Clark back to Washington.

Mr. Chairman I, too, commend you for holding this hearing. Mr. Chairman, we sometimes overlook or forget the fact that we hold these hearings to learn. I know that we are all human beings, and quite often, we are predecided on issues. But hopefully, at least during the hearings, we are openminded enough to learn. Mr. Stearns has already shared with us that 18 States have enacted laws. We all know that. Another 12 are considering similar actions. Some have made the statement that all States have to be a part of this deregulation; otherwise, it will not work. Well, I am just not sure that this is the case. I think that it is just very important that

we go into it with an open mind. There are a lot of tough issues. Some issues affect some States more than they do others, and unless we do our job objectively and have an open mind, we are liable to run into another case of unintended consequences to something that might seem really good at this point in time.

In any case, Mr. Chairman, thank you for holding the hearing. Again, I trust we will continue to learn on this subject. Thank you.

Mr. BARTON. And I believe our last opening statement of members present will be from the great State of Kentucky, Mr. Whitfield.

Mr. WHITFIELD. Mr. Chairman, thank you very much. I had the opportunity to be involved in deregulation of the airline industry, the railroad industry and the trucking industry and was really an advocate for the deregulation of all of those industries, but I also recognize that certainly in the case of the airlines and railroads, some small communities did suffer as a result of deregulation.

I am from a very rural State. We have, I guess, about the second lowest rates in the country, and many constituents ask the question, well, how can we really benefit from deregulation? And then, I noticed just recently the Department of Agriculture came out with a study indicating that in their analysis, energy prices would increase in about 12 or 13 States: Alabama, Colorado, Idaho, Indiana, Kentucky, Mississippi, Montana and others. So I am delighted we are having these hearings, because I recognize there are strong arguments on each side, and I know that with the witnesses we have scheduled all of us will be able to make a better decision on whether or not deregulation is truly beneficial for the entire country.

Mr. BARTON. I thank the gentleman from Kentucky.

All members not present will be given the requisite number of days to put an opening statement in the record. Seeing no other member present who has not been given the opportunity, we will conclude with the opening statements. At subsequent hearings, we do not plan to have opening statements except from the Chair and the ranking member and the full committee chairman and the full committee ranking member if they are present.

[Additional statement submitted for the record follows:]

PREPARED STATEMENT OF HON. KAREN MCCARTHY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MISSOURI

Thank you Mr. Chairman. I would like to commend our Chairman and Ranking Member for convening this hearing today. Elevating our awareness and increasing our knowledge of electric utility deregulation is critical. Having the opportunity to communicate with and learn more from our expert panelists today will be of great value as we proceed with the last major deregulation requiring Congressional action.

Addressing the deregulation of the electrical industry in a manner which is fair to consumers, assures reliability, and promotes fair competition is a goal which we all share. In the process of accomplishing these objectives, it will be vital that we at the federal level not overtly intrude upon state jurisdictions which are the primary regulatory body for public utilities. Legislation from the federal level should complement state laws and regulatory efforts not stifle creativity and innovation. We must be sure that the date certain is realistic for state compliance.

In many instances, the states have been the successful laboratories for change. Federal actions will need to incorporate the best model to effectively produce a national system based upon equity for all. The State of Missouri is a lower-cost State. We are below the national average in our rates, both commercial and residential. Missouri was one of the 23 Low Cost Electric State Coalition asking that their con-

cerns be considered by Congress. I am interested in testimony that will demonstrate how we can best assure that these states maintain their lower-cost position.

Through hearings such as this one, we are able to enhance the education of all parties involved as stakeholders in the deregulation of electricity. I am committed and know that my colleagues are committed to accomplishing deregulation in a manner that produces satisfactory results, not chaos. Deregulation of electricity must be done well, for the heat and lights necessary for comfort and commerce, and in emergency instances for survival.

I look forward to the testimony of our expert panelists today and our committee's subsequent dialogue and debate regarding the critical issues associated with electric utility deregulation.

Thank you, Mr. Chairman.

Mr. BARTON. We would like to welcome our first panel of witnesses to please come forward at this point in time. We have before us the Honorable Elizabeth Moler from Vinson & Elkins. We have the Honorable Linda Stuntz, who is representing Stuntz, Davis & Staffier. We have the Honorable Charles Stalon; we have the Honorable Mike Naeve. All of these individuals are former FERC Commissioners or Deputy Secretaries of Energy in various administrations.

Ladies and gentlemen, we welcome you. Your entire statements are in the record in their entirety. We are going to start with Ms. Moler and give you 7 minutes to summarize your statement, and then, we will go right down the line.

Ms. Moler?

STATEMENTS OF ELIZABETH ANNE MOLER, VINSON & ELKINS; LINDA G. STUNTZ, STUNTZ, DAVIS & STAFFIER; CHARLES G. STALON, CAPE GIRARDEAU, MISSOURI; AND CLIFFORD M. NAEVE, SKADDEN, ARPS, SLATE, MEAGHER AND FLOM

Ms. MOLER. Thank you, Mr. Chairman and members of the subcommittee.

It is an honor to appear before you today and to be asked to testify on my favorite subject. I have testified before this subcommittee many times. This is my first time as a private citizen. Though I do have clients who are engaged in the electricity business, the subcommittee asked me to appear before you to give my own views about the need for Federal electricity legislation.

Mr. BARTON. If you could make sure the microphone is on; flip that switch. Is it on?

Ms. MOLER. Now, it is.

Mr. BARTON. Okay; the power of electricity.

Ms. MOLER. It is good to keep mikes on as well as the lights on, yes, sir.

The views I am presenting today are my own and do not necessarily reflect the views of my clients, nor have they paid me for my presentation. I have four basic points to make. I also identify 10 core elements of what I believe can and should be enacted as bipartisan consensus Federal restructuring legislation.

First, there is a need to act. Congress last enacted electricity legislation in 1992. Since then, events in the marketplace and actions undertaken by both Federal and State regulators have partially reshaped this vital industry. Now, inaction by the Congress is frustrating further progress toward an even more reliable, efficient industry for our country.

Second, this is not rocket science. Though the industry is an economic giant and produces the lifeblood of our modern economy, the issues pertaining to reform legislation are really quite basic, and they are ripe for action.

Third, the industry needs your leadership. Something magic could happen if a bipartisan group of members makes a serious effort to write a consensus bill.

Fourth, the elements of consensus legislation have broad support in the private sector.

Ten core elements of Federal restructuring legislation are apparent if one looks at the array of restructuring proposals that have been introduced so far this Congress and during the last Congress. Enacting legislation composed of these core elements is a very worthy, achievable goal. These elements include mandating customer choice; ensuring reliability of the grid; repealing the Public Utility Holding Company Act; repealing the Public Utility Regulatory Policies Act, substituting instead a market-oriented approach to renewable power; updating the Federal Power Act; requiring all owners of interstate transmission lines to provide open access transmission under the Federal Power Act; providing the Federal Energy Regulatory Commission authority to address market power issues; providing consumers with reliable, user-friendly information about the sources of their power; supporting research and development funding; and finally, recognizing that electricity markets are now regional and facilitating regional solutions to problems.

Let me elaborate briefly. It is not surprising that an electric industry structure that was appropriate for the 20th Century needs fine-tuning to best serve the public in the 21st Century. Federal laws governing this industry no longer promote the public interest; rather, they inhibit the development of a rational, competitive U.S. power industry.

As several members of this subcommittee have observed, 18 States have approved plans to give customers of some of their utilities customer choice. Other States are on the verge of acting. But even in those States that have acted, not all customers have the benefit of customer choice, because some utilities are not included in the program. While there has been considerable progress, the glass is, at best, half full. Those problems need to be solved.

Progress in the States does not mean Congress should not act; rather, Congress must act, or there will be an increasing likelihood of volatile markets and even catastrophic transmission system failures.

Let me turn to two of the elements that I addressed in my prepared statement; first, mandating customer choice. Congress should pass legislation providing all customers the ability to shop for their electricity supplier by a date certain. The date is negotiable; the principle is not. I personally would choose April 15, 2001. That is sufficient time for State regulatory authorities to act to establish an appropriate regulatory regime if they have not already done so. I like April 15 rather than January 1, because something good should happen on that date for a change.

I congratulate the States that have enacted customer choice for their leadership and would grandfather those programs.

Three years ago, I testified before the Senate Energy and Natural Resources Committee in favor of mandated customer choice that would give States the ability to opt out if they made a determination on the record that customer choice is contrary to the interests of their consumers. I still advocate that point of view. Last year's administration bill dubbed this the flexible mandate. I believe it is a reasonable middle ground upon which a consensus piece of legislation could be built as well. In order to opt out, State authorities would have to make a determination on the record that customer choice would be detrimental to their consumers.

As part of any industry restructuring, utilities should have an opportunity to recover prudently incurred, legitimate, verifiable stranded costs that cannot be mitigated. Every State implementing customer choice, except one, has provided for full stranded cost recovery.

While I personally regard stranded cost recovery as an essential element of a fair transition, I do not believe stranded cost recovery needs to be Federalized. The States have and should deal with this issue.

Ensuring reliability of the grid: it would be easy to be an alarmist on the subject of the fragility of our Nation's transmission system. I do not want to be an alarmist, nor do I want to understate the serious nature of the situation. Rather, I want to stress the need to address the issue promptly and responsibly. Your former colleague and subcommittee chairman recently chaired a task force that stressed the need for reliability legislation. They came to a unanimous conclusion that reliability legislation is urgently needed. I would urge you to pay attention to that report and to act positively on their recommendations.

Mr. Chairman, in my prepared statement, which I have submitted for the record, I have tried to outline a proposal that I believe could form the nucleus of much-needed legislation. In conclusion, I would urge you and your colleagues to roll up your sleeves; to talk to each other and commit yourselves to action. It is a vitally important public policy area that is worthy of your time and effort. This need not be a partisan issue; there is bipartisan support for legislation at the highest levels in the Congress and in the administration. We have had 4 years of oversight hearings and policy discussions. It is time to enact something.

Thank you.

[The prepared statement of Elizabeth Anne Moler follows:]

PREPARED STATEMENT OF ELIZABETH ANNE MOLER, PARTNER, VINSON & ELKINS, L.L.P.

Mr. Chairman and Members of the Subcommittee: It is an honor to appear before you today, and to be asked to testify on my favorite subject. I have testified before this Subcommittee many times; this is my first time as a private citizen. Though I do have clients who are engaged in the electricity business, the Subcommittee asked me to appear before you to give my own views about the need for Federal electricity restructuring legislation. Therefore, the views I am presenting today are my own, and do not necessarily reflect the views of my clients.

I have four basic points to make. I also identify ten core elements of what I believe can and should be enacted as bipartisan, consensus Federal restructuring legislation.

First, *there is a need to act.* Congress last enacted electricity legislation in 1992. Since then, events in the marketplace, and actions undertaken by both Federal and State regulators, have partially reshaped this vital industry. Now, inaction by the

Congress is frustrating further progress toward an even more reliable, efficient industry for our Nation.

Second, *this is not rocket science.* Though the industry is an economic giant and produces the lifeblood of our modern economy, the issues pertaining to reform legislation are really quite basic. And they are ripe for action.

Third, *the industry needs your leadership. Something magic COULD happen* if a bipartisan group of Members makes a serious effort to write a consensus bill.

Fourth, *the elements of consensus legislation have broad support in the private sector.* Ten core elements of Federal restructuring legislation are apparent if one looks at the array of restructuring proposals that have been introduced so far this Congress, and last Congress. Enacting legislation composed of these core elements is a very worthy, achievable goal. These core elements include:

- Mandating customer choice;
- Ensuring reliability of the grid;
- Repealing the Public Utility Holding Company Act;
- Repealing the Public Utility Regulatory Policies Act, substituting instead a market-oriented approach to renewable power;
- Updating the Federal Power Act;
- Requiring all owners of interstate transmission lines to provide open access transmission under the Federal Power Act;
- Providing the Federal Energy Regulatory Commission authority to address market power issues;
- Providing consumers with reliable, user friendly information about the sources of their power;
- Supporting research and development funding; and
- Recognizing electricity markets are now regional and facilitating regional solutions to problems.

Let me elaborate, and in doing so I will address the issues you asked me to address in your letter of invitation.

It is not surprising that an electric industry structure that was appropriate for the 20th Century needs fine-tuning to best serve the public in the 21st Century. Yet, the basic organic statutes governing the industry, the Federal Power Act (FPA) and the Public Utility Holding Company Act (PUHCA), have really not been comprehensively updated since the 1930's. They are now archaic and in need of reform. The Public Utility Regulatory Policies Act (PURPA), enacted in 1978, paved the way for new competitors to enter the electric generating business. The same statute also established the Federal policies that currently apply to renewable sources of power. PURPA's requirements have now outlived their usefulness. The Energy Policy Act of 1992 (EPAct) recognized the changed circumstances in the industry, and paved the way for wholesale competition. But more needs to be done in order for the Federal laws to be compatible with State initiatives and to encourage a more efficient and competitive industry. Indeed, in today's evolving industry structure, this array of Federal statutes no longer promotes the public interest; rather, it inhibits the development of a rational and competitive U.S. power industry.

As of today, authorities in eighteen states have approved plans to give customers of some of their public utilities "customer choice"; that is, consumers will have the ability to choose their power supplier. Virginia is the most recent state to enact such a program. Other states, notably Maryland, Michigan, New Mexico, Ohio, and Texas are on the verge of acting. But even in those states that have acted, not all of the businesses and individual customers have the benefit of customer choice because some utilities are not included in the program. While there has been considerable progress, the glass is at best half full. Many, many customers are served by utilities that do not allow them to shop for power. In California, for example, the municipally-owned utilities are not a part of the state's restructuring plan because of concerns about the loss of tax exempt financing if they provide open access. Those problems need to be solved.

Electrons do not recognize state or corporate boundaries. Electricity is an industry that is fundamentally in interstate commerce. Congress needs to act to recognize this fact, and to provide a Federal regulatory scheme that will provide a much more seamless national power grid. Progress in the states does not mean the Congress should not act; rather, Congress must act or there will be an increasing likelihood of volatile markets and even catastrophic transmission system failures.

Earlier I outlined the core elements of what I believe could be a solid, comprehensive, consensus based restructuring initiative. I would like to discuss each element in somewhat greater detail.

1. Mandating customer choice

Congress should pass legislation providing all customers the ability to shop for their electricity supplier by a date certain. The date is negotiable; the principle is not. I personally would choose April 15, 2001. That is sufficient time for state regulatory authorities to act to establish an appropriate regulatory regime if they have not already done so. I like April 15, rather than January 1, because something good should happen on that day for a change.

I congratulate the states that have enacted customer choice for their leadership, and would grandfather their programs. Three years ago I testified before the Senate Energy and Natural Resources Committee in favor of mandated customer choice that would give states the ability to "opt out" if they made a determination that providing customer choice is contrary to their interest. I still advocate that point of view. Last year's Administration bill dubbed this the "Flexible Mandate" and I would urge you to give it serious consideration. I believe it is a reasonable middle ground upon which a consensus piece of legislation could be built. In order to "opt out," state authorities would be required to undertake a regulatory proceeding and compile a record that customer choice would be detrimental to their customers. I personally do not believe that is likely, but states should have the flexibility to make such a finding.

As part of any industry restructuring, utilities should have an opportunity to recover prudently incurred, legitimate, verifiable, stranded costs that cannot be mitigated. Every state implementing customer choice except one has provided for full stranded cost recovery. While I personally regard stranded cost recovery as an essential element of a fair transition, I do not believe stranded cost recovery needs to be "federalized." The states have, and should, deal with the issue.

2. Ensuring reliability of the grid

It would be easy to be an alarmist on the subject of the fragility of our Nation's transmission system. I do not want to be an alarmist; nor do I want to understate the serious nature of the situation. Rather I want to stress the need to address the issue promptly and responsibly.

Your former colleague and Subcommittee Chairman, the Honorable Philip Sharp, recently chaired a Task Force reporting to the Secretary of Energy on Electric System Reliability. The Task Force was very broadly based; it had the widest possible range of industry participants and observers. *They came to a unanimous conclusion that reliability legislation is urgently needed.* Their final report stated:

> There is a sense of urgency throughout this report. Driven by the expectation of billions of dollars in annual savings to the Nation's economy, the electricity industry is in a transition from a highly regulated industry dominated by monopoly utilities to an industry that will rely, in large part, upon competitive commercial markets at both the wholesale and retail levels. The industry is unbundling, and the old institutions for reliability are no longer sufficient. We are already in the middle of our journey toward a restructured electricity industry. However, the new policies and institutions needed to assure electric reliability are not yet in place. Until such policies and institutions are in place, substantial parts of North America will be exposed to unacceptable risk.
>
> ...The Congress, for example, urgently needs to clarify the FERC's authority over an electric industry self-regulating reliability organization and expand the FERC's jurisdiction for reliability over the bulk-power system.

They stressed:

> These steps must be taken soon. Indeed, the Task Force believes that the primary challenges to bulk-power system reliability are presented by the transition itself, rather than by the end state of competition. Failure to act will leave substantial parts of North America at unacceptable risk.

The Administration has been working with the North American Electric Reliability Council and others on legislation to provide FERC with authority to oversee and enforce mandatory electric reliability standards. I cannot overstate its importance; if we are to keep the lights turned on it must be enacted. If it is not enacted, Congress will be considered part of the problem, rather than part of the solution.

3. Repealing the Public Utility Holding Company Act

I do not believe PUHCA any longer serves a useful purpose. It should be repealed. In conjunction with its repeal, Congress should ensure that FERC and State regulators have access to the books and records to insure that captive customers are not subsidizing affiliated corporate business ventures. PUHCA repeal legislation should be part of a comprehensive restructuring bill.

4. Repealing the Public Utility Regulatory Policies Act and substituting instead a market-oriented approach to renewable power

PURPA provided a much needed impetus for the development of an independent power industry. It is no longer useful and should be repealed. I would do so prospectively, honoring existing contracts. In its place, I would substitute a modest renewable portfolio standard, coupled with tax incentives for renewable resources.

5. Updating the Federal Power Act

The Federal Power Act is replete with anachronisms. It should be updated. An essential element is to ensure that FERC has authority to provide interstate transmission for transactions that are ultimately retail sales.

6. Requiring all owners of interstate transmission lines to provide open access transmission under the Federal Power Act

There are many examples of power lines that are interstate in nature that are not subject to Federal Power Act jurisdiction and regulated by FERC. They should be. Transmission lines owned by municipalities, and the Federal Power Marketing Administrations (Bonneville, Southeastern, Southwestern, and Western), and the Tennessee Valley Authority should be regulated under the Federal Power Act just like those owned by other utilities. While I served at the Department of Energy, we established a special advisory committee to develop reform proposals for TVA, and worked with the Northwest Governors' Transition Board on reform proposals for BPA. Like you, I look forward to analyzing the conclusion of that process when the Administration's new restructuring package is forwarded to the Congress.

In addition to the Federal Power Act jurisdiction, the Congress also needs to address the private use and tax exempt bond restrictions to enable municipal and cooperative utilities to provide open access and customer choice. While the subject area is not within this Subcommittee's jurisdiction, it is important to note that the fabric of open access transmission looks a lot like Swiss cheese—there are holes in the cloth. In particular, the tax writing committees need to address the private use restrictions that limit use of facilities constructed with tax exempt bonds. Use of existing generating capacity for sales outside a municipal utility traditional service territory and use of existing transmission lines to provide open access transmission should not upset existing tax exempt financing arrangements.

7. Providing the Federal Energy Regulatory Commission authority to address market power issues

Competitive markets work well only if you have lots of competitors. There need to be appropriate regulatory authorities in place that provide Federal regulators authority to address market power issues. I recognize that this is a particularly thorny area. Nonetheless, I believe that FERC should be given authority to address market power issues in order to ensure that competition flourishes.

Five years ago, generation asset divestitures were unheard of in the utility business. Now, sales of generating assets are recognized as providing corporations and stockholders with very positive returns on their investments. They are also providing much needed financial restructuring tools so that utilities can develop a business strategy that is compatible with serving customers and positive balance sheets.

I would also encourage the Subcommittee to provide FERC with additional authority to encourage a more rational structure for the interstate transmission grid. It needs to undertake reforms in transmission pricing so that the private sector will continue to invest the necessary resources in grid infrastructure. Increasingly utilities are looking at divesting assets and forming independent transmission companies, or "transcos." I would provide FERC with authority to require integrated utilities that are not members of a regional transmission organization (either an Independent System Operator or a transco) to join one.

8. Providing consumers with reliable, user friendly information about the sources of their power

Customers who are interested in learning about the source of their power should be able to do so. Utilities should not be able to claim that they are selling "green" or renewable power unless they are. California, for example, has instituted a successful consumer information program. On the other hand, power marketers should not have to contend with different requirements in each state. A federal program designed to ensure truth in advertising if companies make claims about the source of their power should be enacted. The disclosure requirements need not be elaborate, nor expensive to comply with, in order to provide customers with reliable information.

9. Supporting research and development funding

Support for research and development in the electric technology area has plummeted in the wake of restructuring. State regulators should have clear authority to impose a surcharge on distribution in order to support research and development. At the Federal level, I would focus on beefing up the DOE's electric R&D portfolio.

10. Recognizing electricity markets are now regional and facilitating regional solutions to problems

As I said earlier, electrons know no state or corporate boundaries. But the Federal-State system does not provide good regional solutions. Transmission planning and transmission siting are two excellent examples of things that need to be coordinated on a regional basis. Some have advocated Federal transmission siting legislation. Interstate pipelines are sited by the FERC under the Natural Gas Act; it should and could work for interstate transmission lines. I personally would favor such a move. If this Subcommittee cannot muster the support for Federal siting authority, at a minimum I would urge you to clarify that states can exercise authority on a regional basis and would encourage them to do so. For example, facility siting authorities should be able to get together and plan transmission facilities on a regional basis without running into concerns that their planning efforts will run into federal preemption. The Interstate Compact provisions in the Administration bill would clearly help.

Conclusion

Mr. Chairman, I have tried to outline a proposal that I believe could form the nucleus of much-needed legislation. I would urge you and your colleagues to roll up your sleeves, talk to each other, and commit yourselves to action. It is a vitally important public policy area that is worthy of your time and effort. This need not be a partisan issue; there is bipartisan support for legislation at the highest levels in both the Congress and the Administration.

We have had four years of oversight hearings and policy discussions. It's time to enact something.

Mr. BARTON. Thank you.

I would like to welcome now the Honorable Linda Stuntz, who, in addition to being a former Deputy Secretary of Energy, I believe was a former counsel for the Republicans on this committee at one point in time. It was all downhill since then, right?

STATEMENT OF LINDA G. STUNTZ

Ms. STUNTZ. That is where I learned everything I ever knew about this subject, Mr. Chairman.

Thank you so much for inviting me back. It is a great privilege, and it is one that I respect. I, too, have clients in many aspects of this industry, but you asked me to come here and give you my judgment myself as was my privilege to do on a more regular basis some time ago, and that is what I am here to do today.

Mr. BARTON. You really need to pull that microphone up to you, Ms. Stuntz.

Ms. STUNTZ. Okay; there is no switch on mine, so I do not know.

My message today to you, I hope, is simple. You do need to legislate in the area of electricity, and second, I believe that you can legislate. I think all that work under Mr. Schaeffer's leadership that you all helped the effort in crafting the Paxon-Largent compromise of last year has really, although it may not have made it very far in terms of the legislative process schematic, it has enabled us now to identify, and hopefully you, issues on which there is sufficient consensus that legislation is possible.

In my written testimony, and I would suggest to you today that there are five. I think you are going to hear some of them in common across most of us. First is the reliability issue. I think it is very important to empower a reliability organization that can set

mandatory rules of the road. Right now, there are no such things. There is no entity or enterprise that can set a binding reliability rule. Now, that was okay when it was sort of a club, and people could take care of each other, because that is the way it worked in the previous scheme. It is not okay now. In fact, there are issues as to even whether funds can be collected. They are having difficulty doing that. So that needs to happen.

Second, we need to clarify Federal and State jurisdiction. It is not clear that the States can, in fact, require access to their local distribution systems. There are lawyers' issues related to the scope of the Federal Power Act and the extent to which it may preempt the States. It would help the States move forward, empower them, if that clarification were provided. It has been done in Paxon-Largent; it is done in Mr. Burr's legislation, I believe, and there really should not be any dispute about that.

Third, FERC's jurisdiction does need to be extended to all transmission. If we are going to have an interstate market for electricity that is backed up by a reliable, efficiently run grid, all transmission, regardless of who owns it, ought to be accessible on the same terms and conditions. And again, I do not really think that should be too controversial, although I do not minimize that for some for whom FERC regulation has not been fully applicable, this will require a change in business.

Fourth, we need to repeal the Public Utility Holding Company Act. It is difficult to explain. That statute, as you know, is the province only of a few people, including my colleague here at the end of the table who can actually explain it out loud, but it affects everything that any utility company does: every business decision they make; the issuance of debt; how they are going to structure it; whether or not they can enter competition. It has outlived its usefulness; it is distorting competition, and it should be repealed.

Finally, we need to prospectively repeal PURPA, preserving the existing contracts on which a lot of investment has been based, and there is a Federal responsibility, I believe, to provide for recovery of those costs, because it was a Federal obligation that was imposed on the utilities to enter into those contracts. Mr. Stearns has introduced legislation in the last Congress and, I believe, in this Congress to do that. I think it has bipartisan support, and I think that would be an easy module to put in your legislation.

These are things that only Congress can do. If you do not do them, they will not be done. They are things that are necessary for you to do to remove barriers to State action; to allow the States to move forward with the competitive choice programs of their choice. I think it would be nice to have a date certain; I do not think it is essential, and I am quite persuaded that it is not legislatively possible. It is not in the Senate, and I do not think there is consensus on this committee. So, although, as I said, it may be useful, it also complicates the legislative effort, because you have to start worrying about grandfathering: what will we grandfather; what will we not grandfather.

By not moving to a federally mandated date certain, we do not have to get into that issue, and I honestly do not think you have to go there to provide a lot of benefits for consumers and to get the

Federal Government out of the way to improve the electricity market and allow the competition to move forward.

I would conclude simply by saying that there are many of those—and you know them, I am sure—that have sought to hold electric restructuring legislation hostage until everything is done. There was a boss I had at one time who used to caution me against letting the perfect be the enemy of the good. I would encourage you in the same way. There may be things that turn out that need to be done later. I talked about a couple of them in my written testimony, one dealing with the issue of FERC's merger review approval; another dealing with transmission policy, about which I am greatly concerned. I do not think our current policies encourage anybody to invest in new transmission or to use it more efficiently. I think it is all based on the notion that we have to be concerned about allocating a scarcity, and that is no way to run transmission.

It is also true that you can get in big trouble if you have a transmission outage. You do not get much benefit if you use transmission efficiently. That is encouraging transmission owners to always err on the side of perhaps maintaining more capacity reserves than they need. That is not a good way to go about moving to a competitive marketplace, but I do not think that there is a remedy that has clearly been proposed for that; I think we need to do some more homework on that and allow FERC and some of the agencies that are dealing with this every day to develop the solutions before we try to legislate in that area.

With that, Mr. Chairman, I will cease and look forward to your questions.

[The prepared statement of Linda G. Stuntz follows:]

PREPARED STATEMENT OF LINDA G. STUNTZ, STUNTZ, DAVIS & STAFFIER, P. C.

Thank you for the opportunity to testify before you at this critical time in the restructuring of this nation's electricity markets.[1] There is no more complex, capital intensive or vital industry than the electric industry. Little wonder then, that despite some 30 days of House hearings, over one dozen Senate "workshops" and the introduction of no less than 28 bills dealing with at least one aspect of this issue in the last Congress, only one bill (S. 621 repealing PUHCA) was reported from Committee and no bill reached the floor. The good news, I believe, is that all this work was not for naught. Although controversy remains over many issues, consensus is emerging on certain issues, and in one area in particular—reliability—it becomes clearer every day that the lack of federal legislation is posing real risks. Thus, my message to you today is simple.

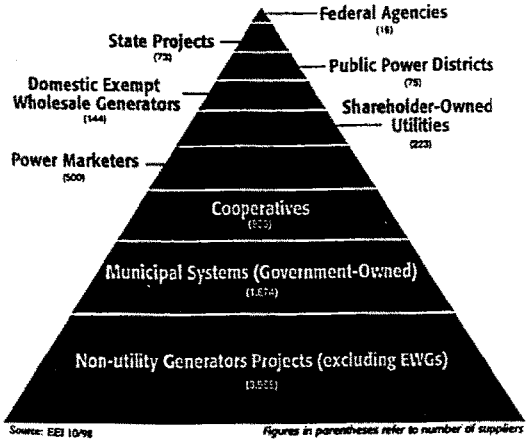
1) There is a need for federal legislation.

2) There is, or can be, sufficient consensus to allow you to enact the needed legislation this Congress.

THE ELECTRICITY INDUSTRY TODAY

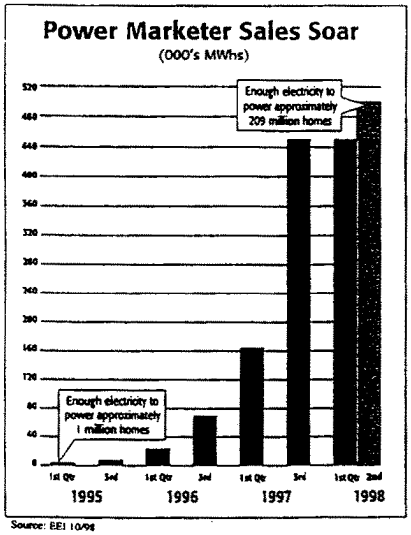
As illustrated by the chart below, in no industry is there a larger or more diverse number of suppliers.

[1] The views expressed herein are solely my own, and are not offered on behalf of, nor should they be attributed to, any other person or firm.



Fueled, in part, by passage of the Energy Policy Act of 1992, which effectively created a competitive wholesale generation market, the share of nationwide generating capacity from non-utility generators (NUGs) has more than doubled from 3.6 percent in 1987 to 8.5 percent in 1997. In fact, since 1990, non-utility generators have contributed over half of all new investment in generating facilities.

Utilities also are no longer the only sellers of electricity. As illustrated in Figure 2, sales growth by power marketers has increased dramatically in the last three years.



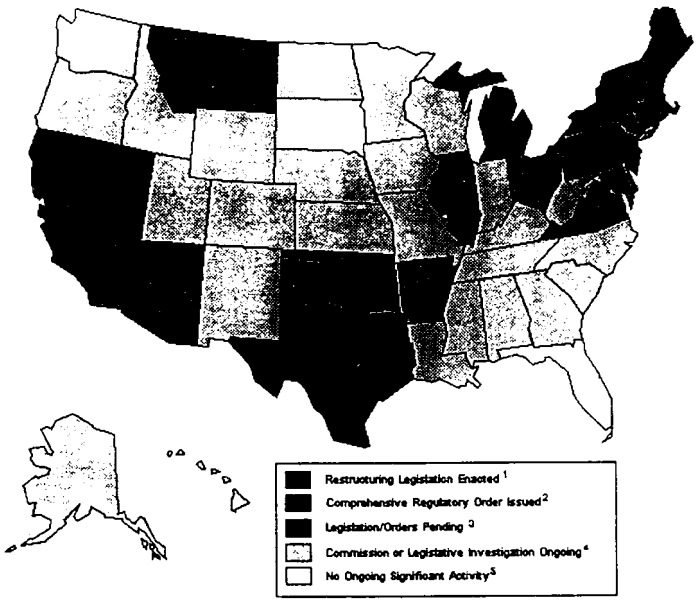
In the first quarter of 1995, power marketers sold slightly less than three million megawatt hours, about the power required for one million homes. By the second quarter of 1998, that amount had grown to almost 501 million megawatt hours, enough to power almost 210 million homes. The Federal Energy Regulatory Commission (FERC) has approved nearly 500 power marketing entities. Of these, some 115 are posting and reporting sales.

STATE ACTION

As a result of the Energy Policy Act of 1992, and actions by the FERC implementing that Act, a wholesale purchaser of electricity (for example, a municipal utility) can obtain electricity from any supplier, and have that power transmitted to it over the transmission systems of any utility that is FERC jurisdictional. (The transmission systems of the PMAs, TVA, municipal utilities and co-ops are not FERC-jurisdictional, although FERC has sought to apply reciprocity requirements and in some cases has some limited oversight). Retail sales and the distribution of electricity are matters of state jurisdiction. Thus, although wholesale customers can obtain power from any supplier, retail customers traditionally could purchase power only from their local utility, which, in exchange for undertaking the obligation to serve all consumers at a regulated rate, was given by most states an exclusive retail franchise.

Starting in about 1994, the states began to consider in earnest whether the benefits of the emerging competitive wholesale market should be extended to retail consumers. As of today, 14 states have enacted legislation to provide retail customers with the option to choose any supplier they wish; four states are pursuing customer choice by means of state commission developed programs; legislation is pending in four additional states and virtually every state has considered whether and how it should adopt customer choice.

Status of State Electric Utility Deregulation Activity as of March 1, 1999



[1] Arizona, California, Connecticut, Illinois, Maine, Massachusetts, Montana, Nevada, New Hampshire, New Jersey, Oklahoma, Pennsylvania, Rhode Island, and Virginia.

[2] Maryland, Michigan, New York, and Vermont.

[3] Arkansas, Delaware, Ohio, and Texas

[4] Alabama, Alaska, Colorado, District of Columbia, Georgia, Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Minnesota, Mississippi, Missouri, Nebraska, New Mexico, North Carolina, North Dakota, Oregon, South Carolina, Tennessee, Utah, Washington, West Virginia, Wisconsin, and Wyoming.

[5] Florida and South Dakota.

Source: Energy Information Administration.

As a result of all this activity, more than 50 percent of the population of this country lives in states that have adopted firm customer choice plans. That being said, there is substantial variety among these state plans. As examples:

* Some require or strongly encourage divestiture of generation.
* Some "unbundle" distribution service and require competition in such services as billing and metering.
* Some require utilities to turn over control of their transmission systems to Independent System Operators (ISOs). One has created a power exchange separate from an ISO. Others have combined these functions.
* Some have established programs to support renewable energy.
* All, save one, have provided the opportunity for utilities to recover fully the costs of investments made and costs incurred that were approved under the prior regulatory regime.
* All have given municipal and cooperative utilities the opportunity, but not the requirement, to participate in customer choice programs.

WHAT CONGRESS NEEDS TO DO

With this background, and with our evolving experience in wholesale and retail electricity competition, it is clear that Congress needs to do certain things.

1. Reliability

No organization currently has the ability to set and enforce binding rules necessary to ensure continued reliability. This is a problem that Congress must remedy. Last year, a Department of Energy Task Force led by a former chairman of this Subcommittee, the Honorable Philip Sharp, completed a study on the matter of reliability in the restructured electricity industry. Mr. Sharp did not mince words in his preface to this report:

> Driven by the expectations of billions of dollars in annual savings to the Nation's economy, the electricity industry is in a transition from a highly regulated industry dominated by monopoly utilities to an industry that will rely, in large part, upon competitive commercial markets at both the wholesale and retail levels. The industry is unbundling, and the old institutions for reliability are no longer sufficient. We are already in the middle of our journey toward a restructured electricity industry. However, the new policies and institutions needed to assure electric reliability are not yet in place. Until such policies and institutions are in place, substantial parts of North America will be exposed to unacceptable risk.

The good news is that many of the parties that contributed to this Task Force Report, including public and consumer-owned utility representatives, ELCON, Enron, DOE and state representatives, worked over a period of many months to develop consensus reliability legislation that would provide the new policies and institutions needed to assure electric reliability in the emerging restructured industry. This language was recently adopted by the North American Electric Reliability Council (NERC) by a near-unanimous vote. This then is module one of necessary federal legislation on electricity restructuring.

2. Clarify State/Federal Jurisdiction

Currently, the dividing line between what is subject to federal regulation and what is subject to state regulation is unclear. Some argue, for example, that the states do not have the ability to order customer choice because states do not have authority over transmission in interstate commerce. FERC, however, is prohibited from ordering retail wheeling. Thus, there is, some contend, a "gap" in the current jurisdictional scheme.

There are other confusions. In Order 888, FERC took the position that it has the authority to regulate the transmission component of "unbundled" retail sales. Some states disagree. Moreover, some who agree with FERC believe that FERC also has jurisdiction over the transmission component of "bundled" retail sales and should be exercising this jurisdiction.

Until and unless these ambiguities are resolved, there will be litigation, uncertainty and conflict between and among the states and FERC, and other elements of the electric industry. To resolve this uncertainty, legislation such as was set forth in the Paxon-Largent draft of last year and the Bingaman bill in the Senate (S. 1276) should be enacted. Among other things, states would be given secure jurisdiction over all retail customers through a more clearly-defined distribution jurisdiction, and FERC's authority over transmission in interstate commerce, including the transmission component of unbundled retail sales, would be confirmed.

3. Extend FERC's Jurisdiction to Encompass All Transmission Facilities, Including Transmission owned by the PMAs, Munis, Co-ops and TVA

We cannot have the efficient, reliable interstate transmission grid necessary to support a competitive electricity generation market and increased customer choice unless the entire grid is operating under the same rules and conditions. The great majority of co-ops and municipal utilities do not own substantial transmission, but those who do should provide access to those facilities on the same rates, terms and conditions as apply to transmission owned by investor-owned utilities. The same should be true for transmission owned by TVA, BPA and other Power Marketing Authorities.

Again, the Paxon-Largent draft of last year contained provisions to accomplish this. These should be the third module of federal legislation.

4. Repeal PUHCA

There is no reason whatsoever to retain this statute and many reasons to repeal it. Every day it remains on the books, it distorts competition and investment in the electric and natural gas industries. Its principal focus of encouraging "integrated" utilities (growth through contiguous expansion) actually is in conflict with antitrust objectives which seek to limit the presence of any one firm in a given geographic market. PUHCA repeal legislation as introduced last year in the House and the Senate, and included in the Paxon Largent draft should be the fourth module of federal legislation.

5. Prospectively Repeal PURPA Purchase Mandate, Preserve Existing Contracts and Provide for Recovery of PURPA Costs

There is no place in a competitive generation market for a federal statute that mandates that utilities (even utilities that have divested all their generation) purchase power from certain favored generators. A vestige of the Carter-era Energy Plan, PURPA inadvertently demonstrated that non-utilities could generate electricity and that generation could be competitive. PURPA, however, has largely failed in its stated purposes, which were to encourage energy conservation and more generation from non-fossil fuel resources. The substantial majority of PURPA projects are fossil-fuel powered. Moreover, because of a complicated government-dictated pricing scheme dependent on our ability to accurately predict energy prices (tried and failed more than once) PURPA is now costing consumers billions of dollars every year for over-priced power. It is time to put this to an end. However, the investments made based upon PURPA should be honored, and the federal government, which imposed this purchase obligation on utilities, should ensure that these utilities are able to recover these costs

Legislation to make these reforms to PURPA has been introduced in the House by Mr. Stearns and in the Senate by Messrs. Mack and Graham. Similar legislation was included in Paxon-Largent, and should be included in any federal legislation.

That is it. Doing just these five things would remove critical federal barriers to customer choice, competition and innovation in the electric industry.

ISSUES FOR THE FUTURE: WHAT CONGRESS MAY NEED TO DO

While I believe that there is at present insufficient consensus to enact legislation in areas other than the five that I have addressed above, growing concern in two areas, in particular, compels me to bring these to your attention and offer my views.

1. Mergers

Section 203 of the Federal Power Act requires that FERC approve the disposition of any jurisdictional facilities in excess of $50,000. Thus, in addition to the traditional antitrust approvals required from the Department of Justice or the FTC, an entity disposing of jurisdictional electric facilities must obtain FERC approval. FERC has made valiant efforts to manage this responsibility in a manner compatible with the restructuring electric industry, but I, at least, have come to the conclusion that change is necessary. While an $80 billion merger of two oil giants can be approved in a matter of months (or so it appears) mergers involving utilities one-tenth that size (or less) are taking years. In the natural gas pipeline industry, as to which FERC has no similar section 203 authority, substantial consolidation has taken place and continues to occur in the aftermath of wellhead deregulation and open access transportation in order to obtain economies of scale and scope. Consolidation in the electric industry, as it has in the natural gas pipeline industry, is being driven by deregulation, technology evolution and growing competition. Consumers will not obtain the full benefits of competitive generation markets unless the process of consolidation and industry rationalization is allowed to go forward.

Mr. Burr has introduced legislation that would repeal section 203. Personally, I think this makes sense. I believe that section 203 FERC review is largely redundant to the reviews that are done by Justice and the FTC. However, I suspect that this is too big a step at this time. Instead, I would suggest a look at the referral process used in the United Kingdom. Borrowing from that process, section 203 could be amended to require that proposed merger proponents file information with the FERC, and that FERC be given a set time (perhaps four or five months) to analyze that information and make a recommendation to the antitrust authorities. In this way, the antitrust authorities would have the benefit of FERC's special expertise, but FERC would not be in the position of trying to recreate antitrust and market power expertise that resides already with the antitrust authorities. Most importantly, the industry realignment necessary and appropriate to provide more efficient, lower cost service to consumers in the new, restructured industry can go forward without undue delay and redundant reviews.

2. Transmission Policy

With your permission, I would like to submit with this statement a paper entitled "Transmission, Congestion, Pricing and Incentives," authored by Leonard S. Hyman, a senior Industry Advisor at Salomon Smith Barney. This paper was presented at a conference in New York on February 3, 1999. I would like to do this because I believe this little paper provides you with more and better information about what is right and wrong with our current transmission policies than anything else I have seen. Taking a step back from the current raging debates over ISO vs. Transcos, Mr. Hyman documents that transmission expansion has not kept up with growth in the market, and that current transmission policy provides little incentive to invest in new transmission or deploy new technologies to improve the capacity or efficiency of the system. Although Mr. Hyman comes down on the side of independent, for-profit, transmission companies as opposed to non-profit ISOs, this may be less important than getting the underlying regulatory structure right so that two things are known: 1) who is responsible for maintaining an adequate, efficient transmission system; and 2) those investing in increasing the capacity or performance of the transmission system will earn a reasonable return.

If these two matters are not resolved, we will all be spending our time talking about how to manage the symptoms of inadequate transmission capacity rather than providing to all consumers the full benefits of a competitive generation market.

CONCLUSION

Thank you again for the opportunity to offer my views. I know it will not be easy, but I encourage this Committee to assemble and move the five-part legislation that I have outlined. As with most legislative efforts, it will not be all that everyone, or perhaps even anyone, wants. It may be too much for some. It would, however, remove critical federal barriers to the advance of competition in the electric industry, while providing the new reliability institutions and protocols necessary to maintain and enhance the reliability of electric service. Other issues will be raised, such as transmission policy and mergers, but seeking to address these issues at this time will doom the legislative effort to failure. These issues are simply too far from consensus or are insufficiently developed to determine whether the legislative prescription being sought is addressing the right problem.

"Doing the doable," and the necessary that only the Congress can do is an important next step to unleash competitive generation markets and deliver the benefits of those markets to all consumers. I welcome the opportunity to work with this Committee toward this end.

Mr. BARTON. We thank you.

The Chair has a pending engagement with the Texas Congressional delegation lunch. I am going to excuse myself. I have read the two statements of our next two testifiers. I will be back for the question period. So I would recognize Mr. Stalon and then turn the Chair over to the vice-chairman, Mr. Stearns.

STATEMENT OF CHARLES G. STALON

Mr. STALON. Good morning, Mr. Chairman; thank you for the opportunity of making a statement. At the expense of some redundancy, I will repeat some of the arguments that have been made earlier but start from a slightly different perspective.

The principal feature of the modern electric industry that allowed proponents of electric industry restructuring to make a persuasive case for that restructuring is the nature of the modern transmission grid. The growth of extensive interconnections among electric utilities of North America, and I emphasize it is a North American grid, not the U.S. grid only, but the growth of extensive interconnections among electric utilities of North America and the continent-wide standards for the use of that grid permitted substantial expansion of trade among utilities in the 1970's and the 1980's.

The success of that trading demonstrated to all but the most skeptical that the creation of competitive markets for generating services was feasible and that the inherited system of regulating the industry as an end to end monopoly was no longer necessary or desirable. In the Energy Policy Act of 1992, the Congress took a crucially important first step in restructuring the industry. A second step is sorely needed.

I want to mention very briefly three issues that I consider to be critical. First, the one that has already been mentioned twice and deserves a third and perhaps a fourth emphasis: In order to create efficient markets for electricity and preserve reliability in the system and to preserve certain key features of the current system for creating and enforcing rules necessary to make the system work well, three things have to be dealt with and dealt with fairly quickly. First, the industry needs an organization that can credibly promise to create and enforce reliability standards for the planning, construction and use of the North American grid. Congressional action is necessary to empower such an organization. The North American Electric Reliability Council on which we have depended in the past can no longer make such a credible promise.

Second, transmission lines are not generally considered to be good neighbors. In fact, to everyone other than electrical engineers, they are just ugly. Their benefits, however, are great, and they are essential to the efficient and reliable operation of the electric industry, and the only plausible assumption on which to build public policy is that the Nation will need to build more of them.

These facts focus attention on the need to reallocate regulatory responsibility for overseeing the planning, construction and use of the U.S. component of the North American grid. The Federal Power Act allocated regulatory responsibilities between the States and the Federal Government for a concentrated and intensely regulated electric utility industry, and it did so at a time when using the grid to buy and sell power was a limited activity practiced only among utilities and even in that role was severely limited by the incentives confronting the utilities.

That allocation has remained essentially unchanged since the initial enactment of the Federal Power Act in 1935. It is not likely that the transmission assets needed for efficient and reliable industry performance can be constructed under the existing allocation of regulatory powers and responsibilities.

Third, there exists an urgent need to impose unambiguous responsibility on the Federal Energy Regulatory Commission for creating and maintaining efficient and reliable bulk power systems in the U.S. and to encourage the continued integration of the U.S. re-

gional systems and to integrate those systems with those of Canada and, increasingly, with Mexico.

To permit the FERC to fulfill these responsibilities, the Congress must grant the agency significant new powers. Such powers should include regulatory oversight and empowerment of the North American Electric Reliability Organization, which is the proposed replacement for the North American Electric Reliability Council, and give the FERC also strengthened powers to oversee the market rules for the operation of interconnected areas.

My testimony elaborates to some degree on this, and I would close merely with one observation: it is apparent to all careful observers that progress toward efficient electricity markets has slowed substantially in the last year; I would say the last year or two. Restructuring continues, but the process is increasingly reflecting the bargaining power of different parties in different parts of the Nation more than it reflects an attempt to create efficient and reliable markets. We need to remind ourselves that the objective is to replace the regulation of natural monopolies with efficient markets for generating services and not to replace the regulation of natural monopolies with the regulation of rivalrous oligopolies.

Congressional action is needed to reenergize this process and to make clear the objectives for the regulators.

I thank you.

[The prepared statement of Charles G. Stalon follows:]

PREPARED STATEMENT OF CHARLES G. STALON [1]

Introduction

The principal feature of the modern electric industry that allowed proponents of electric industry restructuring to make a persuasive case is the modern transmission grid. The growth of extensive interconnections among electric utilities of North American and continent-wide standards for use of that grid permitted substantial expansions in trade among utilities in the 1970s and 1980s. The success of such trading demonstrated to all but the most skeptical that creation of a competitive marker for generation services was feasible, and that the inherited system of regulating the industry as an end-to-end monopoly was no longer necessary or desirable. In the Energy Policy Act of 1992 (EPACT) the Congress took a crucially important first step in restructuring the industry. A second step is sorely needed.

Three Critical Issues

In order to create efficient markets for electricity and to preserve key features of the current system for creating and enforcing rules necessary for electric industry reliability, three "needs" call for Congressional attention very soon. They are:

One. The need for an organization that can credibly promise to create and enforce reliability standards for the planning, construction and use of the North American grid. Congressional action is needed to empower such an organization. The North American Electric Reliability Council (NERC) can no longer make such a promise.

Two. Transmission lines are not generally considered to be good neighbors. In fact, to everyone other than an electric engineer they are ugly. Their benefits, however, are great. And they are essential to the efficient and reliable function of the electricity industry. The only plausible assumption on which to build public policy is that the nation will need to build more of them.

These facts focus attention on the need to re-allocate regulatory responsibilities for overseeing the planning, construction, and use of the U. S. component of the North American grid. Transmission remains a natural monopoly and, consequently, extensive regulation remains a necessity. The Federal Power Act (FPA) allocated regulatory responsibilities between the states and the federal government for a concentrated and intensely regulated electric industry, and it did so at a time when using the grid to buy and sell electric power was a limited activity, practiced only among utilities, and even that role was severely limited by the incentives con-

[1] A Resume is attached at the end of the statement.

fronting utilities. That allocation has remained essentially unchanged since 1935 when the Federal Water Power Act of 1920 was made Part I of the Federal Power Act and Parts II and III were added to impose federal regulation on certain interstate activities of investor-owned utilities. It is not likely that the transmission assets needed for efficient and reliable industry performance can be constructed under the existing allocation of regulatory powers and responsibilities.

Three. The need to impose unambiguous responsibility on the Federal Energy Regulatory Commission (FERC) for creating and maintaining an efficient and reliable the bulk power systems in the U.S. and to encourage the continued integration of the U.S. regional systems and the integration of these systems with those of Canada and Mexico. To permit the FERC to fulfill these responsibilities the Congress should grant to the agency significant new powers. Such FERC powers should include regulatory oversight of a new North American Electric Reliability Organization and strengthened oversight of market rules so that the rules in interconnected control area are complementary and will produce efficient outcomes.

Permit me to discuss each issue in turn.

I. On the Need for Federal legislation to Empower a new North American Electric Reliability Organization (NAERO).

For a competitive generating industry to fulfill its theoretical promise, there must exist an organization that can credibly promise the beneficiaries of the system—and that includes almost every person, firm and government in North America—that it can create and enforce standards on all parties who build, operate, and/or use the North American grid that will provide, at a minimum, the level of electric industry reliability to which we have become accustomed. The North American Electric Reliability Council (NERC) is the organization to which we now look for the creation and enforcement of such standards. As I noted earlier, that organization cannot credibly make the needed promise in the new industry.

In particular, the NERC relies on peer pressure as its principal enforcement tool; it has no ability to impose financial or other types of penalties on industry participants who dishonor the rules. That enforcement system worked tolerably well in the system in which regulated, large vertically-integrated utilities, government-owned and investor-owned, dominated the industry. But even in that environment failures occurred. Such a "voluntary" system cannot be expected to work when entrepreneurial, competitive generators dominate the generating sector.

To its great credit the NERC has recognized that fact and has worked diligently for the last several years to develop a proposal for the Congress that can replace the NERC with a new organization (NAERO) with greater powers. That proposal should be before you soon, if it has not already arrived. That proposal deserves your serious and immediate consideration.

When designing the powers of the NERC replacement and the powers of government regulators to oversee this new organization, it is important to keep in mind that reliability as we have come to know it in North America requires much more than the enforcement of a set of technical standards. Bulk power system reliability, on which reliability of service depends, is best seen as the cooperative production of a public good, to use the jargon of economists. Examples of public goods are national defense, light houses and medieval town clocks. The essence of a public good is that it cannot be withheld form one individual without withholding it from all. The public good called "bulk power system reliability" is produced by the control area operators, each of whom accepts a responsibility to buy certain inputs, commonly called ancillary services, that make it possible for all of them collectively to maintain a low probability of system failure. It is this "agreement" among control area operators to share the cost of producing reliability that deters "free riding." This "agreement" takes the form of mutual acceptance of the NERC reliability standards. Perpetuating this agreement is vital to the future of the industry, since each control area operator faces strong incentives to free ride, that is, minimize its expenditures for such services and let other control area operators bear the cost.[2]

Background for reliability recommendation

Power failures are one of the many inconveniences of modern life. Keeping the frequency of such failures relatively small is an important objective of managers and

[2] In California these "inputs to reliability" have been grouped under six heading, "Regulation," "Spinning reserves." Non spinning reserves," "Replacement reserves," "Voltage support/reactive power," and "Black start capability." All six services are provided by generators. The first four are procured by the Independent System Operator (ISO), the control area operator for that portion of California served by competitive markets, in competitive bidding. The last two are acquired by the ISO by contract. Markets in other states are using different categorizations of such services and different models for producing reliability.

regulators of the electric industry. Power failures occur for many reasons, but it is convenient to group them into two types, failures of distribution systems and failures of bulk power systems.[3] Failures of distribution systems are caused primarily by weather-related phenomena, such as ice storms, thunderstorms, hurricanes, and tornados that break distribution lines. Such power outages are usually localized, and planning and actions to minimize the frequency and duration of them are management responsibilities of individual utilities. In contrast, failures of a bulk power system can cause power outages for users on many distribution systems simultaneously, and there is little that managers of individual utilities can do to protect their customers from them. Consequently, the reliability of each utility's services depends critically on the reliability of the bulk power system from which the utility receives its power. In 1965 an equipment failure in Ontario caused a complete loss of power in New York and Boston within seven minutes. In 1996 a failure later ascribe to a transmission line in Northern California overheating and sagging into trees caused a loss of power in nine states.[4] The Secretary of Energy's letter to the President of August 2, 1996 on this topic noted that an earlier failure on July 2, 1996 caused a loss of power to 2 million customers in 14 states.

The role of control area operators. Creating efficient, competitive power markets in an electric industry composed of interconnected control areas requires the existence of some agency with authority to define, impose and enforce rules for the operation of all control areas so interconnected. It has been noted that "the pursuit of self-interest, unrestrained by suitable institutions, carries no guarantee of anything except chaos."[5] In no part of the economy is this lesson more relevant than in the North American electric industry. As the industry evolves from one dominated by vertically-integrated utilities into one with competitive power markets and non-utility generators the system of coordinating institutions that has worked acceptably well to restrain and guide self-interested decision makers of intensely regulated firms must now be reconstructed to restrain and guide self-interested decision makers of competitive generating companies, competitive power merchants and competitive brokers.

In an isolated system, such as one on a small island, one utility company may own the bulk power system and all distribution companies that take power from it. In that case, the task of reducing the frequency and duration of bulk power system failures is a management task. The more common case, whether on a large island or on a continent, is that generators and transmission lines of many companies are interconnected. In such a bulk power system, no single utility company has the capability of implementing rules to minimize the frequency and duration of bulk power system failures. Planning policies and operating rules must be imposed on decision makers in each control area for the benefit of all. Such plans and rules might be imposed by a government or by collective actions of the interconnected firms. In the North American electric industry the latter approach has been used. Collective actions by interconnected firms can continue to play a significant role in the new system, but adding financial penalties to the reliability agency's enforcement quiver will require the endorsement of the Federal government, as well as Canadian and Mexican governments when the penalty is to be levied on industry participants in those nations.

Currently, the coordination of generators and transmission assets is done by 150 or so control area operators. In each control area, the control area operator is required to operate the area's generating plants and transmission lines in conformity with rules created to ensure that the systemic results of the individual actions of all interconnected control area operators provide reliable service to all users in the interconnection. In operating these assets the control area operators' are expected to balance two objectives, economic efficiency and reliability.

This description of the reliability system makes clear that because generators and the transmission lines to which they are connected do work as a machine, any discussion of one without the other can be justified only as an expository convenience.

---

[3] A bulk power system is defined as a set of generators and the transmission lines that interconnect them and, in turn, connect them to users and distribution companies. Such a system is commonly called an "interconnection," or "grid," although the latter term is also used to describe the transmission network and connected generators of a single utility. The word "interconnection" has two common definitions: originally it meant a transmission line or set of transmission lines connecting one utility to another. The original meaning is still common. A second meaning is an alternating current transmission network in which all generators operate synchronously. The second definition encompasses the first.

[4] See, "Blackout a Caution Sign on Road to Deregulation," *New York Times,* August 19, 1996, p. A.7 for a description of the August 1996 blackout.

[5] Lionel Robbins, *The Theory of Economic Policy in English Classical Political Economy:* (Macmillan & Co

Any proposal for creating competitive power markets in which entrepreneurs are free to build generators and sell power into competitive markets must include a plan for the construction and operation of transmission lines that make a competitive market possible. Furthermore, it must be recognized that operation of a transmission system means operation of the generators attached to the transmission lines.[6] Still further, when large users connect directly to the grid, rather than to the lines of a distribution company, the control area operator will, for both reliability and efficiency reasons, want direct communications with such users.

II. On the Need for Re-allocating Regulatory Responsibilities

State regulators and many other have often characterized the FPA (and the Public Utility Holding Company Act) as legislation designed to "fill the Attleboro gap." The "Attleboro gap" was the "gap" in the system of utility regulation opened by the Supreme Court in 1927 in *Public Utility Commission v. Attleboro Steam & Electric Co.* (273 U.S. 83 (1927)) when the court determined that states could not regulate the terms of an interstate transaction of a utility. Since states could not regulate such transactions and the Federal government did not regulate them, users could not be protected from the monopoly power of a utility engaged in such transactions.

While this description of the FPA oversimplified reality, the statement does convey some basic insights into the FPA. First, the intent of the legislation was, in part at least, to preserve the powers of the states to regulate utilities effectively by imposing federal regulation on those matters which the States could not regulate effectively. For example, the last phrase in Section 201(a) states, "...such Federal regulation, however, to extend only to those matters which are not subject to regulation by the States." Second, the FPA explicitly limits the jurisdiction of the Federal regulator. In Section 201(b) the Federal regulator is explicitly denied jurisdiction over "facilities used for the generation of electric energy," "facilities used in local distribution" and over "the transmission of electric energy in intrastate commerce, or over the facilities for the transmission of electric energy consumed wholly by the transmitter."[7]

Of utmost importance to the current debate, the FPA does not permit the Federal regulator to order a utility to build transmission facilities (except for the very limited purpose of establishing an interconnection with another utilities (See footnote 7.) nor does it permit the Federal regulator to grant a utility eminent domain rights to build transmission facilities if the utility wants to build. These powers were left with states in the original FPA and the remain with the states.

This assignment of regulatory responsibilities is almost certain to cause serious inefficiencies and probably reduced reliability. The FERC has plenary powers to price unbundled transmission services of investor-owned utilities, and in the competitive market all transmission services of such utilities will be unbundled. Furthermore, the modern grid often requires that a line be built in one state when the initial benefits accrue largely to persons in another state. Obviously, the state asked to approve such a transmission line will resist. There will always be an alternative to building a particular line. The consequences of inadequate transmission capacity is increasing transmission congestion and less efficient forms of competition.

Gaining the benefits of an efficient transmission system in an environment of hostility to transmission lines, especially new ones, calls for constructive compromise in two senses: In one sense, Some responsible agency must make a defensible decision that there exist a need for the investment and then make a defensible decision on exactly where the line should be built, recognizing both the need and the environmental and social costs. This dimension of the problem is not new. Regulators have been making these difficult decision for decades. Shifting this decision process from the states to the federal regulator would merely change the locus of decision power. It is the essential second compromise that is new. Many states will vigor-

---

[6] Existing technology does permit some direct controls that retard power flows over particular lines. Phase shifters, in particular, can be installed and operated to limit flows over particular lines. Technology on the horizon promises other control devices. However, a free flowing transmission system has desirable stability characteristics, so those who place a high value on reliability demand a heavy burden of proof from those who want to install such control devices. If the industry finds it difficult to build additional transmission lines, or to upgrade the old ones, it is likely the industry will expand the role of direct control devices.

[7] The FPA allows the FERC to order a utility to connect its transmission facilities with those of "one or more persons engaged in the transmission or sale of electric energy, to sell energy to or exchange energy with such persons." This authority is limited by requiring the Federal regulator to find that the utility subject to the order would not be "unduly burdened" and that the order would not "impair [the utility's] ability to render adequate service to its customers." (FPA Section 202(b))

ously oppose a shift of these decisions to the federal regulator. Some compromise between national and local interests needs to be developed.

An attractive proposal surfaced in the 1980s. It was created by Commissioner Ashley Brown of the Ohio Public Utility Commission who was Chairman of the Committee on Electricity of the National Association of Regulatory Commissioners.[8] His proposal recognized that the need determination might be made by the federal regulator and the actual routing of the line could be made by the state regulators. The federal regulator would be required to specify the beginning and ending point and perhaps some points in between. The task of the state regulators would be to determine the precise route of the facility.

III. On the Need for Federal Action to Ensure That Regional Markets Integrate to a Rational and Efficient North American Market.

Substantial progress has been make in creating efficient markets in the former tight power pools of New England and PJM and in two large states, New York and California. Much work, however, remains to make those market as efficient as they ought to be. There remain two large states with a potential for creating reasonably efficient markets, Texas and possibly Florida. All other states are too small to create an efficient market within their state's boundaries. In my judgement, the California and PJM markets, the largest now in existence, are too small. The 150 control areas in North America need to be consolidated into less than 20 regional markets.

Creating 20 or fewer markets, each of which can claim efficiency, is a necessary condition but not a sufficient condition to have an efficient electric industry. Those regional markets cannot be permitted to balkanize themselves by creating market rules and transmission pricing practices that deter efficient integration of the regional market into North American markets.

The nation is not likely to get a truly efficient electricity market unless the Congress or the federal regulator has the power to insist on the development of large control area and on market rules that integrate the regional markets. Although the FERC is now testing the capability of FPA Section 202(a) to define the boundaries of regional markets, and the agency may find more power in that Section than I currently see, the ambiguity of that section persuades me under the best of circumstances it will take a several court rulings to establish its power. Congressional action could make it clear to all that the FERC is charged with and has the power to insist on large regional control areas and on market rules that harmonize markets in the different regions.

IV. Concluding Thoughts

It is apparent to all careful observers that progress towards efficient electricity markets has slowed substantially in the last year or so. Restructuring continues, but the process reflects the bargaining power of the different parties in different parts of the nation more than it reflects an attempt to create efficient markets.

We need to remind ourselves that the objective is to replace the regulation of natural monopolies with efficient markets for generating services, not to replace the regulation of natural monopolies with the regulation or rivalrous oligopolies.

Congressional action is needed to re-energize the process and to make clear the objectives.

Mr. STEARNS [presiding]. I thank the gentleman.

The Honorable Mike Naeve is next.

STATEMENT OF CLIFFORD M. NAEVE

Mr. NAEVE. Thank you, Mr. Chairman.

First, in response to the story told by Mr. Hall, I wish you would pass on to him that I began my testimony by telling the committee that I am from Texas.

I very much appreciate the opportunity to testify today. I would like to begin by discussing what is happening outside this committee room. The electric power industry is changing at a phenomenal rate. Even as we meet today, the pace of change is increasing. This change is being driven by competitive forces. These competitive forces have been unleashed by Congress through the

[8] See Ashley Brown, "The Balkans Revisited: a Modest Proposal for Transmission Reform," *The Electricity Journal*, vol. 2. 1989.

enactment of PURPA, the Energy Policy Act; through FERC through Order 888 and a great many other individual cases; by responsible State regulators and State legislators; and even by neighboring jurisdictions, such as the Canadian provinces of Ontario and Alberta, who are restructuring their markets.

These competitive forces have reached irresistible proportions. They are driving the industry to reshape itself to fit the new competitive model. By way of example, many vertically integrated utilities are today beginning to disaggregate their businesses into the wires business, generating business, marketing business and so forth. Just within the last 2 years, over 50,000 megawatts of generating capacity have been auctioned off by previously vertically integrated utilities.

The competitive forces are encouraging the entry of new market participants into this industry. These new market participants bring both investment capital, but more importantly, they bring intellectual capital to this industry. The forces have caused a great many mergers and consolidations among a variety of participants in the industry. These mergers are driven by the need and the competitive pressures to lower costs and find economies of scale.

And finally, these competitive forces are forcing the rationalization of the transmission system, through the formation of regional transmission organizations: ISOs and, hopefully, Transcos.

Having set this process in motion, it cannot be reversed—nor should it. But we must see the process through to the end, and we must do so in a way that enables us to capture the benefits of competition while protecting against decreases in the reliability of service during the transition.

In my prepared testimony, I have recommended a number of legislative changes that Congress could make to facilitate this transition. I have divided my recommendations into two broad categories. The first category includes those steps that Congress can take to simply get the Federal Government out of the way of the process. It is ironic that it was Federal law and Federal regulators that kicked off the transition to a competitive market. And yet, other aspects of Federal law now preclude us from realizing the full benefits of competition. Therefore, I believe the most important thing that this committee can do is to clean up the Federal Government's own back yard. This includes repealing PUHCA, reforming PURPA, bringing TVA and PMAs under FERC's transmission jurisdiction and directing them to participate in RTOs, regional transmission organizations.

My second category of recommended legislative changes consists of additional steps Congress can take to facilitate competition. These include giving FERC transmission siting and eminent domain authority and giving FERC transmission jurisdiction over public utilities. I recognize that these proposals and many of the proposals recommended by my colleagues on the committee are not without political controversy. If, in your judgment, it will take time to build a consensus to take these difficult steps, then you have no choice but to build that consensus and to take the time to do it.

But I do have one suggestion, and that is do what you can now, while building the consensus needed on the remaining issues. The greater the competitive pressures that you unleash today, the easi-

er it will be to finish the job tomorrow. In each of these steps I have described, any one of them will further increase the pressure on the industry, further change the industry, and as the industry changes, it becomes easier to enact the other steps.

For the past 5 years, the search for a comprehensive bill has been a formula for inaction. Since there is much you can do right now, I would respectfully suggest that you just do it.

Thank you; and Mr. Hall, I did begin my statement by saying I am from Texas.

[The prepared statement of Clifford M. Naeve follows:]

PREPARED STATEMENT OF CLIFFORD M. (MIKE) NAEVE

INTRODUCTION

I am pleased to testify today before this Subcommittee on electric utility restructuring issues. I served as a Commissioner of the Federal Energy Regulatory Commission (FERC) from 1985 to 1988, and I have represented a wide variety of clients in the electric utility industry in the 11 years since then.[1] While at FERC I was actively involved in numerous FERC initiatives to make natural gas markets more competitive. I believe that consumers have reaped considerable benefits from the resulting competitive commodity market that has developed in the natural gas industry. I likewise believe that the expansion of competitive forces in electric markets will bring about tangible consumer benefits. I hope that my testimony will be helpful to this Subcommittee as it considers legislation to accelerate the pace of electric restructuring.

I and my law firm represent a number of electric utilities, independent power producers, power marketers and other participants in the electric power industry. These clients have diverse views on the need for comprehensive federal legislation. My testimony today represents my own views, and cannot be ascribed to any other person or entity. My practice is not focused on legislative activity. Instead, my practice focuses almost exclusively on restructuring transactions in the electric industry, and on the regulatory and antitrust issues associated with those transactions. In the interest of full disclosure, attached as Exhibit B to this testimony is a list of the significant publicly disclosed transactions in which my firm currently is engaged.

TRADITIONAL FEDERAL AND STATE ROLES

Since the passage of the Federal Power Act (FPA) and Public Utility Holding Company Act (PUHCA) in 1935, the division of regulatory authority in the electric utility industry between the federal and state levels has been relatively static. Certain responsibilities have been assigned exclusively to one level or the other, while other responsibilities have been shared between both levels. The primary allocation of responsibility has been as follows:

Exclusively State

- retail sales
- distribution of electricity
- generation of electricity
- resource planning
- transmission siting

Exclusively Federal

- wholesale sales (FERC)
- interstate transmission of electricity (FERC)
- limited authority over interconnections (FERC)
- corporate structure (SEC)
- nuclear operations and safety (NRC)

Shared State and Federal

- mergers (States, FERC, SEC, NRC, DOJ/FTC)
- disposition of assets (States, FERC, DOJ/FTC)
- issuance of securities

[1] Attached as Exhibit A to this testimony is a statement of my qualifications.

- SEC regulates issuance of securities by registered holding companies and subsidiaries
- States regulate issuance of securities by all other utilities
- FERC regulates issuance of securities if states do not

The two major statutes affecting the industry that have been enacted since 1935—the Public Utility Regulatory Policies Act (PURPA) and the Energy Policy Act (EPAct)—have removed certain generation facilities from certain types of regulation, but have not disturbed the above allocation of jurisdiction.

TRADITIONAL INDUSTRY STRUCTURE

Investor-owned utilities range in size from a few very large, integrated holding companies spanning multiple states to a great many small companies operating in part of a single state. All investor-owned utilities are under FERC's jurisdiction for transmission and wholesale transactions. Until the last few years, investor-owned electric utilities for the most part were vertically integrated, franchised monopolies. Because the utilities had exclusive retail franchises, there was no competition for retail sales to speak of. And, because utilities controlled access to their transmission facilities, there was very little competition for wholesale sales either.

Co-existing with investor-owned utilities are numerous publicly-owned entities that were formed to provide utility services to various classes of customers. These include TVA, BPA and other federal Power Marketing Agencies (PMAs) that own and operate significant generation and transmission facilities. Also included are municipal and state-owned utilities, as well as rural and other cooperatives created pursuant to the Rural Electrification Act. Many of these entities also own considerable transmission assets. Each type of publicly-owned entity is subject to a different regulatory scheme. No publicly-owned entity, however, is directly regulated by FERC.[2]

As demand for electricity grew and utility systems expanded, these public and investor-owned utilities began to interconnect with one another, primarily for reliability purposes, *i.e.* to provide service in the event of emergencies and to purchase and sell power needed to serve load. These interconnected systems, in turn, formed the backbone of large regional transmission grids. Until recently, however, control of the regional grids has been balkanized among the diverse owners of transmission facilities that collectively made up the grids. Not only has the control been divided among the numerous entities but a number of regulatory schemes have been applied to the various owners of the grid, depending upon whether the owner is an investor-owned utility, a PMA or a publicly-owned utility.

THE ELECTRIC INDUSTRY IS IN TRANSITION

In the last few years, legislators and regulators have enacted programs that have given the electric industry strong incentives to rethink and restructure the way that they do business. The first step was the passage of PURPA in 1978, but most of the steps have been taken in this decade. These steps include:

- The passage of the EPAct in 1992. This Act (1) created the Exempt Wholesale Generator (EWG) exemption from PUHCA; (2) granted FERC more explicit authority to order access to transmission facilities under Sections 211 and 212 of the Federal Power Act; and (3) created the Foreign Utility (FUCO) exemption from PUHCA.
- The issuance by FERC of Order No. 888, which requires utilities to provide nondiscriminatory open access to their transmission facilities. FERC has taken a number of other procompetitive actions on a case-by-case basis, frequently relying upon its conditioning authority in mergers.
- The efforts by the SEC to provide more flexibility under PUHCA, which have been limited by the strict confines of this antiquated statute.
- The enactment of restructuring legislation and regulations by a number of states.

In response to these important policy changes, the traditional vertically integrated structure of the industry has started to come undone. Regulators and industry participants are beginning to view the electric utility industry as consisting of at least five distinct lines of business: (1) generation; (2) wholesale sales; (3) retail sales; (4) transmission; and (5) distribution. Some of these business activities, such as transmission and distribution, must continue to be regulated in some fashion as natural monopolies, at least until technological advances permit greater competition. Under the right circumstances, however, other business lines, such as generation and

[2] These entities are subject, however, to FERC's authority to order transmission under Sections 211 and 212 of the Federal Power Act.

wholesale and retail sales, can be carried out on a competitive basis. Indeed, the generation business already is very competitive, and the wholesale sales sector is not far behind. The retail sales market also is becoming increasingly competitive as the states implement restructuring.

In response to the programs implemented by state and federal legislators and regulators to facilitate and encourage competition, the utility industry has changed rapidly. Four significant changes in the traditional industry structure have emerged:

Disaggregation

First, as generation and sales markets have been opened up to competition, a number of utilities have begun the process of disaggregation and separation of their regulated wires businesses from the other businesses that can operate in competitive markets. This process, which is a natural consequence of the opening up of generation and sales to competition, also has been spurred by state and federal regulations to prevent owners of wires businesses from using their natural monopolies in those regulated businesses to benefit themselves unfairly in the competitive markets.

Entry of Non-Utility Participants

Second, hundreds of new entities, such as independent power producers and power marketers, have entered the competitive generation and sales markets. While some of these entities are merely affiliates of utilities formed as part of the disaggregation process, many are completely new players with no previous connections to the electric utility industry.

Consolidation

Third, in the last few years there have been a flurry of mergers of electric utilities, independent power producers, power marketers and other market participants. These mergers are a natural response to the onset of competition. In the old regulated cost of service regime, utilities had less incentive to be efficient, given that all prudently incurred costs could be recovered through rates charged to customers who had no alternative suppliers. As markets have become more competitive, utilities and other market participants have vastly increased incentives to explore all alternatives for reducing costs and improving services. Mergers frequently create the opportunity for scale economies that make suppliers more competitive in the new cut throat world. Even small savings, when applied to high sales volumes, can result in significant benefits both to shareholders and customers.

Mergers also are a natural response to the disaggregation of vertically integrated utilities. Absent a merger, a smaller utility that divests its generating assets could become so small as to lose its ability to finance its remaining transmission and/or distribution business on reasonable terms and conditions. A merger between utilities that are divesting generation provides the combined entities with greater financial strength, as well as with scale economies.

Regional Control Over Transmission

Finally, there has been a change in the operations and control of the regional transmission grids. Transmission systems are most efficiently and reliably operated on a regional basis. Several utilities have placed the operations of their transmission systems under the control of an independent system operator (ISO). Other utilities have begun the process of creating incentive-driven independent transmission companies (Transcos). FERC has actively encouraged the formation of both ISOs and Transcos, as well as other forms of regional transmission organizations (RTOs).

The statistics tell the story of this dramatic evolution of the electric utility industry:

- Since 1997, 23 utilities have divested generation facilities representing more than 50,000 MW of generation capacity, and several other utilities have announced their intent to follow suit.
- Through the end of 1998, FERC has issued 560 power marketers' authorizations.
- Since 1997, 6 ISOs have been formed, covering the transmission systems of California, Texas, the eastern United States from Maryland north through New England, and a large part of the Midwest. Several other ISOs and Transcos are in various stages of development.
- Since 1995, almost 20 states have enacted statutes or promulgated regulatory schemes requiring restructuring. 24 more states currently are considering electric restructuring in regulatory proceedings or proposed legislation.
- Since 1995, there have been 23 electric utility mergers consummated, and over a dozen more have been announced and are in the process of obtaining the necessary regulatory approvals. There have been numerous other combinations in-

volving independent power producers, power marketers and other industry participants.

- Since 1995, total wholesale sales by power marketers have increased from 27 million MWh to 2.3 *billion* MWh in 1998.

IMPLICATIONS OF RESTRUCTURING

It may be too late to ask the question, but it is worth considering whether all the change that we are experiencing is a good thing. In my view, while the process has been somewhat uneven, on the whole we are on the right track. My experience has been that when competition is substituted for regulation, efficiency improves, innovation increases, and supply and demand become more closely balanced—all of which work to the benefit of both shareholders and consumers. Although vertically integrated companies do provide consumers with scope and scale economies, I believe the benefits of competition will more than offset the efficiencies that may be lost through disaggregation.

I do not mean to say that there is no future role for regulation. When the circumstances do not permit effective competition to exist, regulation is necessary to ensure that market participants do not abuse their market power. Even in markets that are competitive, some type of oversight is necessary to ensure that markets continue to operate competitively. For example, to the extent that an entity that owns a regulated wires business also participates in a competitive generation or sales market, regulation of some type is necessary to ensure that the entity does not use its market power in the wires business to give it an unfair advantage in the competitive market.

The current transition toward disaggregation allows the benefits of competition while retaining regulatory oversight where needed. By disaggregating the industry into separate sectors, those sectors that are competitive can operate with a minimum of regulation, while those sectors that are not competitive can continue to be regulated.

Another issue that frequently is raised in connection with electric utility restructuring is the potential impact on reliability of service. There are two principal elements to reliability. The first is the reliable and secure operation of regional transmission grids, and the creation and implementation of rules to promote such reliable and secure operation. The second is the ability to construct new facilities to ensure that there is enough generation and transmission capacity available to satisfy customer demand.

With respect to the first element, restructuring can only help. The trend towards centralizing control of the regional transmission grids under a single regional operator instead of under several owners with differing interests and incentives will allow better decisions regarding the operation and maintenance of the grid. This should result in more reliable operations.

With respect to the construction of new facilities, it is too early to tell for sure how the competitive model will work in comparison with the command and control type regulation that has been used in the past. I do know, however, that under any model investments will not be made unless the investors believe that it will be profitable to do so. I also know that, under the old system, there have been relatively few investments in facilities by regulated electric utilities in recent years. This is illustrated by the supply shortage that occurred in the Midwest last year, which was a result of the failure of the old system to provide the proper incentives for investment in generation facilities. I believe that a competitive market is more likely to provide the correct incentives for investment. Again, this is illustrated by the example of the Midwest, where several new unregulated merchant plants have been announced in the wake of last year's supply shortage.

ADDITIONAL LEGISLATIVE STEPS

The changes that have occurred over the last few years are phenomenal. I would not have expected at the beginning of the decade to see such rapid progress. The question that Congress now must face is whether the existing incentives that have driven the changes are adequate to complete the job, or are additional policy changes necessary to see the transition through to the end. Congress also must consider whether the pace of change has been or will be fast enough, or whether additional steps are necessary to accelerate the process.

In my view, federal regulators are doing as about as good a job as they can under the current statutory framework, as are many state regulators. There are a number of additional legislative steps that only Congress can take, however, to facilitate the process and maximize the benefits of restructuring. These steps fit into two broad categories: (1) elimination of existing federal impediments to restructuring (*i.e.* get-

ting the federal government out of the way); and (2) creation of additional regulatory tools to facilitate restructuring. I discuss below possible legislative action that could be taken in each of these categories.

Elimination of Barriers

1. *Repeal of PUHCA.* In my view, the single greatest existing barrier to industry competition and restructuring is PUHCA. This Act was passed at a time when large holding companies were engaging in suspect securities transactions and taking advantage of the limited reach of state regulatory commissions over interstate transactions. PUHCA was decidedly successful in breaking up those holding companies and putting an end to their abuses. It is not needed today, however. As the SEC Staff found in 1995, securities laws have advanced considerably since 1935, and the Federal Power Act, which was passed in conjunction with PUHCA, has filled the regulatory gap. Furthermore, state public utility regulatory laws and agencies have improved significantly since 1935.

In proposing the repeal of PUHCA, I am arguing against my own self interest. A major part of my practice in the past several years has consisted of advising clients how to structure transactions in ways that will pass muster under PUHCA. All too often, however, I have seen PUHCA act as a barrier to efficient restructuring transactions, or else cause transactions to be structured in a suboptimal way.

The manner in which PUHCA favors or disfavors transactions is almost completely random. PUHCA makes it easier for a domestic utility to acquire foreign utility assets than U.S. utility assets. It significantly restricts successful non-utility businesses from acquiring utility assets or offering utility services. It also restricts utilities from investing in the businesses they know best—utility businesses—while, for the majority of companies, imposing no restrictions on investments in unrelated businesses. PUHCA also prevents EWGs from competing directly for retail electric sales.

PUHCA frequently is mistakenly described as protecting against anticompetitive combinations. That description is mistaken. Very large utility transactions can be completed without any PUHCA review whatsoever, while small transactions may simply be impossible to complete under the Act's arcane standards. Further, in its administration of PUHCA, the SEC almost universally defers to other states and federal regulators to evaluate competitive issues.

PUHCA also frequently is mischaracterized as a consumer protection statute. Again, this description misses the mark. While PUHCA requires the SEC to regulate certain transactions between utilities and their affiliates, the effect of SEC regulation frequently is to preempt FERC or the states—which have greater resources and expertise—from regulating the same transactions that effect rates charged to consumers. The relatively few consumer protection tools found in PUHCA are duplicative of, and inferior to, the consumer protection powers of FERC and the state regulators.

Finally, repeal of PUHCA is not solely of interest to public utilities. While PUHCA repeal certainly would benefit traditional utilities, it also would benefit independent power producers and other entities that are interested in participating in the electric utility market. PUHCA has the effect of keeping out of the market all potential participants who cannot qualify for an exemption or who are unwilling to become registered holding companies—which in and of itself places severe restrictions on market participation. Repeal of PUHCA would permit efficient transactions to occur, would allow transactions to be structured in the most rational way and, most importantly, would allow a host of new competitors to own utility assets and compete to provide utility services.

2. *Amendment of PURPA.* When PURPA was passed in 1978, it played a very important role in opening the generation market to competition, which was the first step in the transition away from the vertically integrated utility structure. Now that we are much further down the road, however, there are two aspects of PURPA that need to be reconsidered.

First, PURPA obligates utilities to purchase electricity from qualifying facilities (QFs). This mandatory purchase obligation was crucial in 1978 to force utilities to purchase power from independent power producers. It no longer is needed in today's market for new generation, where most utilities have all but abandoned the field, and state regulators are skeptical of generation that is added without going through competitive procurement. The mandatory purchase obligation is the very antithesis

of competition and is fundamentally inconsistent with the creation of competitive markets. This obligation should be eliminated on a prospective basis.[3]

Second, PURPA limits the ability of electric utilities to invest in QFs. This too was an important feature of the Act in 1978, when the goal was to encourage independent ownership of generation. Again, conditions have changed enough today so as to nullify the concern underlying the ownership restriction. The generation market now is highly competitive, and there is no reason to restrict utility ownership of any type of generation facility. Indeed, in 1992 Congress saw no reason to restrict utility ownership of EWGs.

The PURPA ownership restrictions have had another unintended consequence. PURPA not only limits utility investments in QFs, but it also limits QF owners' investments in utility assets. Once a QF owner purchases utility assets, it becomes either a utility or a utility holding company, both of which are restricted by the FERC regulations implementing PURPA from owning more than 50% of a QF. Thus, for example, Cal Energy has been forced to divest a portion of its ownership interests in its QFs as a consequence of its purchase of MidAmerican—an electric utility holding company.

As a consequence, PURPA should be amended to revise the ownership restrictions. Utilities who have retail franchise monopolies probably still should be limited in their ability to own QFs from which they purchase power, but otherwise utilities should be permitted to own QFs.

3. *Amendment of Atomic Energy Act Foreign Ownership Prohibition.* The Atomic Energy Act (AEA) currently includes a prohibition against foreign ownership of nuclear generation. This restriction has inhibited a number of transactions that have involved foreign companies. Again, the result has been a less-efficient transition toward a restructured industry.

As many U.S. utilities are exploring ways to divest their interests in nuclear plants, there is much to be gained by permitting knowledgeable foreign companies to compete to acquire nuclear facilities. I am not suggesting that there are not important national security concerns associated with the foreign ownership of nuclear generation, nor am I recommending that these concerns not play a role in determining whether and how foreign ownership should be permitted. However, the prohibition contained in the current law makes no sense to me. There surely must some way to permit foreign ownership without jeopardizing national security. There are sophisticated nuclear power technologies employed by utilities in England, France, Japan and other Western allies. Our domestic nuclear industry could benefit from the knowledge and experience of these utility companies without endangering national security.

4. *Include TVA and PMAs in the Transition.* Another stumbling block in the path to competition has been TVA, BPA and other PMAs. These entities, particularly BPA and TVA, dominate their regions. Yet they have lagged behind the private sector in restructuring, and have represented a significant impediment to the creation of regional transmission entities in their regions. It is not necessarily the case that these entities actively oppose a national transition to competition. Rather, their underlying statutory schemes are not easily adaptable to the new competitive model.

Congress has two choices for dealing with this problem. First, these entities could be privatized. This automatically would cause them to fit under the same regulatory scheme as the rest of the industry and would permit them to follow the same transition to competition.

I recognize that this may be a difficult step to take. At the very least, however, legislative changes should be implemented to ensure that TVA, BPA and the other PMAs join the path toward competition rather than act as impediments to the transition process.

First, the provision of transmission by these entities should be brought under FERC's jurisdiction. It is important for competition that all interstate transmission fall under a common regulatory scheme. While the federal utilities have filed transmission tariffs that are similar to the open access tariff required by FERC, the fact that FERC does not have direct jurisdiction over them makes a big difference in how they are required to behave.

Second, legislation should be written that makes clear that TVA, BPA and the other PMAs are required to join ISOs or other regional transmission organizations within a reasonable amount of time. As I previously discussed, lack of federal utility participation has made it difficult for regional transmission organizations to get started in regions where they are located.

---

[3] Elimination of the obligation to purchase should be prospective only. Large investments of capital already have been made based on existing contracts, and those contracts should not be abrogated.

Tools to Facilitate Restructuring

The most important step for the federal government to take is to eliminate existing barriers to restructuring and get out of the way. The proposals that I have identified above are intended to achieve this objective. In addition, there are some affirmative steps that Congress could take to facilitate efficient restructuring. Included are the following:

1. *Federal Authority Over Transmission Construction and Siting.* There is one significant mismatch in the allocation of authority between the federal government and the states. On the one hand, FERC has jurisdiction to regulate the rates and terms and conditions for transmission service. On the other hand, the states have the authority to approve the siting and construction of transmission facilities. The lack of FERC jurisdiction over transmission siting represents a major distinction between the two principal statutes that FERC administrates—the Federal Power Act and the Natural Gas Act. FERC is responsible for authorizing interstate natural gas pipeline construction under the Natural Gas Act.

In the past, transmission was built largely to upgrade the reliability of service by vertically-integrated electric utilities to their retail franchise monopoly customers. In that circumstance it made some sense for state commissions, who were primarily responsible for regulating the provision of service to the retail franchise monopoly customers, to have jurisdiction over transmission additions. Today, however, the primary need for transmission is to permit or enhance interstate wholesale transactions and competition, and to enhance the reliability of the interstate grid. FERC more properly is the overseer of transmission additions for this purpose.

Second, it increasingly is the case that the benefits of transmission construction may fall primarily outside of the state where most of the construction occurs. For example, if a utility located in one state constructs a transmission line in another state to connect it with a source of supply, it may be that the majority of the benefits go to one state while the majority of the construction occurs in another state. Under these circumstances it may be difficult to obtain the necessary permits from the adjoining state, which has no incentive to approve the construction.

The effect of the different allocation of siting responsibility between the Natural Gas Act and the Federal Power Act can be seen in the amount of construction activity in the two industries. Both industries have been transformed in the last decade into competitive industries where the construction of new facilities is vital to increasing competition. Yet, while there has been substantial construction of new interstate pipeline facilities in that time, there has been comparatively little construction of transmission facilities.

It no longer is appropriate for decisions over transmission construction and siting to be made on a state level. Instead, that authority should be moved to FERC, consistent with its authority under the Natural Gas Act. Similarly, FERC should be given the power of eminent domain for the construction of transmission facilities, consistent with the grant of eminent domain under the Natural Gas Act. This way decisions regarding new transmission facilities can be made with a view towards achieving the best results on a regional or national basis rather than on a parochial basis, and those decisions can be carried out effectively to enhance competition.

2. *Encouragement of RTOs.* As I testified previously, control over the operation of transmission facilities is increasingly being shifted to regional entities, whether ISOs, Transcos or other forms of RTOs. In my view, this is a good trend. Competition in sales markets is enhanced when entities are able to transmit electricity on a regional basis at non-pancaked rates. More importantly, reliability is enhanced when transmission operators control flows over the entire regional grid rather than over fragmented segments, and when investment decisions are based on regional needs.

Furthermore, for the same reason that I favor competition, I am inclined to believe that incentive driven Transcos should be preferable to ISOs. A Transco will have more incentives to operate and expand its facilities and consider all resource options in an efficient manner than an ISO that is not primarily motivated by operating the transmission system in a way that maximizes profits.

I do recognize, however, that many believe that it is easier to form an ISO governing the transmission systems of several entities than it is to form Transcos, although there are Transco proposals currently under development. Given the benefits of regional transmission operation, I believe that ISOs at the very least can be useful transition vehicles for eliminating the balkanization of control over regional transmission grids.

Given the rapidly evolving nature of regional transmission organizations, I am hesitant at this point to recommend that the Congress mandate any particular path. Our learning on the issue may not be advanced enough for any particular solution

to be locked in today. Instead, we need to leave in the flexibility for paths not yet apparent to be pursued.

There are, however, several impediments to the formation of regional transmission organizations that should be removed. I have discussed some of these previously, but I will address them again with particular emphasis on their relationship to the formation of regional transmission entities.

- *PUHCA ownership restrictions.* Among its numerous impediments to competition is the impact of PUHCA on the formation of regional transmission entities—particularly Transcos. Any large regional Transco will cover a multistate area. Yet PUHCA, which would apply to the ownership of a Transco, would place restrictions on the private ownership of such an entity. The solution is to repeal PUHCA.
- *Transmission constraints.* In some regions there are transmission constraints that place significant limits on the amount of power that can flow through certain facilities. The result may be fragmented transmission systems that cannot easily be integrated into a regional system. States may be reluctant to act to relieve such constraints solely to improve the interstate grid, and likely will become more reluctant in response to a request by a regional transmission operator where the apparent benefits to that state may be even more remote. The solution is to give FERC siting and eminent domain authority for the construction of transmission facilities.
- *Nonjurisdictional transmission owners.* Some regions are dominated by transmission owners that are not subject to FERC's jurisdiction, and who are either reluctant to participate in regional entities or cannot so participate as a matter of law. For example, it is difficult to form an ISO in a region where there is a large federal utility, such as BPA in the Pacific Northwest and TVA in the Southeast. Similarly, public power systems are concerned that participation in an ISO might cause the loss of their tax-exempt status. The solution is to bring the federal utilities under FERC's jurisdiction and otherwise require their participation in regional transmission entities, as I previously have testified. FERC also should be given jurisdiction over transmission services provided by the other public power entities that currently are beyond FERC's reach. I recognize that so extending FERC's reach probably requires additional steps to eliminate barriers to participation by these entities in RTOs, such as revisions in the tax code to protect these entities existing financing.

CONGRESS SHOULD NOT ENACT A COMPREHENSIVE BILL IF THAT WOULD DELAY ACTION ON IMPORTANT INDIVIDUAL COMPONENTS

I feel compelled to make one final point, although I acknowledge that it is politically naive. There are a number of important actions that Congress can take to encourage competition that are completely unrelated to each other. In my view, Congress should enact as many of these as it can right away, even if that means that others have to be put off until later. Even if only one component can be enacted at this time, that component should be enacted. We now are in a crucial stage of the transition, and should do everything we can to move it along. If we wait until all parties can agree on all aspects of a comprehensive bill, it very well may be that the bill will be passed too late to have the intended effect.

Whether it is repeal of PUHCA, amendment of PURPA, or any of my other proposals, Congress should act now on those issues that it can agree on even as it struggles with other more difficult issues. Any steps that it can take will benefit consumers and market participants, and Congress should do everything that it can to effect those benefits.

Mr. STEARNS. I thank the witnesses. Let me open up by just making an observation from listening to your testimony. First of all, it appears that all of you seem to agree that we need Federal electric legislation. I think that is trying to look where we all can agree, and also, all of you agree that the existing statutory authority that we have in place is inadequate to assure, I guess, perhaps, this deregulatory process and also the continued reliability of the transmission system. Do any of you disagree with that?

No; okay. With those two premises in place, it seems to me in listening to the testimony, one of the areas of disagreement is the date certain. The Honorable Linda Stuntz has indicated that she

thinks it is not mandatory, and the Honorable Moler has indicated she thinks it is. I would like to take off, just if you would, from that point of view and hear each of you, in a very short amount of time, say strongly why you think a date certain is very important and why it is not, and we will just go across the panel, because I think that has been one of the contentious issues among members, and so, to reiterate again, if you might start off, Ms. Moler, to describe why date certain is important.

Ms. MOLER. I believe a date certain is important because there are large sectors of the country where there is virtually nothing happening. I would respect, ultimately, a decision that any State regulatory commission made or any State legislature made if it were to determine that it did not want to have customer choice, but I believe that that determination should be made on a record where citizens have an opportunity to participate, and they would have to compile a record that would compellingly decide why competition is bad.

Fundamentally, I believe that it would be very difficult to compile such a record, but if they make it, that is fine with me.

Mr. STEARNS. And FERC would have the environment?

Ms. MOLER. No, I would have a very simple certification to the Commission that we have looked at this, and we have decided that we do not want to do it, and then, any challenge to the State's determination would be done under State law.

Mr. STEARNS. Okay; Ms. Stuntz?

Ms. STUNTZ. Thank you, Mr. Stearns.

I believe it is not a critical element of legislation, first, because nearly half the country is already in a State that has adopted choice, so we are already, depending on your statistics, 45 or 50 percent of the country is there; that does not include Texas or Ohio, which I know are looking hard at this. So I believe that number will go up before the end of the year.

Second, of the States where nothing or less is happening, I believe many of those are low-cost States who legitimately view this as not necessarily in their interest to do, and I think it is hard for us to say from the Federal level that they are wrong and they should be preempted.

And I guess third is I think if this market expands, and I think we are seeing signs of this already, brings to consumers the benefits that I expect that this is going to happen on its own, so that—and you see signs of that in the paper if you read about what is going on in Maryland or Virginia. They talk about, well, Pennsylvania has done this, and we need to get with this, because we might lose economic development opportunities.

And, I guess, finally, as I said, I do believe it will be the poison pill in your legislative effort.

Mr. STEARNS. Okay.

Ms. STUNTZ. And I think the perfect will be the enemy of the good.

Mr. STEARNS. Do you think if you had two States that did not want to comply with a date certain that you could develop reciprocity incentives between them? What you are indicating, like in the State of Maryland, it is going to change because of survival, because the economics——

Ms. STUNTZ. Right.

Mr. STEARNS. [continuing] is going to other States.

Okay; Charles Stalon?

Mr. STALON. I would draw a distinction between the role of very large players, large users, and creating efficient markets and very small users, and I would not insist that the States have a date certain for allowing smaller users to enter the competitive market. I would let them have substantial freedom, perhaps complete freedom, to make that decision.

But large users are quite different. It is very difficult, almost impossible, to create an efficient competitive market unless you have sensitivity to prices among the buyers. As long as the buyers and the distribution companies who are required to sell to the users at an average price, the only demand curve they can bid into the market is a perfectly vertical one, which creates the terrible problem of price spikes. So I would mandate a date certain for large users, so we could get their buying skills into this market as a constraint on price spikes and as an intensifying pressure in a competitive market.

Mr. STEARNS. Mike Naeve?

Mr. NAEVE. Thank you.

First, let me state that I believe in retail choice. I think it is good public policy. I have watched as Congress has attempted to build a consensus on retail choice. The concern that I have is that the longer it takes to build this consensus, the more difficult it becomes to enact legislation. While we are waiting to enact retail choice legislation, each State or a great many States are adopting their own programs. I believe those programs should be grandfathered.

But as you build those programs, the complexity of the legislative process becomes more difficult, both because you tend to lose support for the process but also because it becomes very difficult to draft a bill that decides what is grandfathered; what is not; what are the parameters; which programs do you change or do you not change?

I would also say I have been involved in the State retail choice programs in several States, and it is very complicated: questions about demand credits; questions about what do you do with load pockets; so forth. It is a more complicated issue than I previously thought. So I would say retail choice is a good thing, but my primary concern is waiting for a consensus for retail choice has caused us to lose the opportunity to do a great many other good things, and if we were to do those other good things, I think the forces of competition inevitably would cause retail choice to be a consensus in this country.

Mr. STEARNS. I thank the witnesses, and now, questioning from the ranking member, the gentleman from Texas, Mr. Hall.

Mr. HALL. I thank you, and I guess, Ms. Moler, you have been a real leader on thinking through competition, and we are very happy to have you here today, as we were happy to have you in Texas when you were the——

Ms. MOLER. Thank you, sir.

Mr. HALL. [continuing] speaker there for us.

If I understand your testimony, on the one hand, it seems you seem to say on page 4 of your testimony that there are problems

with some State plans, but since munis are not included, you also seem to call for a hard mandate requiring States to adopt retail competition by 2001, and I do not know which one of those to pursue, but I have read later where you seem to soften your testimony by saying opt out is a good idea and that you would grandfather existing retail competition laws.

I do not really want to put you on too much of a spot, but I guess my question is whether or not you favor a real hard mandate or an opt out, and do you favor a clean grandfather for the State action or something else, and if it is something else, what would that be?

Ms. MOLER. I would favor a mandate, but I do not think it could fairly be called a hard mandate. I would grandfather generically those States that have acted. I would not try and figure out whether the fact that the California Legislature included some water projects in its legislation somehow made that an unworthy program. I would simply grandfather actions by States that have enacted customer choice, and I would, as I have said earlier, respect a determination made on the record by an appropriate State regulatory authority, presumably the PUC, that customer choice is detrimental to the citizens in that State.

Mr. HALL. You would require that to be proved by the States?

Ms. MOLER. Pardon, sir?

Mr. HALL. Was that the part where you were talking about competition and your proposal to have the States carry the burden of establishing, on the record——

Ms. MOLER. Yes, sir.

Mr. HALL. [continuing] that competition would be harmful.

I guess my problem with that is would that—and I ask you as an attorney—would that lead to a final decision that would make it appealable?

Ms. MOLER. Yes, it would; they would certify that to the FERC. I do not think it is necessary to have it appealable at the Federal level. I would just leave the normal State machinery in place for appealing State regulatory decisions.

Mr. HALL. There would have to be a final decision by someone, somewhere, sometime, though, that would be appealable by the court, and would that not lead to the courthouse? And that is where something like that is going to wind up.

Ms. MOLER. We are headed there in many respects in this business. The restructuring statutes have been appealed even without a mandate in a number of States. So that is not a new problem.

I also think that establishing a mandate for customer choice and then having the States take some sort of voluntary action is consistent with the Constitutional questions that have arisen under the Prinz v. United States, the Brady Bill Supreme Court decision.

Mr. HALL. Linda, do you have any comments on that? I think you—go ahead. I am not trying to tell you what to say, but I would like to hear it.

Ms. STUNTZ. Well, thank you, Mr. Hall. I actually agree with Mr. Naeve. I support retail choice, but for the reasons I said and I think he articulated very well, I do not believe any mandate, frankly——

Mr. STEARNS. Could you move your microphone just a little closer?

Ms. STUNTZ. I do not believe any mandate is essential—a date certain—is an essential component of necessary Federal legislation.

Mr. HALL. What are the complicating factors in a date certain?

Ms. STUNTZ. I do not think it is necessary, although I, too, think retail choice is the right policy, and I think it is going to happen; I think it is happening, and it will happen more quickly if we get rid of some of the Federal barriers.

Mr. HALL. Mr. Stalon?

Mr. STALON. I guess I agree with what Linda has said. I think it will happen, and I am very much in favor of it happening. I would like to see all consumers with a choice. But I am most impressed with a need to get the large ones in to make the markets work well. Once the markets are working and working fairly well at the wholesale level, it is much easier to persuade legislators to have choice at the retail level for smaller customers.

Mr. HALL. My time is up, Mike. I will get back to you in a little bit.

Mr. STEARNS. I am pleased to recognize the chairman of the committee, Mr. Bliley.

Chairman BLILEY. Thank you, Mr. Chairman.

For all of you, everyone seems to believe that retail competition is inevitable. Why? Is it because competition is better for consumers than regulation or what? We will go from the left to the right.

Mr. NAEVE. I think that is the basic answer. I think competition—there are many aspects of this industry, perhaps, that cannot be made competitive, but there are aspects that can be: the marketing of power; the ownership of generation; the construction of generation. These are parts of the industry that can be made competitive. And a part of those components becoming competitive is giving customers the choice to decide who they are going to buy from. So I think it is a part of the competitive landscape if we believe that competition is better than regulation; in those parts of the industry where we can introduce competition, then, this is a part of the landscape.

Chairman BLILEY. Does anybody disagree with that?

Well, good.

There are many States that would prefer Congress to do nothing with respect to retail choice and kind of let the market evolve. Can retail markets evolve without some Federal or State action? Are there barriers to national retail competition?

Ms. MOLER. I think all four of us have testified to the fact that there are significant impediments in existing law to retail competition, yes.

Chairman BLILEY. So we will have to have Federal legislation at some point in time.

Ms. MOLER. The State legislature in the Commonwealth of Virginia, to my knowledge, cannot amend the Federal Power Act, PUHCA, et cetera.

Chairman BLILEY. No; Dominion Resources would like it very much if they could. But unfortunately, they cannot.

Does wholesale competition provide consumers with the lowest prices, the best service and the greatest degree of innovation, or do we need to move to retail competition?

Mr. STALON. I would insist we must move to retail competition and fairly quickly for all of the large users in order to make wholesale competition work and work efficiently. If buyers cannot respond when prices change, and they are continually required to buy at regulated rates which are averages over some period of time, the buyer for them, the utility, is required to submit a perfectly inelastic demand curve.

Look at the recent studies in California where the demand curve is perfectly vertical as submitted by the distribution utilities. It is very difficult to have an efficient market with a perfectly vertical demand curve.

Chairman BLILEY. Well, but there is a corresponding argument. If you have the big users and are able to bargain and to get better prices, what about the other side of that coin which says, well, if that happens, then, the little guys are going to have their rates increased to make up the slack?

Mr. STALON. No, I do not think that is true at all. In a competitive market, if you take a cut on one side, you cannot arbitrarily charge someone else unless you have monopoly power. If we take away the monopoly power of the generators, I am not concerned about that.

Chairman BLILEY. Does anybody take exception to what he said?

Mr. NAEVE. No, I do not take exception. I will point out that in a tightly regulated market, there are a lot of built-in cross subsidies. As markets become competitive, many of those cross subsidies may evaporate, so you can see cost shifts from one customer class to another. It is not necessarily a result of competition; it is a result of getting rid of cross subsidies.

I will also add that I do not think there is disagreement among us as to whether retail competition is the right policy. Nor do I think there is disagreement among us as to whether or not you need legislative changes. I think the only disagreement is which legislative changes are needed to get us there, and how can we get there the quickest? And some of us think there should be a Federal mandate; some of us think there should not be; and I must admit I am a little in between. I think we should do what we can first; unleash competition. I think the mere force of that competition will drive us toward retail competition, and if, in the long run, we do not get there, then, I think we should consider a Federal mandate, but I think once you unleash competition, it forces the industry to change.

In fact, that is already happening now. There are tremendous changes in this industry because of the changes that were enacted by this Congress a decade ago, a little bit less than a decade ago. And I think if we could do some of these other things now, we are going to see a continued movement, a momentum toward greater and greater competition, and that will drive the industry and the States to retail competition very quickly. It is already happening. If it does not, we need to look at mandates.

Chairman BLILEY. Thank you; I see my time has expired, Mr. Chairman.

Mr. STEARNS. I thank the gentleman.

The Chair recognizes the gentleman from New Jersey, Mr. Pallone.

Mr. PALLONE. Thank you, Mr. Chairman.

I wanted to ask Ms. Moler and also Ms. Stuntz a couple of questions. I know that in the next panel, we have two witnesses who are going to say that they oppose a Federal mandate to deregulate their States' retail electricity industry, and we have, I guess, 23 States who have stated their concern that retail competition will result in higher costs for their consumers. You have kind of gotten into this a little bit, but I wanted to, if you would, tell us why you think, if you do, you know, why should we force these States to deregulate if they do not think it is a good idea, and are there compelling price or transmission or delivery problems in these States that warrant intervention by the Federal Government?

I know, Ms. Moler, you kind of touched on that a little bit, but I wanted you, if you could, both of you, to respond a little more fully.

Ms. MOLER. Many of the States have initiated some kind of regulatory proceeding. In many cases, those regulatory proceedings are just sort of meandering and have not come to a conclusion that retail competition is contrary to the interests of their consumers. In many instances, it is not likely that those regulatory proceedings will ever get to a final conclusion, so that those who are interested in customer choice really do not have anywhere to go. They are stymied.

So I believe that if States do not want to have competition, I would respect that as a determination by the State regulatory authorities, but I would make them put that on the record. I believe, furthermore, that having to go through such a proceeding and make those kinds of determinations will force very significant changes in the industry in those States that are now just stymied. There is no other major market in this country where consumers cannot choose from whom they want to buy, whether it is bananas or automobiles, and there is no compelling technological or engineering reason in this day and age why consumers need to be protected and prohibited from exercising their choice of from whom they buy electricity.

Mr. PALLONE. So the lack of clarity about what the States are doing in itself is sort of a negative in your opinion?

Ms. MOLER. Yes, sir.

Mr. PALLONE. Okay; would you like to respond, Ms. Stuntz?

Ms. STUNTZ. Thank you, Mr. Pallone.

I do see it a little differently. I believe most States are looking at this, and I think they are looking at this seriously, and I guess I do not, at this point, see the need to preempt a State decision that it may not be in the interests of that State at this time to move forward. Some States—I know New Jersey just enacted legislation this year; Ohio; I know one of the issues out there, and it is not unique, has been a question of taxes. Many of—much of Ohio's school funding came from taxes that were levied on utility sales, and they suddenly, if you are going to put this into a competitive environment, you can no longer tax utility property at a hugely different rate, which meant you had to make up for those

revenues, and it has been a big problem that is going to take some time to work through. I hope they will work it through; I hope they will pass a law this year, but I think it is just an illustration of the difficulty, I think, for the Federal Government to say now is the time; here is the date; have it done by then.

And every State plan is different in some respects, and I think, to echo what Mr. Naeve said, I really think if we get some of the barriers out of the way; for example, clarify that the States can do this so that they cannot be taken to court on an issue of Federal Power Act preemption if they choose to move ahead. I think that would be a very helpful thing for us to do to let the States move forward who want to move forward.

Mr. PALLONE. Well, let me—in your testimony, Ms. Stuntz, you stated that—you said this committee need not tackle now those issues as to which consensus is remote, the issues are not yet ripe, or the issues are only loosely related to restructuring. What kind of issues would you put into that category? And, you know, why do they fall into those categories?

Ms. STUNTZ. Well, I would certainly say date certain is one of those in which I do not think a consensus can be forged soon, and there are others. I personally do not think Congress knows enough yet or anyone knows enough yet to say Congress should authorize FERC to order people into transmission organizations of a particular type. I am not sure that there is consensus on a renewal portfolio standard. I think there are efforts underway that may result in that. I think there is some good work that potentially needs to be done: things like fuel diversity for our generation mix is an important policy issue, but I am not sure we have consensus yet on exactly what the mechanism should look like; how it should be funded. The States are doing it different ways, and those are some examples of issues that I think may be too hard to deal with right now.

Mr. PALLONE. Okay; thank you.

Thank you, Mr. Chairman.

Mr. STEARNS. I thank the gentleman.

The Chair is pleased to recognize the gentleman from Georgia, Mr. Norwood.

Mr. NORWOOD. Thank you very much, Mr. Chairman.

I would like to again associate my remarks at the beginning with Ms. Stuntz and Ms. Moler. My views today are my own.

But the difference is for both of you that I admit freely that I am influenced greatly in my views by my clients, all 650,000 of them in the Tenth District of Georgia.

Now, I am going to ask you some questions that I am going to ask as kindly and gently as I can, and I would like the record to reflect that I am smiling, not frowning. I do not intend to impugn your motives or your character, and I am going to ask these same questions to every panel that comes before us in this great debate.

Now, I would like for each of you for the record, really so that the committee can better understand your testimony, state for me whether you are receiving compensation by a client or a coalition of clients to lobby Congress on electricity restructuring. Either end.

Ms. MOLER. Mr. Norwood, I am a registered lobbyist for the Enron Corporation. I serve as counsel to the——

Mr. NORWOOD. For which corporation?

Ms. MOLER. Enron.

Mr. NORWOOD. Enron.

Ms. MOLER. Enron Corporation, a Texas corporation.

Mr. NORWOOD. Okay.

Ms. MOLER. I——

Mr. NORWOOD. I am glad the chairman is not here. Go ahead.

Ms. MOLER. [continuing] serve as counsel to a group known as Americans for Affordable Electricity. However, and I also do work for an alliance of companies who are interested in forming a regional transmission organization. And it is early in my practice, and I hope to have more clients one of these days.

Mr. NORWOOD. And I hope you do, too, Betsy, and I hope you do not take this question personally.

Ms. MOLER. I do not take it personally.

Mr. NORWOOD. Thank you.

Ms. MOLER. I understand the public interest behind the client.

Those clients have not paid me for the time, nor will I ask them to do so, for the time I have spent during this testimony.

Mr. NORWOOD. I understand that.

Linda?

Ms. MOLER. And indeed they probably disagree with some of the things I have said.

Ms. STUNTZ. Mr. Norwood, I am counsel to a group called the PURPA Reform Group, which has advocated the prospective repeal, cost recovery of the Public Utility Regulatory Policies Act. I am a registered lobbyist for Southern California Edison Company, and I am on the board of American Electric Power Company.

Mr. STALON. I am not being paid by anyone to participate in this hearing. I am a member of the Board of Directors of ISO New England; I am a member of the California Market Monitoring Committee, and I have many other interests in the utility industry and clients in the past from the utility industry. Given my age, I have been withdrawing from the consulting business, and so, currently, I only have one, and that one is not in the United States.

Mr. NORWOOD. The implication in the question is not about this hearing. I know none of you are being paid to come here; you are doing it because you are good Americans. But what I am after is if you are actually lobbying during this debate over the next 4 or 5 months.

Yes, sir?

Mr. NAEVE. I am not being paid to lobby Congress on these issues. I represent a great many companies that have positions on these issues, because I am involved in a lot of transactions in this industry. They are largely mergers, asset divestitures, that sort of stuff, and I am sure my clients in those transactions have views on all of these issues. I also am quite confident that, given the breadth of that client base, that they have very diverse views.

Mr. NORWOOD. I appreciate your answer, and I presume you do not represent or lobby any coalition.

Mr. NAEVE. I do not.

Mr. NORWOOD. Okay.

Mr. NAEVE. And I attached to my testimony a list of the transactions I am currently in and the parties in those transactions, but I have not consulted with them on their views and——

Mr. NORWOOD. Now, here is the second question, which is the zinger. Now, this is not personal, but I need an answer. If you are lobbying a coalition of clients, will you identify for this committee the major sources of funding for your coalition? Who, in fact, are the biggest financial participants? And last, if you lobby for a coalition, does your coalition favor a Federal solution or a continued State experimentation?

Ms. MOLER. Mr. Norwood, as I said previously, I am registered as a lobbyist for the Enron Corporation. They are the largest supporter of the Americans For Affordable Electricity. That group, however, does have many, many active corporations and public interest groups that are in favor of a Federal solution to this issue.

Mr. NORWOOD. Enron is in favor of a Federal solution.

Ms. MOLER. Yes, sir.

Mr. NORWOOD. Well, I guess all Americans need to be a member of the Affordable Electricity. We all want to be part of that.

Ms. MOLER. We welcome your membership.

Mr. NORWOOD. I mean, everybody wants cheaper electricity, do we not?

Linda, could you explain for us?

Ms. STUNTZ. Yes, sir, and this is filed in our lobbying registration form. The PURPA Reform Group does advocate a Federal solution, because only the Congress can reform PURPA. It is about 12 members at the moment, including a number of investor-owned utilities and Edison Electric Institute, ranging from Florida Power Corporation, Central Maine, GPU, Duke, SEMPRA Energy. I am going to get in trouble if I forget one of them now but——

Mr. NORWOOD. No, you will not with me. The idea is that you went to work for the right people, because your views happen to work very well with theirs on having a Federal solution. That is the way you ought to do it.

Ms. STUNTZ. I have always been in favor of reducing the U.S. Code; thank you.

Mr. NORWOOD. Mr. Stalon, do you have any comment at this point?

Mr. STALON. No, I do not.

Mr. NORWOOD. Mr. Chairman, I am going to ask this question every time, and here is the problem: in an industry that moves around $250 billion a year, which is a lot of money, it attends to attract a lot of lobbyists when Congress starts to interfere in their business, understandably so. And I would suggest perhaps our committee ought to, if they can find anybody, an expert in this area to testify before us at each hearing that is not a lobbyist.

Mr. STEARNS. I thank the gentleman from Georgia.

A couple of things I might comment. First of all, all the background and their lobbying interests are already disclosed in their resumes, which are part of the packages that each of us have. The second thing is, for example, some of these folks, including the Honorable Moler, Elizabeth Moler, actually wrote the Clinton Administration's bill. If she was working for EEI or a co-op or a municipal, no matter where, we would have her, because experts do

not necessarily live on a mountaintop. You are going to have to go to industry and say, by golly, what do you know and give us your opinion.

And so, my point would be is that we are going to find with these individuals that their expertise was developed somewhere and somehow. But I appreciate what the gentleman is referring to, but I would point out that the staff has assured me that all of these people were selected on the basis of their knowledge, and any questions you have, you certainly can look in their resumes.

Mr. NORWOOD. Mr. Chairman, I was not impugning anybody, their character. I knew they were based on their knowledge. But surely, in this large country, there are enough people with knowledge that we can have come before us that are not lobbyists, and I would ask for unanimous consent that my question and the answers be placed in the written record just prior to the testimony.

Mr. STEARNS. Agreed.

Mr. NORWOOD. I yield back the——

Ms. MOLER. Mr. Norwood, I would also point out that I am a retiree, so I am here on behalf of Federal retirees.

Mr. STEARNS. There you go.

All right; the Chair is pleased to recognize the gentleman from Ohio, Mr. Sawyer.

Mr. SAWYER. Thank you, Mr. Chairman. I have really enjoyed the testimony this morning, and I have particularly been gratified by the focus that every one of the witnesses has brought to the largely unresolved and, in some cases, unaddressed questions of how we deal with the infrastructure of transmission in this country.

Let me just ask you a basic question. Is it your belief that all infrastructure, whether currently owned by an IOU or a public power entity or a co-op be treated in essentially the same way in terms of FERC's authority to regulate?

Ms. MOLER. I would treat all transmission——

Mr. SAWYER. I am speaking specifically of transmission.

Ms. MOLER. Transmission infrastructure the same and put it under the same Federal Power Act amended, obviously, set of rules and also the same reliability rules, which is vitally important.

Mr. SAWYER. Ms. Stuntz?

Ms. STUNTZ. I would agree with that.

Mr. SAWYER. Everybody?

Mr. NAEVE. I endorse that.

Mr. STALON. I endorse that as well.

Mr. SAWYER. There are some who have suggested that FERC ought to have the authority to order generating entities to join a particular regional transmission organization. Do you subscribe to that? And if you do, how will FERC know which is best for any individual generating portfolio on a case-by-case basis?

Ms. MOLER. My testimony focuses on this issue. I do not think of it in terms of generating entities; I think of it in terms of transmission entities, and I would give the Commission authority to order those who are not currently a member—integrated transmission companies, because that is where the vertical integration raises the market power questions, but I would have them be able

to order those who are transmission entities are part of integrated companies——

Mr. SAWYER. Right.

Ms. MOLER. [continuing] to join a regional transmission organization of their choice.

Mr. SAWYER. Of their choice?

Ms. MOLER. Yes, so only those who are not currently members——

Mr. SAWYER. But that is the crux of my question.

Ms. MOLER. Right.

Mr. SAWYER. You are not suggesting that FERC would assign them to a particular——

Ms. MOLER. I would not have FERC draw the lines on the map, no, sir.

Ms. STUNTZ. I think I agree with that, but I have a little concern about, getting back to why we care about RTOs in the first place, which is market power. And I guess I would rather FERC say these are the rules in order to protect against abuse of market power and leave it to the utilities, the transmission owners and the generation owners to decide how they are going to address that. And I understand that RTOs can include both transcos and ISOs, which is important, because I do not think we know yet which is the right way to do this, but I am thinking also about some small utilities that may own transmission, and is there some line that should be drawn at some point? Is there a market power issue raised by a small, integrated utility that requires a FERC remedy? And I just do not know the answers to that.

Mr. STALON. I would disagree on this point with Ms. Moler. I think the FERC must have the authority to draw lines, to define transmission regions and markets, the edges of markets. One thing seems to be very clear: we now have approximately 150 control areas on the North American continent; we probably need less than 20. There needs to be a merger, and somebody has to draw those lines, and I do not know of any other agency that can draw the lines other than the FERC. And so, I would draw the lines; define the regional organizations and insist that every significant player in those regional organizations be integrated by communications and perhaps also operating rules and perhaps for other reasons with the control area operator, whether it be a transco; whether it be an ISO or a transco that is an ISO.

However we choose to do this, someone has to draw the lines, and I do not know of another agency other than the FERC that could do so.

Mr. SAWYER. Mr. Naeve?

Mr. NAEVE. Well, I agree with the other panelists that we do need regional transmission organizations. We do not need so many as we have now. We need a very small number. I think it is more than for just market power reasons. I think it very much helps in reducing market power, but I also think it is for reliability reasons. I think we get more rational transmission investments; we can better plan the grid, and we can better operate the grid if done so on a regional basis.

With respect to legislation, I think we need to encourage, and the FERC is encouraging, the formation of regional grids. I think they

have a lot of power, frankly, they are not using. For example, in merger cases, there are pending merger cases today where we could force the creation of very large regional organizations if they choose to do that.

So I think they have a great deal of power. I also, as I mentioned in my prepared remarks, think one of the most important things we can do to facilitate the creation of RTOs is to get the Federal agencies in it. In the Pacific Northwest, Bonneville is a giant. They dominate the system. There have been attempts to create RTOs out there, and the difficulty of integrating Bonneville into that RTO has been a huge problem.

Likewise, TVA sits right in the middle of the southeastern United States with tremendous transmission assets. It is a pathway between markets, and if with Federal legislation requiring TVA to participate in RTOs, that would greatly facilitate the formation of large regional RTOs.

Mr. SAWYER. Mr. Chairman, I appreciate your flexibility on those answers.

Is it possible that we might have a second round with this panel?

Mr. STEARNS. If members would like it, we will have a second round.

Mr. SAWYER. Thank you.

Mr. STEARNS. I thank the gentleman. I just wanted to clarify that what Mr. Norwood indicated in his request, I want to interpret his request that his oral statement will appear in the record in accordance with the point or at the point in the record where he said it.

At this point, we will recognize a gentleman from Tennessee, Mr. Bryant.

Mr. BRYANT. Thank you, Mr. Chairman.

I would like to ask the panel about a concern I have that would it be possible that low-cost providers may raise their rates in a competitive environment? And also, I guess, do you believe in a competitive world, electricity suppliers will have that ability, will truly have the ability to sell to some customers at prices higher than the market? Anybody want to jump in?

Mr. NAEVE. In a competitive world, there will be a market price, and that market price may fluctuate from hour to hour, day to day, season to season. And there will be times when low cost providers who today are regulated at a price that is very low will be able to sell their power at prices higher than they receive today. At other hours, they will sell their electricity at prices lower than what they receive today. On average, I believe prices will be lower than they are today, because competition is a better regulator than regulation.

And there is also, I think, a misunderstanding that if we have competition, what we will have is an averaging of pricing throughout regions or an averaging of pricing throughout the United States. If that is all we do, it is not worth doing. I think what we will have is a lowering of prices, because competition will drive prices down.

Mr. BRYANT. Let me ask you another question. You spoke about—you felt that Federal regulation ought to require TVA to

participate in the RTOs. What impact will that have on TVA and its consumers?

Mr. STALON. I draw a distinction between the retail activities and the wholesale activities. Integrating the transmission system of TVA and Bonneville into the North American network and subjecting it to FERC regulation would permit more efficient trades, but nothing changes at the distribution level unless you approve it. The Bonneville structure would still benefit the Bonneville area to the extent that it does today. We are not, to my knowledge, discussing the changing of the distribution sector of the industry. It will be subject to the same regulation that it is today.

Mr. BRYANT. Mr. Naeve, do you have any additional comment?

Mr. NAEVE. I would agree with that. Today, there are prohibitions against selling power to certain TVA distribution customers. You can integrate TVA into an RTO and not upset those prohibitions. Now, I would say down the road, perhaps you should do away with those prohibitions as well. That may cause TVA to incur stranded costs, just like we might impose stranded costs on any other utility, but that is the price of competition, and we should find ways to deal with that.

And I do think it is good policy to permit recovery of stranded costs. In this case, TVA, the stranded costs may belong to the Government.

Mr. BRYANT. Let me ask, again, whoever wants to answer this. We seem to all agree that something is going to happen either at the Federal level or the State level and that retail competition is inevitable. This being the case, would one of you like to describe some of the things that companies are doing to prepare for this competition and also describe, perhaps, some of the products or services that you believe might be available in a competitive marketplace that are not available today?

Ms. MOLER. I think that companies that are facing competition, and I do serve on the Board of Directors of the Unicom Corporation, though I am not retained by them to lobby in any way, shape or form, have looked at their assets. They are selling assets at the present time that are not performing as well as they would like. They are working very hard to take the assets, such as Unicom's nuclear fleet, and have them perform much more efficiently and have made significant progress there. They are also investigating a wide variety of non-regulated business opportunities, and just one of the things that needs to happen with the repeal of the Public Utility Holding Company Act, for example, is to free up corporate structures so that they can invest in new lines of business and have the kind of creative opportunities that are now precluded from entering into if they are PUHCA-registered utilities.

There are just any number of efficiency opportunities and new kinds of businesses that they are anxious to get into.

Ms. STUNTZ. Yes; I would just add that as Mr. Naeve mentioned, there are some more than 50,000 megawatts of formerly utility-owned generation that is being divested. Utilities are saying people who invest in my company are looking for a stable rate of return; a regulated rate of return. The generation business is not going to provide that anymore, right, because it is competitive, and I do not think I want to be in that business, so I am going to get rid of

those assets; I am going to focus on my wires business. I mean, that has been one, I think, emerging strategy.

Others are looking at diversification. They are looking into energy services, and I think consumers are going to get tremendous benefits from people now looking to offer them bundled packages of, you know, we are not going to be electric or gas; we are going to be lighting or heating or cooling and put it together in a way, or maybe it is going to be onsite, a lot of people, you know, whether it is fuel cells or distributed generation, more control over your energy future.

You may not have time to monitor or run home because it is a peak price at 12 in the day, and you might want to throttle down your refrigerator or your air conditioning, but people will do that for you, and it is already happening, certainly at the commercial level, where you can see chains like McDonald's and department stores now coming together in one building and one provider for their units all across the country.

It is just beginning to unfold, but it is very exciting, and I think it is going to continue to accelerate.

Mr. STEARNS. I thank the gentleman.

The Chair is pleased to recognize the gentleman from Oklahoma, Mr. Largent.

Mr. LARGENT. Thank you, Mr. Chairman.

I would just say that I guess I have a little different view than my friend from Georgia about our witnesses today. I, frankly, admire people who have enough knowledge that they can market it and make a living as well.

Ms. Moler, I wanted to ask you a question about what I referred to as kind of a rogue study that was conducted by the USDA, kind of released prematurely, that reflected that some States would not benefit from competition. Do you have any comments about that?

Ms. MOLER. Like you, I was quite curious about the USDA study. I got a copy of it from a reporter. They are a wonderful source of information and misinformation as well.

I have personally read the USDA study that purports to show that there will be significant increases in costs from retail competition in a number of States. While I was in my prior life at the Department of Energy, we did what was then the most comprehensive analysis of what would happen in a competition scenario. It was released as the supporting analysis for the Comprehensive Electricity Competition Act. It was a region-by-region study of the benefit of competition, and it showed that in every region of the country, all classes of consumers would benefit from competition.

I believe that there is considerable controversy within the administration over the USDA study, and I am very much looking forward to the really expert analysts at the Department of Energy, and there are some terrific people there, who are committed to doing unbiased analyses, coming to grips with the assumptions in the USDA study.

It seems to imply that you are going to deregulate distribution, for example. I know of no one who is seriously talking about that. So I do not worry about what happens from deregulating distribution, and I do not think that is a valid assumption.

Mr. LARGENT. Ms. Stuntz, let me ask you a question. Can you just tell us, for the record, who the largest generator of electricity in this country is, what single entity is the largest single generator of electricity?

Ms. STUNTZ. You know, I should know that. I believe it is the Southern Company but——

Mr. LARGENT. Actually, I think it is the Tennessee Valley Authority.

Ms. STUNTZ. Probably.

Mr. LARGENT. It is the largest generator of electricity.

Ms. STUNTZ. I believe you.

Mr. LARGENT. So, in light of that, if you do not have a date certain, how do you deal with TVA and Bonneville in particular and States that they serve?

Ms. STUNTZ. I see them somewhat different questions, Mr. Largent. I think you do have to deal with TVA and Bonneville. You have to deal with their transmission systems; you have to deal with wholesale competition, getting them firmly engaged in that, which they are not yet, and ultimately, I think you will have to deal with retail competition, and I think that is going to be hard to do. I am sure you are aware that TVA has a debt in the neighborhood of $27 or $28 billion. That is the reality you have to deal with.

The BPA is facing a whole lot of issues. I think they are close to deciding that they are going to separate generation from transmission, which I think would be a good thing. I think it would make it easier for their transmission to be put into an RTO or to become part of the national grid. I do not believe TVA is close yet, and I think it is very important for the very reason you say: their size, their location, that they cannot be left outside.

But I am not sure that we are close enough yet to be able to work through those issues, to say that needs to be done right now, because I think it will further delay legislation and prevent some good things that could be done in the near term from being done.

Mr. LARGENT. Ms. Moler, I wanted to ask you about—in your testimony, you talk about market oriented approach to renewable power. Would you say that the administration's proposal that was submitted last year is a market-oriented proposal to renewable power?

Ms. MOLER. Yes, I believe it is a market-oriented.

Mr. LARGENT. It is not a mandate?

Ms. MOLER. It is both, and I believe it is possible to have both.

Mr. LARGENT. A market-oriented mandate?

Ms. MOLER. Yes, sir.

Mr. LARGENT. Okay; could you explain that? That is unique.

Ms. MOLER. It is market-oriented in the sense that it would require any entity that sells power to have, eventually, 5.5 percent of its portfolio from renewables. However, and that is the mandate part. The market part is that if that entity does not own those particular generating sources, it could buy credits, renewable credits, on the market just as we do now with Clean Air Act SO2 credits.

So, it has a trading scheme in it. In that sense, it does not say that you, ABC Utility, have to have 5 percent or 4 percent or 3 percent of your power from renewable. You could trade for your credit.

Mr. LARGENT. Okay; Mr. Chairman, if I could just have one additional minute——

Mr. STEARNS. Without objection.

Mr. LARGENT. [continuing] The question I wanted to ask you, it seems to me that I recall that there was some aspect of the proposal from the administration that actually took some of the savings from moving to a retail market and spent that—I mean, that savings came to the Federal Government in some capacity. Do you know what I am talking about?

Ms. MOLER. The administration believes that the Federal Government would be a huge beneficiary from retail competition——

Mr. LARGENT. As a consumer; I understand that.

Ms. MOLER. [continuing] as a consumer, but there was not any transfer payment of the sort you are describing.

Mr. LARGENT. And one last question, was the renewable portfolio, was that sunset in——

Ms. MOLER. It had a date certain 5.5 percent by the year 2010. It also, if the price of the credits reached a certain level, it would have said okay, that is enough. So it had a cap.

I would also, if I may, mention the administration is developing a proposal on both Bonneville and TVA. We had an advisory committee that looked at considerable length at the TVA while it was in the administration. They came up with a proposal for restructuring TVA. I believe, though I have not talked to them, the administration is refining that proposal, and it will include provisions, instead of the placeholders, with respect to Bonneville, that were in last year's legislation. There will hopefully be a more refined proposal that should give you a good starting point for integrating Bonneville and TVA.

Mr. LARGENT. Mr. Chairman, thank you, and if we have a second round, I have some other questions. But I would like to say thank you to all of our panelists and particularly Ms. Moler, because I think she has really added a lot of impetus in keeping us moving forward by, you know, putting together the administration's proposal.

Ms. MOLER. Thank you.

Mr. STEARNS. The Chair intends to let every member present ask the first round. Then, we are going to give the panel a personal convenience break.

And then, we are going to do a second round at Mr. Sawyer's request. So, we have got Mr. Pickering, Mr. Shimkus, Mr. Burr and Mr. Whitfield. Then, we are going to take a little break. And then, we will come back for one round of second questions. Then, we will go to the second panel.

Mr. Pickering for 5 minutes.

Mr. PICKERING. Thank you, Mr. Chairman.

I have two directions or two questions that I would like to ask. One is a followup on the cost shifting concern.

Ms. Moler, you mentioned that you did a regional analysis when you were at the DOE. It must be my sense, from what I have heard on the Department of Agriculture study, that it was a State-by-State analysis. Given the nature of my State, being very rural, Mississippi, one of the States mentioned in the USDA study, can you see, in some instances, if we go to competition, could a rural State

like Mississippi, which is now a low-cost State, could you see some cost shifting and higher costs and that type of situation.

If you could please respond.

Ms. MOLER. The DOE's economists and other modelers did the study. I cannot claim to have any personal expertise in this area, although I have read it in detail. It was not a State-by-State study, though I believe that they are doing the analysis now and have a collaborative between the various analysts in the Government to look State-by-State.

I believe that, as I stated earlier, that each State should be able to choose its own destiny as far as whether to have retail competition is concerned, and if they have real problems to determine on the record that competition would be detrimental to the citizens. As I have said, I would respect that.

I do not believe, however, that it is likely that competition would be bad for consumers. I believe that you can deal fairly with the stranded costs and transmission issues and come out ahead, with lower costs for all customer classes, State-by-State.

Mr. PICKERING. Does the rest of the panel share that view that in a State like Mississippi, that it, too, would benefit from competition?

Mr. NAEVE. I would have to say in the short run, I have done no analysis, so I do not know. In the long run, I tend to believe that all customers will benefit. In the short run, I cannot say.

Mr. STALON. I guess I would add, again, that I have done no detailed analysis here, but a reality of a competitive market in the short run is that if you have a barrier between the two markets, and you remove the barrier, prices will tend to equalize, which means that they will go up in a low-price area, and they will come down in a high price area. And it was the nature of the old utility system that there were quite remarkable differences in cost from area to area because of accidents of history when things were built.

And I think it is inappropriate to look in the short term here and ask yourself what are the incentives being provided to minimize costs over a long term.

Mr. PICKERING. Excuse me; you realize that Congress runs in the short-term, every 2 years.

Mr. STALON. But we are creating an industry that will, we hope, in the future act with a longer-term time horizon than it has in the past, and it has a long time horizon even in the past.

I cannot make a flat assertion that there is not somebody in the Nation who will lose because of this process, although I think the effort has been made to make sure that everybody is a winner.

Mr. PICKERING. Let me just say that that is a concern that we are going to have to address, each of us in our own respective districts. I do believe in the benefits of competition. We just want to see if there is a flexible way that will minimize any harm while we maximize the benefit.

Having said that, let me ask a question to see if we can reach a consensus among this panel, and let me ask the date-certain question in a little bit different manner. Previously, it was asked who supports a date certain; what kind of date certain? Let me ask the pragmatic question that I think Mr. Naeve hits at the heart of, and that is if we do not have a date certain, whether it is, as Ms.

Moler recommends, a State opt-out; I believe Mr. Stalon was talking about a mandate, but it would apply to the class or the size of the utility.

Let us remove all date-certain mandates, whether it is by State or by size, and if we had a core element of a bill that established an organization for reliability; that clarified the Federal Power Act concerning retail wheeling; that removed barriers such as PUHCA; prospectively removed PURPA; tried to look at any other issues such as jurisdictional issues on stranded costs, leaving that to the States; if we could not reach consensus on a date-certain, would all four panelists still support moving forward on that core framework that I just outlined?

Ms. STUNTZ. I certainly would.

Mr. STALON. I would with one exception, and it is that by not having adequate demand elasticity in the market, we may end up with some uncomfortable price spikes after we move to competitive markets.

Mr. PICKERING. If we did not have a mandate.

Mr. STALON. If we did not succeed in attracting or compelling all of the large users into that market so that they can provide demand elasticity, we could end up with uncomfortable price spikes.

Mr. NAEVE. I support making as much progress as soon as you can make it, and if that is what we can do now, I would say let us do that. And I think if you were to do that, it would further increase competition in the market, and that competition would drive down prices and would create additional pressure to bring about retail competition in the States that do not have it.

Mr. PICKERING. Ms. Moler?

Ms. MOLER. I have stated my position on the mandate. I also think you need to address market power issues. That was not in your list.

Mr. PICKERING. If you add that to the list?

Ms. MOLER. Then, I would not let the perfect be the enemy of the good.

Mr. PICKERING. Thank you, Mr. Chairman.

Mr. STEARNS. The next on the list is Mr. Shimkus of Illinois, but our senior member, Mr. Bilirakis, may be seeking recognition.

Congressman Bilirakis, do you have another engagement? I am sure Mr. Shimkus would yield to you.

Mr. BILIRAKIS. No.

Mr. STEARNS. Mr. Shimkus for 5 minutes.

Mr. SHIMKUS. Thank you, Mr. Chairman.

And it was good to see Ms. Moler here again, because as this is my second term, and I cut my teeth in the last Congress and, of course, being with the administration, I think you help educate and move this process along, and I just—a short note. I think Mr. Largent's question on cost shifting is something that I addressed a lot in the last Congress was I think the administration would always see moving the energy dereg as a way to mitigate the additional costs of global warming. Now, there is nothing ever written down, but I have heard the administration state that if we have increased costs under the Kyoto Accords, the saving, the mitigation would be energy dereg, and I just throw that out; I will not ask for a comment, but we had discussed that numerous times.

There were two things I wanted to address briefly, and I hope I can get both of these out. One deals with regional pools, and one deals with merchant plants. So I am going to talk on the regional pools issue, and Mr. Pickering is here, and I think this addresses the price spikes and some of the concerns. Of course, being from the Midwest, we had the price spikes last year, and during that, the PJM pool, which we all know is the Pennsylvania, New Jersey, Maryland pool, there is a lot of criticism that that pool did not do its duty to help the Midwest, and you all know the argument that they held—they thought they were going to have the demand, so they held their pool, and it turns out that they did not need it.

I am interested in your short, concise comments on the export rules of the PJM or just, as we move to energy dereg, what do we need to do at the Federal level to preclude this from happening? Why do we not just go down the line, starting with Ms. Moler?

Ms. MOLER. I believe that you need much more transparent markets. I believe that you need to have much more clearly defined capacity rights in the transmission system. That is why I think it is very important to have integrated companies be a part of some sort of regional transmission organization so that they take service under the regional transmission organization's tariff for their bundled load as well as for their wholesale load.

By doing that and getting much more flexible, fungible transmission rights and congestion management, which you will get as a result of those regional transmission organizations, you will have a much more fluid flow of power between pools. And you also have to deal with and have the same reliability rules of the road apply across the board, so that individual companies cannot cheat.

Mr. SHIMKUS. Does anyone else have anything to add to this question?

Mr. STALON. I would differ with one particular point. I do not support the extensive development of capacity rights in the transmission grid. That grid has traditionally been allocated 10 minutes at a time or 5 minutes at a time under continuous control. It must continue to do that. Assigning firm transmission rights that are real rights rather than financial rights will greatly expand the need for transmission assets for the system to function and function reliably.

What we need, I think, primarily are bigger control areas. As big as PJM is, and it is the largest control area we have, it is not big enough. We need to expand it with larger control areas. The border problem becomes less troublesome and more easy to handle.

Mr. SHIMKUS. Anyone else?

I would like to move to merchant plants if I may. Some States require a certificate of need from merchant plants, and they make the argument that the rate-payers are at risk, and so, they do not approve plants where, in today's environment, only the shareholders would be at risk. Do you have any comments on what we should do at the Federal level with the issue of merchant plants?

Mr. NAEVE. Well, obviously, if you are going to have a competitive market, you do not want to create barriers to entry, and if some States adopt siting requirements that limit entry, of course, in the long run, it is their consumers who will pay. I must say, I have not personally come across this as a major problem, because

I think as we move to a competitive market, most States recognize that there is a need to build new generation; most welcome new generation. So I have not seen it as a problem but——

Mr. SHIMKUS. There is a recent case in Florida where the incumbent utilities tried to block construction of a Duke merchant plant on this very basis, so there is obviously that possibility out there.

Ms. MOLER. I would congratulate the regulators in Florida who have determined that Duke should be allowed to build that plant. In order to have a competitive market, you need competitors.

Mr. SHIMKUS. Great.

Mr. BARTON. Mr. Burr of North Carolina for 5 minutes.

Mr. BURR. I would like to welcome all four of you here, especially Ms. Moler and Ms. Stuntz, to have you guys back.

Let me just—Ms. Moler, you make it very clear in your testimony that you do not feel that there is a Federalization of stranded cost recovery needed; that that is a State issue. Let me ask: if there was a date-certain in a piece of legislation, do you believe that that changes whether there is any Federalization of that stranded cost?

Ms. MOLER. No, sir, I do not.

Mr. BURR. Ms. Stuntz, how about you? Clearly, you made some comments on PURPA that you believe that our actions as it related to PURPA make us obligated, then——

Ms. STUNTZ. Right.

Mr. BURR. [continuing] to participate in the stranded costs. Do you believe that a date-certain would move that marker one way or the other?

Ms. STUNTZ. I do believe that if the Federal Government is going to mandate a date-certain, it takes upon itself more responsibility for determining how retail stranded costs are going to be dealt with, because they have taken the choice out of the States' hands in terms of what the time should be, and, I mean, I have heard this argued both ways. It just seems to me that if the Federal Government is going to make that choice, it does take upon itself more responsibility to do that.

Now, with respect to PURPA and possibly things like Federal nuclear decommissioning funds, I think those are already Federalized, and I really think it is the Federal Government's obligation to make sure that in the competitive transition, those responsibilities are carried forth.

Mr. BURR. You said in your testimony that repeal of Section 203 was too big a step. Can you just elaborate on that a little bit?

Ms. STUNTZ. Well, I said I agree with you personally, because I believe that for consumers who truly enjoy the benefits of a competitive market, we cannot continue to have a utility industry that looks like it did when we had exclusive retail franchises. I think I had a triangle in my testimony that talks about the 200 and some investor-owned utilities, more than 1,000 co-ops. I mean, this industry has got to rationalize; there has to be consolidation; there have to be mergers and acquisitions, and I believe under Betsy's leadership and subsequent, the FERC has tried to find a way to accommodate that necessary consolidation, but I, for one, think the process is bogging down; that it is duplicative now of the FTC and Justice reviews that should go forward. They have the antitrust expertise, and I would basically leave it to them, since they regulate

this activity in the rest of our economy, to let them do this in this area as well. But I suspect we need to do more educating on that, and what I tried to set forth was a potential half-way measure that would at least, perhaps, allow this consolidation to occur when I——

Mr. BURR. Certainly, my hope to repeal Section 203 is not indicative of the past leadership at FERC and the participation of commissioners. And one quick followup to that for each of you. FERC in the future: bigger, smaller, the same? Those are the only three choices.

Ms. Moler?

Mr. STALON. Going to be bigger.

Mr. BURR. Bigger?

Mr. STALON. Yes.

Mr. BURR. I guess my question, let me say should it be bigger, smaller or the same?

Mr. STALON. It should be the same.

Mr. BURR. Ms. Moler?

Ms. MOLER. If you repeal the Public Utility Holding Company Act, there are some functions that the Commission will need to perform. They are well-recognized in the PUHCA repeal legislation. And the Commission's resources are taxed like lots of agencies' resources. I give my successor Jim Hoecker, Chairman Hoecker, credit for trying to reinvent many of their processes, and the thing I worry about most there is burnout of the best people.

Mr. BURR. Bigger, smaller or the same?

Ms. MOLER. I think it depends on how successful the reinvention effort is.

Mr. BURR. Okay.

Ms. MOLER. Most likely—I said bigger with respect to PUHCA, though.

Mr. BURR. Ms. Stuntz?

Ms. STUNTZ. I believe it does not need to get bigger. I think it is hard to make it smaller. But remembering that they also regulate things like natural gas and hydroelectricity and oil pipelines, where I think there are opportunities to make it smaller—in electricity, I think we would be doing well to keep it the same.

Mr. BURR. Mr. Naeve?

Mr. NAEVE. It will change. Their mission will change, and I must say I, at this stage, cannot tell you whether they will need more people or fewer people to carry out that mission, but it will be a much different agency than it is today. There will be certain functions that they carry out today that they will continue to carry out, but they will be relieved of the obligation to regulate wholesale markets. They also will be given the responsibility, though, to protect competition, to make sure that the preconditions are there for competition.

Mr. BURR. I see my time has run out.

Mr. BARTON. Yes; we have a pending vote, and we have got two other members. I want to try to get both members' questions in in the first round, so then, we can go vote; let them take a break; and then come back.

So I am going to recognize Mr. Bilirakis for 5 minutes, but Mr. Burr will be given an opportunity in the second round.

Mr. BILIRAKIS. Thank you, Mr. Chairman.

Ms. Stuntz, utilities, in many States, certainly in Florida, have been obligated to sign numerous long-term contracts under PURPA. Let us get into PURPA. Is there any reason why Congress should not act to repeal this mandatory, and I underline mandatory, purchase obligation—and at the same time ensure the recovery of those Government-mandated costs? And I mean eliminate it not necessarily tied into deregulation. Why should it be tied in? I cannot really believe that we, in our infinite wisdom, passed that type of a thing awhile back.

Ms. STUNTZ. I do not remember that you were on the subcommittee at the time.

Mr. BILIRAKIS. I may not have been. Hopefully, I was not at the time.

So go ahead.

Ms. STUNTZ. And I think there is really a consensus on that. It is just a question of what it gets linked to.

Mr. BILIRAKIS. There is a consensus that we can eliminate PURPA regardless of deregulation? Because last year's legislation basically said as soon as a State opts in, then, PURPA is eliminated. That need not be the case, is it?

Ms. STUNTZ. Well, I do not think so, but as I said, I think there are still some who would link it either expressly or say it cannot go until we get other parts of this restructuring.

Mr. BILIRAKIS. Yes, blackmail kind of a thing, right?

Ms. STUNTZ. Yes.

Mr. BILIRAKIS. Well, all right, but do you think that is wrong? It can be done without it being tied in.

Ms. STUNTZ. I certainly think so.

Mr. BILIRAKIS. Should it be done?

Ms. STUNTZ. I think so.

Mr. BILIRAKIS. Ms. Moler? Now, you indicated earlier, and I wrote it down; you said you would respect that if a State decided to opt out. So apparently, you are flexible insofar as the States coming on board by a date-certain.

Ms. MOLER. Yes, I am.

Mr. BILIRAKIS. All right; that being the case, how would you feel about PURPA being eliminated now rather than later?

Ms. MOLER. I believe, as I said, that there are some core elements of a package that can be moved. I do not believe that PURPA will move on its own, nor should it.

Mr. BILIRAKIS. Nor should it?

Ms. MOLER. No, sir.

Mr. BILIRAKIS. Why? Because you do not think that the others will move without it?

Ms. MOLER. PURPA is our statement at the present time of a policy in favor of renewables, and if you repeal PURPA, I would make whatever statement the Congress wishes to make with respect to renewables policy——

Mr. BILIRAKIS. Okay.

Ms. MOLER. [continuing] as a part of a comprehensive restructuring bill.

Mr. BILIRAKIS. All right; so, you might tie it into renewables but not necessarily to the date-certain.

Ms. MOLER. No, as a part of a comprehensive restructuring bill. Whatever you all can put together, but there is clearly a need to do as much as you can possibly do.

Mr. BILIRAKIS. Frankly, I am very pleased with your testimony, all four of you. You seem to be very flexible in that regard. You feel that it needs to be done and should be done but do as much as can be done and then tackle the tough parts.

Yes, sir.

Mr. NAEVE. I would first say, as I stated earlier, do what you can when you can.

Mr. BILIRAKIS. Yes.

Mr. NAEVE. If you can do this now, do it.

I would add one thing. I think you need to do more than prospectively repeal the purchase obligation. I think there are other things in PURPA you can do, and one of the more important things is to change the ownership restrictions. Right now, utilities and utility holding companies cannot own more than 50 percent of a QF. That may have made sense back when we were trying to encourage independent power development. When Congress passed the Energy Policy Act, though, we decided that was not important anymore; we did not put that restriction on the ownership of exempt wholesale generators. I think we should go back and take it off of QFs.

Mr. BILIRAKIS. I want to be fair to Mr. Whitfield, sir, and the chairman wants to really finish up this first round, so maybe I will just cut you off, and we can continue in the second round, because obviously, I want to hear what you have to say and Mr. Stalon too.

I am going to yield back for that reason, Mr. Chairman.

Mr. BARTON. Thank you, and the Chair would recognize Mr. Whitfield for 5 minutes, and we have got about 7 minutes to vote, which means we have about 10 minutes actually, because they give us about 3.

Mr. Whitfield?

Mr. WHITFIELD. Mr. Bilirakis, I have always been a fan of yours; thank you.

We all know that one of the major opponents to deregulation are the rural co-ops, and I think, in a nutshell, they are just concerned that if you go to deregulation, they are going to have to discount their rates in order to keep their large industrial customers; and then, the concern is that they are going to raise the rates on the residential users, because they are going to have to make up at least some revenue somewhere.

Now, what arguments would you all make to the rural co-ops as to why they should support deregulation?

Mr. STALON. I would make one quickly. The traditional justification for REAs as distribution utilities is unchanged by anything we are doing, and I just simply do not see why all users of electricity, especially large users, should not pay the competitive market price for electricity, and we can only determine that price with a competitive market.

Ms. MOLER. I also believe that they should clearly be given authority to deal with transition costs just as I would have any other utility deal with transition costs, and if they need to do exit fees in order to get from here to there in terms of a transition, that would be fine with me as well.

Ms. STUNTZ. I think you have asked one of the hardest questions of this whole issue, and it is one we have struggled with. I guess where I come out is I think if a rural co-op wants to continue to do what it has historically done as, you know, not a big owner of generation, not a G&T, because they are different, and provide that distribution function, I think there is a real role for them to play, continuing to do that. Choice could be provided through aggregation if they thought it desirable, but if they want to stay in that role, and their owners are happy with that, I would sort of come down and say okay, that is fine.

I think the tougher issue are larger co-ops, particularly the G&Ts, who, in many cases, are not in great financial shape; who are very concerned about what this transition is going to mean for them but for whom it seems to me it is essential that they be part of the process; that they need to allow their customers choice; their transmission needs to be put into the system with everyone else's, and we deal with the debt issues like we are dealing with stranded cost issues for other utilities.

Mr. BARTON. Would the gentleman yield on that?

Mr. WHITFIELD. Yes.

Mr. BARTON. Just as an elaboration.

Would it not be possible for a co-op to at least collectively and in this new era bargain for a better supplier? Would that not——

Ms. STUNTZ. Oh, absolutely.

Mr. BARTON. They would not be disadvantaged, and it is possible they could actually be advantaged.

Ms. STUNTZ. No, absolutely, Mr. Barton, and I think that is one of the tough things now is because they can do that now, and many of them, as wholesale buyers, are doing it very effectively. So sort of stopping your wholesale competition for them in many respects is the best of all worlds.

Mr. BARTON. Okay; we have 3 minutes until the vote.

Mr. WHITFIELD. Well, there is more than one component to the cost charge of the co-ops and, for that matter, utilities, and one component is the cost of the supply itself, and that is what we are talking about with competition here. Would the industrials have access to lower-cost supplies? Because many co-ops do not own generation but buy their power themselves, they may not incur additional costs by allowing those industrial users to go out and buy directly from other suppliers.

There are other costs, such as the costs of the distribution system itself; the cost of manpower and so forth. They can continue to allocate those costs as they do today because in many cases, those industrial customers are still going to need their wires serviced.

Mr. WHITFIELD. Mr. Chairman, I am in a tough district, and I cannot miss a vote so——

Mr. BARTON. Okay; we are going to recess until 2. We are going to go vote, and we will reconvene at 2. We want this panel to come back, because a number of members want a second round of questions.

[Brief recess.]

Mr. BARTON. As is usually the case, the people who wanted a second round of questions are represented as empty chairs. But we

are going to go ahead and reconvene; it is 2; there are two members present, so a quorum is present.

The Chair is going to recognize himself for 5 minutes of questions. I will get the clock turned on.

I want to ask a question to our two former FERC dignitaries. Most observers indicate to handle the transition rules and to handle the reliability issue that we need an expanded role for the FERC. I question the wisdom of making that a permanent expansion, so my question to Mr. Stalon and Mr. Naeve, what is your opinion of transition rules that give FERC an expanded role but do it in a sunsetted fashion?

Mr. STALON. The principal reason for giving the FERC any particular authority here is so that the new international reliability regulatory organization can impose financial penalties on players in all three nations. The principal weakness of the NERC today is that it relies entirely on peer pressure in order to get its rules obeyed, and peer pressure, obviously, is not adequate; it has not always been adequate even in the old system when it was a club.

It is clearly not adequate with a lot of entrepreneurs in the game, and it seems to me that the FERC will have an ongoing oversight rule, because there will be appeals, and somewhere or the other, the appeals of parties have to get to some point where a government agent—it could be a court—says yes, this is a correct form of behavior; the reliability organization is behaving in accordance with its charter and exercising powers that we have explicitly approved and doing it in the right way.

So I think that role is a never-ending role now for some agency, and I cannot think of one better than the FERC for that.

Mr. BARTON. Mr. Naeve?

Mr. NAEVE. I will defer to people who have spent more time studying this subject, but I am not completely convinced that more legislation is required to give FERC an important role in reliability. FERC has jurisdiction over transmission service, and every reliability rule that is adopted has an effect on transmission service. So, through its jurisdiction over transmission services and over the grid, FERC has indirect jurisdiction over reliability. I think if we were to have a reliability organization that is independent; that is composed of a variety of participants in the industry or has an independent board, FERC would be in a position to give substantial deference to their recommendations and would not have to become directly involved in reliability issues.

To the extent that those reliability issues have an effect on nondiscriminatory transportation, FERC could serve as an appellate body to look at them and review them; but again, as long as they are recommended by an independent board, I think they would be in a position to give tremendous deference to an independent board.

As to the issue of penalties and the ability to impose penalties, to the extent that you have large, regional transmission organizations, and those penalties are embedded in their operating tariffs and procedures, I would think those, too, would be jurisdictional to FERC and that they perhaps would have the ability to authorize the imposition of penalties and have jurisdiction over them without

additional legislation, but again, I am prepared to defer to people who have spent more time studying that subject.

Mr. BARTON. Ms. Moler, you are a former FERC commissioner also. Do you wish to have an opinion on this question?

Ms. MOLER. Yes, I do. I think it is, as my prepared statement says, I think it is essential to give the Commission expanded jurisdiction for reliability over the bulk power system. That is not a conclusion that I, alone, have. While I was at the Department of Energy, former Secretary of Energy O'Leary did establish a very broadly based group of individuals who struggled with the reliability issue for a couple of years under Phil Sharp's leadership, and they are very, very firm in their conviction that additional authority is needed here.

Mr. BARTON. But does the additional authority need to be permanent? See, my view is if you really believe markets will work, you may need an expanded FERC authority to get to that perfect world, but once you get to there, it is no longer necessary, except perhaps on a monitoring or an appellate basis, you know, occasionally. But I am willing to give additional authority, but I am not yet willing to do it permanently and expand the power permanently.

Ms. MOLER. The markets that we are talking about working really are generation markets, and the transmission grid is the facilitator, if you will, and you have to make sure that on a long-term basis, that everybody plays by the same rules, and I do not believe that we can foresee the loss of the monopoly that is transmission.

Mr. BARTON. Okay.

Ms. MOLER. That still has not happened in the gas area many years after we have had increased competition in the natural gas area.

Mr. BARTON. And my time has expired.

Ms. Stuntz, did you want to——

Ms. STUNTZ. Mr. Barton, if I may just add, I have a little different take on that, maybe, because I am not at FERC, but I do support the legislative proposal that has been worked out by the industry and a lot of shippers and interested consumers, and I do not really see it as necessarily adding to FERC's authority. What it would do is it actually empowers an independent organization to set these rules. You have to have FERC as a backstop, because otherwise, you have a Constitutional problem under the delegation clause.

But if we do not do that, then, I agree with Mr. Naeve. I think FERC could do it through top-down and start setting rules for every grid all over the country, for every interconnection. That would be a very central thing. I think they could probably do that now if they had to. I think it would be much better to have this independent organization with deference procedures that are embedded in it, for example, to the Western Systems Coordinating Council, and FERC plays only a necessary backstop role to make sure that the arrangement is Constitutional.

Mr. BARTON. Okay; Mr. Bilirakis for 5 minutes.

Mr. BILIRAKIS. Mr. Chairman, I am not sure that anybody on this panel is not for deregulation. It is a case, again, of how it is done and how it affects our States. Let us face it; we are Rep-

resentatives, and how it affects our States, is our main concern, after all.

And the gentleman from Oklahoma mentioned, that you have got to deregulate by a date certain, and everybody has got to be regulated by that particular date. I guess that is what Steve is saying. And I just wonder, why is that the case? You have your high priced States, and you have your low-priced States. In Florida, and I mean to get parochial, is different. We have a peninsula that sticks out there, and the energy that comes in the State is transmitted from the northern border.

And Florida is a low price State. I am not picking on New York, but if New York is a high price State, then, deregulation might be better for their consumers. Why does it mean that just because it is good for New York's consumers, it is good for Florida's consumers? Ms. Stuntz, can you describe a scenario for us? Let us say deregulation goes into effect, and some States, as is the case now, have deregulation in effect, and a few States do not have it in effect. Let us say maybe Georgia and Alabama, which border on Florida, have deregulation in effect.

Now, what kind of a scenario might we expect as far as Florida is concerned? How would the Florida consumers be benefited by their being forced to deregulate when, the Public Service Commission and the State legislature have turned it down in the past, in the distant past, in the more recent past?

Linda, I am not sure the question is a clear one but——

Ms. STUNTZ. Well, I think the argument for a date-certain is that you would have more uniformity; that maybe in some instances, you know, judgments based on parochial concerns are not the best judgments in the national interest, and that sort of once you require them to do this by a certain date, and I do not know that we are really so far apart, because I think at some point, a flexible mandate or an opt-out, or I do not want to put words in your mouth, is not so different than what we are saying, which is that it is probably a good idea, but you are going to have to give States an opportunity to take into account local needs, and if they do not want to go now, as long as they have considered it in a good faith fashion, that may be enough.

At some point, I mean, maybe that is the way that lets us get out of this, because I think that in the end, it is very hard to say that the people would——

Mr. BILIRAKIS. But if it were the case, where we would have more flexibility opting out off opportunities, you are not going to have the uniformity that you mentioned.

Ms. STUNTZ. Well, I think it will happen over time. I think it is a question of timing. I mean, right now, California is open; Pennsylvania is soon going to be open; Massachusetts is open. You know, I have not noticed any huge problems that we could say other people should be open; other people should be open sooner, and maybe their consumers would benefit sooner, but I think in the end, you know, it is happening for 50 percent of the population already on a schedule; Virginia has said now no later than 2007.

Mr. BILIRAKIS. Should we allow it to just continue happening rather than mandating it from this ivory tower?

Ms. STUNTZ. You know, I do not think this is the most important issue. I think that you can without being adverse to consumers.

Mr. BILIRAKIS. You mean deregulation is not the most important issue or the mandate?

Ms. STUNTZ. No, I think the date-certain is not the most important issue.

Mr. BILIRAKIS. Yes.

Ms. STUNTZ. Deregulation, you have already deregulated generation effectively in the Energy Policy Act of 1992 and wholesale markets, and the question is is that going to be expanded to retail customers? And if so, when? And who is going to make that decision? And what are individual retail customer choice programs going to look like? And how many of those decisions do you want to make? And how many do you want to leave to the good folks who are coming up later? And those are hard questions.

Mr. BILIRAKIS. Thank you a lot.

Thank you, Mr. Chairman.

Mr. BARTON. Well, as the chairman of the ivory tower subcommittee, I would like to recognize my ranking member, Mr. Hall, for 5 minutes.

Mr. HALL. I will not take the 5 minutes. I just would point up some questions because I do not know what has been asked, and we have another panel waiting, and we have beat on these folks for a long, long time here.

But, Mr. Stalon, I appreciate the concern that you showed about the need for new transmission capacity to make the competitive market work. I did not totally understand some of the things that you said, and I am going to write you a letter and ask you for that if I might. We had a lot of warning signs in the real world last summer and then in the form of a DOE blue ribbon task force, both of which tell us that the system might lack the capacity to function reliably. I think I am correct in understanding you, Mr. Stalon, that you recommend Congress enact legislation to set up a Federal authority, FERC or some other entity, with sitting authority that would preempt State and local authority.

Is that your position?

Mr. STALON. The States, no, I would not agree with that wording. We are asking that the powers of the existing organization, which are being eroded dramatically by competitive forces be reestablished, and the reestablishment of those powers to set and enforce standards must now be accompanied by the ability to levy financial penalties. So we need a new international organization to carry out the functions that the old one carried out fairly well for the club of big utilities.

Mr. HALL. With sitting authority that would preempt State and local authority.

Mr. STALON. My proposal, as embodied in my written testimony, was a compromise proposal to leave with the States the power to determine the precise route of a new transmission line after the Federal Government, the FERC, has made a finding of need for the line and perhaps specified several points on the line that must be interconnected but leave the details to the States.

Mr. HALL. Okay; I will ask more pointed questions to you in writing, and I thank—is it all right, Mr. Chairman, that we do that? It will save me time.

I think I know what you are saying. I will go back and reread the testimony.

Mr. Nave, your testimony seems to make a case for Federal authority over the transmission construction, and you used a Gas Act provision as a semi-model or something, and my questions to you will be if the Gas Act provisions are the model, what changes are you going to have to make to make it fit electricity if any, and those are some of the questions I will ask you. You need not answer them now.

In the interests of time, I will yield back the balance of my time.

Mr. BARTON. You do not want him to give you a partial answer now?

Mr. HALL. Oh, he will give me a full answer a little bit later.

Mr. BARTON. The Chair recognizes Mr. Largent of Oklahoma.

Mr. LARGENT. Ms. Moler, one of the statements you make in your report or your testimony, it says that support for research and development in the electric technology area has plummeted in the wake of restructuring. It seems to me that, I mean, it sort of flies in the face of what we are trying to talk about in a competitive market that technology and research would actually increase as your competitors are seeking market share and new services.

Ms. MOLER. The difficulty is that in the prior regulatory regime, States imposed R&D and other public benefits kinds of requirements on the regulated utilities. Now that the regulated utilities are out competing with, in the States that have customer choice and open access, are out competing with those who do not have similar obligations, they have cut support for R&D very significantly. State regulators have expressed a major concern with this phenomenon. They have developed a proposal that is similar to what happened under the telecom bill, where States could impose an R&D charge, if you will, that would be an across-the-board charge done as an add-on on distribution rather than on the utility, so that everybody would have to pay it.

Mr. LARGENT. Would it not be better to wait until we actually are in a totally deregulated market and see if competition does not drive technology as opposed to on the front end, imposing an R&D tax on, you know, end users?

Ms. MOLER. My proposal, as I said, is one that was developed by the State regulators. I would leave it up to them to monitor the efforts in their States and determine whether such a charge is necessary.

Mr. LARGENT. Yes?

Ms. MOLER. The Federal role should be performed by the Department of Energy-supported R&D.

Ms. STUNTZ. Mr. Largent?

Mr. LARGENT. Yes.

Ms. STUNTZ. I am the chairman this year of the Electric Power Research Institute, which has been the umbrella organization coordinating the electric utility industry's research enterprise, and it is a real issue. Particular types of research, I would say, have been more effective than others. It tends to be longer-term, higher-risk

things that it was easier to fund when you were not facing competition for utility contributors. EPRI is struggling right now to come up with a proposal that it could present to you. I would say on behalf of the committee that there is not uniform support within EPRI for that particular matching fund proposal. It has got goods and bads, but it is something that I think will need to be addressed, because it is one of the many mechanisms that worked in the old regime that is not necessarily going to work in the new regime.

Mr. LARGENT. Yes; okay.

Ms. Moler, could you explain how your opt-out works? And the other question I wanted to ask about that is did you look at other flexible, date-certain options beside the one that you chose? I mean, is this a subjective thing that has taken, say, well, we just do not feel like doing it? We will go on record in saying we do not feel like doing it?

Ms. MOLER. The provision is fully drafted and was presented when the administration's bill was transmitted to the Congress last year, and the mechanism is actually fairly simple, you know; State authorities would write to the Federal Energy Regulatory Commission and say we have determined we are not going to do this. It is not hard.

Mr. LARGENT. So it could be a totally subjective thing; not necessarily a——

Ms. MOLER. They would have to have a record that would back up their determination. Their determination that they did not want to do it would not be challengeable as a matter of Federal law, and so, whatever is the ordinary mechanism under the State regime would apply for challenging decisions of the Public Service Commission, presumably, and that is a fairly well-settled body of law, how one goes about doing that.

Mr. LARGENT. But basically, what you are saying is that would be a fairly easy thing for a State to do to just opt out.

Ms. MOLER. A self certification, if you will, is the concept.

Mr. LARGENT. Okay.

Thank you, Mr. Chairman.

Mr. BARTON. The gentleman from Ohio is recognized for 5 minutes.

Mr. SAWYER. Thank you, Mr. Chairman.

It is probably fair to say that some regions of the country are having difficulty in transmission constraints and that in no small part, that is due to the difficulties just simply in siting transmission facilities. With transmission facilities being used in terms of large bulk sales over long distances in ways that they may well not have been designed for, increasingly, the business of siting new facilities will become even more important and more difficult. Do you have thoughts on how the Congress, in legislation that deals broadly with these kinds of questions, might address that specific kind of problem State-by-State?

A State might well be even expected to be reluctant to build transmission facilities that will not directly benefit their populations. Can you talk about that for a moment?

Mr. NAEVE. For the very reasons that you mentioned, I recommended in my testimony that we transfer to FERC, as we did

in the Natural Gas Act, the responsibility for siting and the power of eminent domain for interstate transmission facilities. That is not to say that local interests should be ignored, and indeed, FERC does not ignore local interests when they site natural gas transmission facilities. They have a great many local hearings; they hear from all of the affected environmental agencies. There is a great deal of local input into the process.

So the local concerns are taken care of, but nonetheless, the decisions to build the line in the first place are made on a regional basis or a national basis, the national need. And then, once those decisions are made, then, you have to factor in local consideration and environmental issues when you are doing the siting, but the decision to go forward is done on a national or regional basis.

Mr. SAWYER. Any other points of view on the question?

Ms. MOLER. Mr. Naeve and I did not consult on this ahead of time. On page 11 of my prepared testimony, I made a very similar proposal to emulate the Gas Act, the Natural Gas Act jurisdiction for Federal siting authority.

If you cannot muster the support for that, at a minimum, I would urge you to clarify that States can exercise authority on a regional basis and to encourage them to do so. The administration bill has an interstate compact concept in it that is worthy of thought. One of the hopes I hold out for these large regional transmission organizations that we are trying to either compel or induce into being is that they will begin to plan and think regionally, and if you can build a regional consensus that this new capacity is necessary, I have hope, but it is tempered with a hard dose of reality that transmission companies will undertake to build new transmission.

It is incredibly expensive and incredibly difficult to do so, and they do not get paid enough to make it worth their while these days to do that.

Ms. STUNTZ. Mr. Sawyer, that was the point I wanted to make. I think this may be a useful proposal, but even under the Natural Gas Act now, it is getting increasingly difficult to site this stuff, so there are siting issues. But you have got to have the right incentives, and right now, I agree with what Betsy said. It is extremely expensive, and frankly, I do not think transmission pricing is—nobody is encouraged to do it.

Mr. STALON. I would agree that no one is encouraged right now to do it, but I would also, and I did in my proposal, postulate that the States are going to be very resistant to build when the principal benefit is to someone outside the State, and I can give examples where transmission in the western system is needed, and it ought to be built in Idaho, and the principal beneficiaries are Southern California and Arizona. By the way, it was never built.

My proposal would give to the FERC the power to make the finding of need, and that would impose a legal obligation on the State, and the Federal agent could also specify several points on the route to make sure that the objective is achieved and then let the details of the routing be left to the States.

Mr. SAWYER. Thank you, Mr. Chairman.

Mr. BARTON. Thank you.

Mr. SAWYER. Thank you all very much.

Mr. BARTON. The Chair would observe that there are 3 or 4 young men in the far back corner who are having entirely too much fun for such a serious hearing, and I am going to deputize the lovely young lady, Ms. Ireland, to serve as their detention monitor, and they are going to be required to write down the answers to the questions they just missed verbatim for the next 30 minutes, and that will be deducted from their client billing for monitoring this hearing.

The Chair would recognize Mr. Burr of North Carolina for 5 minutes.

Mr. BURR. Mr. Chairman, I do not know who is more challenged: the members to come up with more questions or for you guys to rephrase the answers that we did not get the first time, but I will try to go to some new areas other than to rehash things.

Let me ask you: do any of you believe NERC's draft reliability language? Do you believe that there exists consensus on that language?

Mr. STALON. I do not. It was a compromise within the NERC, and I am sure that if every member who voted for that compromise was to write his own, parts of that would be missing. I know I would have left out certain parts of that and changed it, so yes, it was a compromise piece of legislation, proposed legislation.

Ms. MOLER. I would say it is a lot like when Congress passes legislation by a very lopsided majority to a small minority. You have decided it is the best you can do, and it is in the public interest to go ahead. You would have written your bill differently, just as Mr. Hall would have written his bill differently, but you have decided it is a good thing to do, all considered.

And I think it is like consensus building in any organization.

I'm sorry, Mr. Hall would have written his billed differently, but you decided it is a good thing to do, all considered. I think it is like consensus building in any organization.

Mr. BURR. Mr. Stalon, let me ask you a question. How much capital will chase the industry without any Federal legislation?

Mr. STALON. I am sorry, I don't understand the question.

Mr. BURR. How much available capital in the marketplace will be made available to the entities, those generators out there, if, in fact, there is not Federal legislation that clears up some of the laws and the hurdles that exist on the books?

Mr. STALON. Well, I don't have any concern that we will create adequate generating capacity. I think firms can borrow that money. The capital is there.

Mr. BURR. You feel that the capital is sufficient even with the hurdles still in place?

Mr. STALON. Right.

Mr. BURR. Even with the hurdles? But the price is going to be unnecessarily high, the industry is going to be unnecessarily inefficient. Do we accelerate the availability of capital when we move to that open marketplace?

Mr. STALON. I think you lower the cost of capital. In the American economy, capital is almost an unlimited supply. It is the cost that matters. And by making the industry more efficient, you will lower the cost of capital to key players, because it gives them more

security. But they can live in an inefficient market and they can borrow money to produce in the inefficient market.

Mr. BURR. Mr. Naeve, did you want to——

Mr. NAEVE. Well, I generally agree with what Charles said. I would focus, though, on other parts of the industry as well, not just the generation sector. And there are a variety of potential participants in this market who would have capital and intellectual capital to bring to bear on it, if they were permitted to do so, but are precluded from doing so under the Public Utility Holding Company Act.

Mr. BURR. Ms. Moler, let me go back to you for a second. I want to follow up on what Steve Largent raised. When you came on behalf of the Administration's plan last time, I left with the impression that opt-out was a very difficult process for a State to go through, but, in fact, States would have to prove that there was no benefit at all, from a rate standpoint, to their consumers in their marketplace in their State. I heard of something a little bit different from that with your response to Congressman Largent. I'm allowing an opportunity for clarification. Is it one or the other, or somewhere in the middle?

Ms. MOLER. I think it's a simple process. In most States, determinations by regulatory bodies are given a presumption of validity, just as they are under the Federal statute. And if the PUC said "We've decided not to do this, because we don't think it would be good for our consumers," I do not believe—first, that would be fine under the way the administration's bill is drafted so there would not be any Federal mandate imposed upon that State. I don't think it is a difficult process at all.

Mr. BURR. If the administration does what is rumored, and that is that their next bill incorporates a 10-percent renewable, you feel like they would be headed in the wrong direction. Would that be an accurate statement?

Ms. MOLER. I think that is a little steep.

Mr. STALON. Ten percent is a little steep, or being an accurate statement is a little steep?

Ms. MOLER. I have not kept up on the rumor mill about the administration. I will say, I shy away from that, because I have very strict restrictions these days. I can't talk to them about what they are up to. I was very comfortable with where the administration bill was last time. I don't know what else they might be putting in a bill that would make it so that you still had significant consumer benefits from the piece of legislation, which I think is important. So I don't have a judgment at this point.

Mr. BURR. You made a statement, and I appreciate the chairman's indulgence; you made a statement earlier that the inaction of Congress is holding the marketplace back. I don't disagree with you, but I guess I would ask you, do you believe that this administration is ready and willing to deal with Congress to move legislation?

Ms. MOLER. Yes, I do. I have nothing but the highest respect for Secretary Richardson's negotiating skills. They are legendary around the World, and I believe that they will come prepared to come to the table and work with the Congress to enact legislation.

Mr. BURR. But you would counsel us to negotiate and not necessarily just to blindly accept?

Ms. MOLER. I have nothing but the highest respect for this Congress' negotiating skills either. I think you are a fair match.

Mr. BURR. I thank the chairman.

Mr. BARTON. Thank you. I have one final question, then we are going to let the panel go. When I was in graduate school, my two favorite subjects were economics and marketing, and every case study always started with the assumption, assume a perfect market. We never have a perfect market in the real world, but we always study to assume a perfect market, so you've got perfect knowledge and perfect allocation of marginal costs. But, we have an opportunity to create a more perfect market, if we can move this legislation. And, I want to ask Mrs. Moler directly, but anybody can answer it; it would seem to me in trying to create a more perfect market that you would want some Federal guidelines on stranded costs, because, while it's true most States are allowing some stranded cost recovery as they act, it is theoretically possible that some States would not, and if you were in a situation where you had States that were interconnected and had a greater likelihood that they would be transmitting power, if one State did their stranded cost recovery a totally different way or the impact was disproportional, wouldn't that cause quite a bit of problem?

So you indicated, Ms. Moler, you didn't think stranded costs necessarily need to be a part of a Federal bill, and it would seem to me it would almost have to be a part of a Federal bill.

Ms. MOLER. The States in New England, which have all enacted customer choice, all have very different stranded cost recovery mechanisms. We have a practical experience with adjoining States having very different stranded cost recovery mechanisms. I am not aware that it has been a problem there, so I don't see why in the future it would be a problem.

Mr. BARTON. That's a fair answer. Anybody else?

Mr. STALON. I would endorse that by saying the difference in rates shows up in the distribution charges, and that is still a monopoly, which will permit you to sustain those different rates.

Ms. MOLER. Right.

Mr. STALON. The energy market will be competitive, and such differences need not be and could not be sustained.

Mr. BARTON. But if you take a State like California that pretty well allowed stranded cost recovery up-front, so their utilities got quite a bit of money, they can then use that money to go into the marketplace and buy power plants and do things that in States that allow stranded cost recovery over an extended period of time, they don't have that opportunity. It creates an imbalance, at least the appearance of an imbalance. That's my point.

Mr. NAEVE. I would say this. I think governments, like people, should take responsibility for their actions. To the extent that restructuring is mandated by a State legislature or a State public utility commission, I think the responsibility is theirs for deciding how they are going to deal with the consequences of their action, namely, the stranded cost. I think if the stranded cost in a particular case is the bi-product of a Federal mandate, then the Federal Government should take, in part, responsibility for that.

Mr. BARTON. I could go down that line, too.

Well, I'm going to excuse this panel. We will have other questions for the record. We do very much appreciate your time and your expertise on this issue, and I'm sure that you will be called on again, if not formally, informally to give us your advice. Thank you very much.

Ms. MOLER. Thank you for the opportunity to appear. This is my idea of a good time.

Mr. BARTON. Yes, well. It's my idea of a time, I don't know how good of a time. It is interesting.

We would like to call our second panel now, please. We have the Honorable John Quain, who is the Chairman of the Pennsylvania Public Utility Commission; the Honorable Craig Glazer, Chairman of the Public Utility Commission of Ohio; we have the Honorable Vincent Persico, who is the Co-Chairman of the Special Committee on Electric Utility Deregulation for the Illinois General Assembly; we have the Honorable Susan Clark, the Commissioner from the Florida Public Service Commission; and the Honorable Marsha Smith, the Commissioner for the Idaho Public Utility Commission.

Welcome. Your testimony is in the record in its entirety. We are going to recognize each of you for approximately 7 minutes to elaborate on it. Mr. Persico, I am told, has a plane at 4 o'clock. Is that correct?

Mr. PERSICO. Correct.

Mr. BARTON. So we are going to let you go first, and we are going to give the panelists an opportunity to question you before we allow the others their opening statements, so that you can catch your plane.

Does anybody else have a place to catch?

Ms. SMITH. At 5:30.

Mr. BARTON. You are 5:30. You don't count.

Ms. CLARK. Six o'clock.

Mr. BARTON. Okay. But the earliest is the 4 o'clock plane, right?

Mr. PERSICO. Correct.

Mr. BARTON. So we are going to recognize you for 7 minutes and then give the panel an opportunity to specifically ask questions to you and then you can be excused, since it is 2:45.

So, Mr. Persico?

STATEMENTS OF HON. VINCENT A. PERSICO, CO-CHAIR, SPECIAL COMMITTEE ON ELECTRIC UTILITY DEREGULATION, ILLINOIS GENERAL ASSEMBLY; JOHN M. QUAIN, CHAIRMAN, PENNSYLVANIA PUBLIC UTILITY COMMISSION; CRAIG A. GLAZER, CHAIRMAN, OHIO PUBLIC UTILITY COMMISSION; SUSAN F. CLARK, COMMISSIONER, FLORIDA PUBLIC SERVICE COMMISSION; AND MARSHA H. SMITH, COMMISSIONER, IDAHO PUBLIC UTILITY COMMISSION

Mr. PERSICO. Thank you, Mr. Chairman, and members of the committee for the opportunity to present testimony before the subcommittee on this very important issue. Hopefully, I can bring another perspective to the debate on this issue, because for one thing, not only do I represent the 39th District of Illinois, which is in a western suburb of Chicago, but also, for 6 months a year, I try to harness a different kind of energy, and that is teaching seventh

graders government and history, and you know how lively 12 and 13 year olds can be. Plus, I am one of the few, I guess, members in the whole United States that have actually voted on this particular issue, and we went about it in a somewhat different way. Besides my role as a regular member in the general assembly, I was appointed as Co-Chairman of the Electric Utility Deregulation Committee, a special committee established 2 years ago to help guide our members to through the debate of deregulation and restructuring of the electric industry in our State.

The Committee is unique in the sense that it is made up of equal numbers of Republicans and Democrats, and has one Co-Chairman from each party. The leadership of the General Assembly in Illinois felt that this was the best approach to take, because, first of all, we had to draft a bill that was not only good for the State of Illinois, but also a bill that we could go back to our respective caucuses and have it pass in the law. And that's precisely what happened. After 4 years of debate in the legislative process, the Illinois General Assembly passed the Electric Service Consumer Choice and Rate Relief Law of 1997, in November of that year, and our former Governor, Jim Edgar, signed it into law in December.

Historically, the retail electricity industry has been the policy and regulatory responsibility of the States, whether it was in the establishment of the traditional rate base rate of return regulatory system which served our States and Nation well for over 75 years, or in the most recent review and adjustments made to that system. State policymakers have established that the interests of their constituents can be best served by the exercise of local control over the electric industry. Each State has unique characteristics which bear on how the industry operates within its borders and boundaries, and State legislators, Governors and regulators have always been in the best position to oversee that process on the retail level. My own State of Illinois provides an excellent example of the wisdom of this approach. Illinois is diverse in many, many respects. Not only do we have a huge urban metropolis in the city of Chicago, but we have small and medium sized towns throughout the whole State, and a very large agricultural area. We also have a very diverse people, a mixture of races, creeds and colors, and we are in many ways the microcosm of the whole United States. In the same way, we also run the spectrum in terms of the electricity industry. Commonwealth Edison serves the city of Chicago and most of Northern Illinois, and is one of the largest investor-owned electric companies in the United States. Prior to the passage of our law, it also had some of the highest electricity rates in the Midwest, rates which can be traced back to its concentration of nuclear generating capacity. In other parts of Illinois, we have electricity companies which have much lower prices, because they generate power with one of their most abundant resources, which is coal. We have larger customers served by municipal electric companies and rural cooperatives. Again, the Illinois electricity industry is very representative of the industry in the Nation as a whole.

The point of the description of the State is to emphasize that as policymakers in Illinois, we cannot even govern our State with the one-size-fits-all approach, especially when it comes to restructuring our electric industry. Our challenges were unique to our State, and

we were successful in meeting them only because we had the necessary familiarity with the issues, the stake holder and the constituents which were affected.

I have attached supplemental material to my testimony in the form of a two-page layman's summary of the law which we passed in 1997. If you examine the issues which we have highlighted in that summary, I believe that you will find most of the restructuring issues which are being addressed at the State level. These include such major issues as the timing of customer choice, the recovery transition costs, and the provision of delivery service. Also included in our law were such issues as maintaining the obligation to serve, how to deal with entrance to the marketplace, consumer education and protection, restructuring of our utility tax system, and a host of other public benefit issues, including protections for utility industry employees. I can tell you from literally hundreds of hours of personal experience that in each of these areas, Illinois policymakers and stake holders struggled to craft solutions which were very unique to our own State.

I would also like to take this opportunity to point out that Illinois is not alone in meeting the challengings of restructuring the electricity industry. Now, like two dozen other States have taken on either legislative or regulatory action, or both, to begin the process of moving from a traditional monopoly electricity industry to the new competitive environment. More will follow. So the States have definitely stepped up to the plate and met this challenge. We simply ask that you let us continue this process and assist us when necessary. While some States have taken a regulatory approach to restructuring their electricity industry, we, in Illinois, decided early on to address the matter with a comprehensive legislation, and our product is probably the most comprehensive law passed by any State. As you can see from the summary, we tackled every major issue involved in the debate, as well as a host of minor ones. When some State legislators have merely adopted a list of general principles and then asked their State public utility commissions to turn them into reality, we, in Illinois, opted to have our elected legislators make the critical policy decisions which are found in our law. Our regulatory commission and other State agencies were charged with implementing these decisions, and that process is well underway as we speak. In fact, we are progressing toward the first phase of opening our mark on October 1, 1999, and we will meet that deadline.

The decision made by our legislative leaders and Governor to take the comprehensive legislative route reflects the necessity of crafting unique solutions to the challenges presented by our State's diversity, as I outlined at the beginning of my remarks. Other States have chosen other approaches which work better for them. They and we should have the ability to make these choices, both in the overall approach and the details of our work product. If there ever was an area of public discourse where one side does not fit all, it is in the deregulation and restructuring of the electric utility industry.

And, finally, after a long and difficult process of education, discussion and legislation, we, in Illinois, passed a law which we believe will bring the benefits of competition in the electricity indus-

try to all citizens of our State. We passed a law which is comprehensive in its approach and balanced in its provisions. We believe it will provide an orderly transition for all the industry stakeholders from the old world to the new. In short, we, in the Illinois General Assembly, are convinced that it is the best possible law for Illinois. I would urge you to respect that judgment by taking no Federal action which would have the effect of changing our law or disturbing a very delicate balance that we have so crafted.

And, with that, I will be happy to answer any questions.

[The prepared statement of Hon. Vincent A. Persico follows:]

PREPARED STATEMENT OF HON. VINCENT A. PERSICO, ILLINOIS STATE REPRESENTATIVE

Thank you, Mr. Chairman, and Members of the Committee, for the opportunity to present testimony here today before this Subcommittee on the important issue of the evolving federal and state roles in fostering competition in the electricity industry. My name is Vince Persico and I represent the citizens of the 39th District in the Illinois House of Representatives. I live in Glen Ellyn, Illinois, which is a suburb of the City of Chicago. In the Illinois House of Representatives I serve as Co-Chairman of the Electric Utility Deregulation Committee, a special committee established two years ago to help guide our Members through the debate over deregulation and restructuring of the electricity industry in our state. The committee is unique in recent Illinois legislative history in that it is bi-partisan, has one Co-Chairman from each party and is made up of equal numbers of Republicans and Democrats. The leadership of our General Assembly felt that such an approach provided the best chance of success in terms of producing legislation which could pass both the House and Senate and be approved by our Governor. And that is precisely what happened. After a full year of debate and legislative process, the Illinois General Assembly passed The Electric Service Customer Choice and Rate Relief Law of 1997 in November of that year. Governor Jim Edgar signed the bill into law the next month.

State Role in Electric Regulation

Historically, the retail electricity industry has been the policy and regulatory responsibility of the states. Whether it was in the establishment of the traditional rate-base, rate-of-return regulatory system which served states and the nation well for over 75 years or in the more recent review and adjustments made to that system, state policymakers have established that the interests of their constituents can best be served by their exercise of local control over the electricity industry. Each state has unique characteristics which bear on how the industry operates within its boundaries and state legislators, governors and regulators have always been in the best position to oversee that process on the retail level. My own state of Illinois provides an excellent example of the wisdom of this approach.

The State of Illinois is diverse in many, many respects. We have an urban metropolis in the City of Chicago, we have fast-growing suburban areas which provide their own special challenges for policymakers, and we have lots of medium-sized and small towns and agricultural areas. We are also a diverse people, a mixture of races, creeds, colors and nationalities which reflects the nation as a whole. In many ways, Illinois is a microcosm of this country. And, in this same way, we also run the spectrum in terms of the electricity industry. Commonwealth Edison Company serves the City of Chicago and most of Northern Illinois and is one of the largest investor-owned electricity companies in the United States. Prior to passage of our law, it also had some of the highest electricity rates in the Midwest, rates which can be traced to its concentration of nuclear generating capacity. In other parts of Illinois, we have electricity companies which have much lower prices because they generate power with one of our most abundant resources—coal. We also have large numbers of customers served by municipal electric companies and rural co-operatives. Again, the Illinois electricity industry is very representative of the industry in the nation as a whole.

The point of this description of our state is to emphasize that as policymakers in Illinois, we cannot even govern our own state with a "one-size-fits-all" approach, especially when it comes to restructuring our electricity industry. Our challenges were unique to our state and we were successful in meeting them only because we had the necessary familiarity with the issues, the stakeholders and the constituents which were affected.

The Need for Changes to the State Role

I am of the opinion that the basic policy decision which you, as federal legislators, should make in terms of deregulating and restructuring the electricity industry is to maintain the traditional division of responsibility between the retail and wholesale aspects of the industry. For many of the reasons which I outlined above, states are best equipped to govern the retail electricity industry which operates within their boundaries. This is true on both a constitutional and a practical basis. The federal government, through the Federal Energy Regulatory Commission and any potential national transmission reliability body, is best equipped legally and practically to handle the wholesale, interstate commerce side of the industry.

However, there may be issues which arise during the course of the transition from the traditional electric utility industry to the new competitive marketplace where the federal government should act to assist the states and its own regulators so that they can better perform their roles in the overall system. There may well be some areas where only the Congress can act to clear up ambiguities or remove roadblocks to a smooth transition. These areas may include interstate transmission, federal power marketing administrations, repeal or reform of the Public Utilities Holding Company Act and other issues. However, the emphasis should always be on assisting the states who remain the primary drivers of the changes taking place in the retail electricity industry.

State-Level Restructuring Issues

I have attached supplemental material to my testimony in the form of a two-page layman's summary of the law which we passed in 1997. If you examine the issues which are highlighted in that summary, I believe you will find most of the restructuring issues which are best addressed at the state level. These include such major issues as the timing of customer choice, the recovery of transition costs and the provision of delivery services. Also included in our law were such issues as maintaining the obligation to serve, how to deal with new entrants to the marketplace, consumer education and protection, restructuring of our utility tax system and a host of public benefit issues, including protections for utility industry employees. I can tell you from literally hundreds of hours of personal experience, in each of these areas Illinois policymakers and stakeholders struggled to craft solutions which were very unique to our state.

I would also like to take this opportunity to point out that Illinois is not alone in meeting the challenges of restructuring its electricity industry. Nearly two dozen states have now taken legislative or regulatory action, or both, to begin the process of moving from the traditional, monopoly electricity industry to the new competitive environment. More will follow. The states have definitely stepped up to the plate and met this challenge head on and will continue to do so because it is of critical importance to each of our constituents and to the various state economies. We simply ask that you let us continue this process and assist us when necessary.

The Illinois Approach

While some states have taken a regulatory approach to restructuring their electricity industries, we in Illinois decided early on to address the matter with comprehensive legislation. And our product is probably the most comprehensive law passed by any state. As you can see from the summary, we tackled every major issue involved in the debate as well as a host of minor ones. Where some state legislatures have merely adopted a list of general principles and then asked their state public utility commissions to turn them into reality, we in Illinois opted to have our elected legislators make the critical policy decisions which are found in our law. Our regulatory commission and other state agencies were charged with implementing those decisions and that process is well under way as we speak. In fact, we are progressing toward the first phase of opening our market on October 1, 1999 and we will meet that deadline.

The decision made by our legislative leaders and governor to take the comprehensive legislative route reflects the necessity of crafting unique solutions to the challenges presented by our state's diversity as I outlined at the beginning of my remarks. Other states have chosen other approaches which work better for them. They, and we, should have the ability to make those choices, both in our overall approach and in the details of our work product. If there was ever an area of public discourse where one size does not fit all, it is in the deregulation and restructuring of the electricity industry.

Conclusion

After a long and difficult process of education, discussion and legislation, we in Illinois passed a law which we believe will bring the benefits of competition in the

electricity industry to all the citizens of our state. We passed a law which is comprehensive in its approach and balanced in its provisions. We believe it will provide an orderly transition for all of the industry's stakeholders from the old world to the new. In short, we in the Illinois General Assembly are convinced that it is the best possible law for Illinois. I would urge you to respect that judgment by taking no federal action which would have the effect of changing our law or disturbing the balance contained therein.

SUMMARY OF THE ELECTRIC SERVICE CUSTOMER CHOICE AND RATE RELIEF LAW OF 1997

Customer Choice of Supplier

By May 1, 2002, all Illinois electricity consumers will be able to choose their electricity supplier. On 10-1-99 customer choice is phased-in beginning with the ability to obtain direct access to alternative suppliers given to industrial customers with loads of 4 megawatts or larger and aggregated commercial loads of 9.5 megawatts or larger. On that same date, one-third (1/3) of all other commercial and industrial customers get choice based on a lottery. On 12-31-2000, the remainder of commercial and industrial customers get choice. The residential class gets choice on 5-1-02.

Rate Reductions

Illinois utilities are divided into two categories for purposes of rate reductions. Those above the current Midwest average residential rate must reduce their rates for residential customers by 15% on August 1, 1998 and an additional 5% on May 1, 2002. Utilities (except CILCO) below the current Midwest average must reduce residential rates by 5% effective 1-1-98. Additional 5% reductions are scheduled for 10-1-2000 and 10-1-02 if those utilities are not below the Midwest average on those dates. CILCO rates must be reduced 2% on 1-1-98, 2% on 10-1-2000, and 1% on 10-1-02.

Utilities will receive credit against any rate reductions under this law for rate decreases ordered by the Illinois Commerce Commission in regulatory proceedings before the effective dates of the reductions. The Commission cannot alter rates during the phase-in period except in case of financial emergencies for utilities. If utilities have excess earnings during the transition, they must share them with their customers. Rate reduction provisions apply to all companies with more than 12,500 customers in Illinois.

Transition Costs

The bill uses a "lost revenues" methodology to determine the amount of transition costs which utilities can recover from customers during the change from a regulated to a competitive environment. The amount of the charge is calculated by first determining the amount of revenues lost to the utility when a customer leaves its system for a new electricity supplier, and then subtracting from that figure the value of the now-available power previously used by the former customers. Also subtracted is the amount of the charge which that customer still pays to the utility for delivery of the power from the new supplier. Finally, a "mitigation" factor is subtracted. This factor reflects the amount of cost-reduction for which the utility is directly responsible and the number subtracted increases during the transition. After all the subtractions, the number which remains is the transition charge which the utility can collect from the departed customer. 2006 is the final year of recovery of transition costs by utilities. Transition costs are paid only by those customers leaving the utility's system.

Obligation to Serve

Utilities have a continuing obligation to provide traditional, bundled service to customers who do not wish to shop for power. Residential customers who leave the host utility are allowed to return without penalty but cannot switch again for 24 months.

Transition Funding

Often referred to as "securitization," this transition funding mechanism allows utilities to lower their cost of debt. Upon petition by a utility, the Illinois Commerce Commission can issue a Transitional Funding Order which the utility could then use to secure financing and raise funds to pay down transition costs. Up to 20% of the monies can be used for costs such as employees transition, billing and metering transition and ISO start-up. Transitional funding ends in 2006.

Delivery Services

While the generation aspect of the electric industry is deregulated, the transmission and distribution functions remain regulated. In order to facilitate competi-

tion, however, the bill provides mechanisms to establish non-discriminatory delivery of power by local distribution utilities.

Independent System Operator

In addition to unbundling delivery services from power generation and using non-discriminatory transmission techniques, eventually utilities will have to turn over operation of their transmission systems to an independent system operator who will run the system in order to institutionalize the fairness concepts. Illinois utilities must seek to become part of a regional independent system operator plan or, if none is available, establish an in-state ISO. In the meantime, Illinois utilities must "functionally unbundle" their generation, transmission and distribution operations.

Municipal Utilities and Cooperatives

The bill allows municipal electric utilities and electric cooperatives the right to decide for themselves whether to become part of the competitive power supply market. These customer-controlled entities can elect to open their current territories to competition or remain in their current status. If they seek customers from other suppliers, they automatically subject their own territories to competition.

Alternative Retail Electric Suppliers

Alternative Retail Electric Suppliers (ARES) will be allowed to compete for the customers of current Illinois electric utilities. They must first meet minimum certification requirements and along with their competitors comply with a Code of Conduct set out in the bill.

Consumer Education and Protection

Working with suppliers, the Illinois Commerce Commission will develop materials which will be sent to all electric consumers in the state seeking to educate such consumers on the new competitive electric supply system. Additionally, a new Consumer Utilities Unit will be established in the Attorney General's Office to deal with complaints regarding the new system and the state's consumer fraud statute is amended to be consistent with a customer choice environment.

Public Utilities Act Amendments

Several provisions of the state's Public Utilities Act are amended to streamline the current regulatory process and make it more amenable to a competitive electricity environment. These include such areas as removal of least-cost planning requirements, options for utilities to do away with fuel adjustment clauses and making utility reorganization and financial activities less cumbersome and time-consuming.

Taxes

The state's revenue-based utility tax system is completely revamped under the bill in order to treat all suppliers equally and maintain revenue neutrality as closely as possible. Except for a transitional period where large customers will pay utility taxes based on the old percentage of gross receipts basis, the state will move to a "use" tax system where charges are based on consumption of electricity rather than revenues. This will be the case not only for state utility taxes but for municipal taxes as well. Additionally, the state's Invested Capital Tax as it applies to electric utilities is replaced by a usage based tax. Finally, a usage based infrastructure maintenance fee system is established for the imposition and collection of fees associated with the use of public right of way for delivery of electricity.

Environmental Provisions

The bill mandates disclosure to customers of sources of power and amounts of pollutants. On a quarterly basis, suppliers must inform customers of the known sources of the power which they are supplying, such as coal, nuclear, wind, etc. They must also list the known amounts of pollutants such as carbon dioxide, sulfur dioxide and nitrous oxide which come from those sources. Also, funds to promote renewable energy resources and clean coal technology are created and paid for by charges to customers. An energy efficiency fund is also established with the money for same coming from suppliers of electricity. Effective 1-1-98.

Assistance to Low-Income Customers

The legislation establishes a fund to supplement federal money received for energy assistance to low-income consumers. When fully implemented the fund will generate over $75 million per year. Additionally, a long-term planning process is put in place which will develop a permanent low-income energy assistance program for the new customer choice environment. Effective 1-1-98.

Utility Employees

Provision is made for assisting utility employees in the event of dislocations resulting from moving to a competitive electricity market. These include severance pay, retraining, outplacement and voluntary retirement plans. Utilities must develop workforce reduction plans if dislocations occur.

Other Provisions

The 250+-page bill includes a myriad of other provisions, each of which has individual importance to stakeholders in the electricity industry. These include the ability of utilities to engage in billing experiments before and during the transition to competition, options for customers to elect real-time pricing of their power supply, and safeguards on the reliability of the transmission and distribution functions.

Mr. BARTON. Thank you, Mr. Persico. Does any member of the subcommittee have specific questions for Mr. Persico? Does anyone, because I want to excuse him if there are no specific questions.

Mr. HALL. I take it, Mr. Persico, that you and all the others of you, that none of you favor a Federal mandate requiring States to enact any kind of a specific type of retail competition plan on a specific time table? You all five are in agreement on that, aren't you?

Mr. PERSICO. Well, I think it would be out of my place to recommend a certain time table for Utah or Idaho, or whatever State. I mean, Illinois has a time certain in the year 2002, all industry and all residential customers will have the ability to choose. And, again, it was through major hours of negotiations where we literally sat in a room this large with 80 to 90 people and we went point-by-point, because what we first did is we gave them 12 guidelines. We wanted obligation to serve in there. We wanted protection for utility employees. We wanted to cover the issue of transition costs—I mean, stranded costs. So we sat down and said, ''This is what we want,'' and then we hashed it out and debated and discussed, and finally came up with a bill that fit Illinois.

Mr. HALL. Your State's act, right?

Mr. PERSICO. Pardon me?

Mr. HALL. Your State has acted?

Mr. PERSICO. Yes, it passed it in 1997.

Mr. HALL. So you would want an unconditional grandfather under your State's plan?

Mr. PERSICO. Without a doubt.

Mr. HALL. Okay.

Mr. PERSICO. I think we crafted a very delicate balance of a very good piece of legislation that is unique to Illinois, and I believe other States should be given the same opportunity.

Mr. HALL. Do I get some kind of a ''yes'' from all five of you when I asked——

Mr. BARTON. Well, let's try to be specific to Mr. Persico so we can let him go. We are going to give you time to——

Mr. HALL. I'm trying to leave, too. I've got a 5:10 flight. Seriously, he can hold up his hand as quick as the other four do. I don't want to defy the chairman, not this early in the game, anyway. I said, I take it that none of you favor a Federal mandate requiring States to enact a specific type of retail competition plan on a specific time table. That's right, isn't it?

Mr. QUAIN. Representative John Quain from Pennsylvania. I don't——

Mr. HALL. I'll get you later, John.

Mr. QUAIN. Okay.

Mr. HALL. You would hold your hand up to that?

Mr. PERSICO. I don't favor a one-size approach fits all.

Mr. HALL. I yield back my time.

Mr. BARTON. Before we let Mr. Persico go, does Mr. Shimkus have a question for him, since he represents your State?

Just a specific question for him and Mr. Burr also has a specific question.

Mr. SHIMKUS. What can the Federal Government do to help prohibit the price spikes that we experienced in Illinois last year, question No. 1?

Mr. PERSICO. These are issues, again, that we struggled with. And one of the things that is in the Illinois bill is we eliminated the fuel adjustment cost, which meant that when we had those price spikes in Illinois last Summer, where they were buying it 4, 5, 10 times over the original cost, they couldn't pass it on to the consumers. And so, many utilities which, through discussion and debate and agreement, agreed to eliminate this fuel adjustment clause, because everybody was giving in on each side, it meant that the consumers, both at the industrial and residential level, were not affected by it. So how you do that on a more national level is something that this committee and Congress, as a whole, are going to struggle with.

Mr. SHIMKUS. But you can see how that is a critical role for the Federal Government to get involved with?

Mr. PERSICO. Yes.

Mr. SHIMKUS. The last question. Illinois addressed low-income assistance in its law. Should the Federal Government do the same?

Mr. PERSICO. Again, I think what you decide is important, and what we decided in Illinois were those 12 guiding principles, and one of them was assistance to low-income customers. And as a result of that piece of legislation, we enacted, I believe, a forty cent charge per month on a customer's bill, for a residential customer, which went into a low-income assistance program which generates around $75 million a year to provide assistance, as well as, I believe, like $50 million to $55 million in Federal assistance. So we felt, as a General Assembly, that that was important. By the same token, we also felt that any restructuring act, that we would pass that reduction by law for residential customers as well as industrial customers. For example, we had a 15 percent rate cut which took effect last August 1998 that what ever the customer's bill was as of July 1998, it was 15 percent less in their August bill and from then on, and another 5 percent in 2002.

Mr. SHIMKUS. And let me ask one last question. If the Federal bill changes one comma, colon, or period in the Illinois law, what does that do to the Illinois restructuring law that you all passed?

Mr. PERSICO. Well, again, it was a very delicate balance with each giving and taking, or whatever they felt was necessary. For example, one of the things that we are struggling with right now is—and we knew that it was coming, and that's why we set up a special commission to study that problem; was the school districts and the municipalities in certain areas where they have these nuclear generating plants would be adversely affected, because the value of those plants would dramatically go down. And so, right now we are trying to craft a piece of legislation that again will be

very difficult to pass the Illinois General Assembly on how to help out these school districts and municipalities. So if you came in with a one-size-fit-all, and so on, it could very much upset this balance that we're still struggling with ourself.

Mr. SHIMKUS. What about the severability clause that you all have?

Mr. PERSICO. Again, I'm not an expert on this, but we did have a clause in there that if one part was found unconstitutional, that everything would found.

Mr. SHIMKUS. Not just unconstitutional.

Mr. PERSICO. That it wouldn't work. It wasn't going to——

Mr. SHIMKUS. But if the Federal Government preempted any part of your statute, isn't that correct?

Mr. PERSICO. I believe that's correct.

Mr. SHIMKUS. We would want to follow-up and make sure we can get that into the record.

Mr. BARTON. Does Mr. Burr have a question for Mr. Persico?

Mr. BURR. Just one quick question. Do you believe it's possible for Congress to pass a comprehensive piece of legislation that, in fact, does not preempt you and does not require grandfathering, but eliminates many of the Federal hurdles that have been identified?

Mr. PERSICO. I guess we started at the same page almost. We had people on all sides of the spectrum on either end, and we finally were able to craft a piece of legislation through 2 years of very hard work and 2 years of compromise. Yes, I think the Federal Government does have a role, you know, whether through the wholesale transmission lines or the PURPA Act, or so one, eliminating and repealing the PURPA Act. I think you definitely do have a role. This is my humble opinion, I think if you come in and say that every State has to do this by this certain date, I think it is going to be very difficult to craft that kind of piece of legislation. I think you're going to have a hard time selling it to your members.

Mr. BURR. Clearly, a date certain would be preemptive. And I'm talking about, do you think it's possible for us to do a bill that's comprehensive, that addresses the Federal hurdles, that's not preemptive?

Mr. PERSICO. Yes, I do.

Mr. BURR. I'm going to deal back, Mr. Chairman.

Mr. BARTON. Thank you, Mr. Persico. We are going to excuse you so that you can catch your airplane. We are going to resume regular order. We will hear from Mr. Quain, Mr. Glazer, Ms. Clark, Ms. Smith, and then we'll allow each member to question them in turn.

Mr. PERSICO. Thank you, Mr. Chairman, and members of the committee.

Mr. BARTON. We appreciate your testimony. Mr. Quain, you're recognized for 7 minutes.

STATEMENT OF JOHN M. QUAIN

Mr. QUAIN. Thank you, Mr. Chairman, and members of subcommittee. Let me answer the question that was asked earlier. I do favor a time-line mandate in Federal legislation for States to act. Although, I believe that should be far enough in advance to allow each State to craft a solution individual to its own needs. Lis-

tening to Mr. Persico talk, it sounded very much like my State in the sense that we have some of the highest costs to utility providers in Pennsylvania and some of the lowest cost providers in the Nation. And when we sat down to look at the electric choice process, we began at the Public Utility Commission in Pennsylvania in 1995, and by the Summer of 1996, we had concluded as a group that generation was no longer a natural monopoly and, as a result, should not be regulated as such, but transmission and distribution should. But with the findings in that report, the Governor of Pennsylvania, Tom Ridge, one of your former colleagues, requested that I convene a group of stake-holders to see if we could identify problems, reach a consensus piece of legislation to present to the Pennsylvania General Assembly that would handle all the issues from the various prospectives on such a complex and difficult matter. And we did just that. We had certainly our electric utilities in the room, we had our rural electric co-ops, we had labor, environmentalists, low-income consumers, residential consumers, small business advocates, large industrial consumers, marketers, independent power producers, and the like, and I'm sure I've missed some. But we had 50, 60 people sitting around a table, and in over a 2-month period of time, we reached a piece of consensus information, that all agrees was a good way to open the market in Pennsylvania. So the center to that was the environmentalist who wanted us to put provisions in the statute that we believe were in conflict with Federal law, so we parted ways on that singular issue.

Having done that, we moved to the General Assembly and we had a lobbying effort that was rather unique. We had large industrial customers sitting in their representives office with small and low-income consumers. We had marketers and brokers sitting in with industrial users, as well as IOU's, all saying the same thing; this is a good way to open up the Pennsylvania market. In October 1996, the General Assembly passed the bill in both Houses without amendment. In December 1996, the Governor signed it into law.

Now, as of January 1, 1997, the details for implementing the electric choice law moved to the Pennsylvania Public Utility Commission. We had, under the law, an obligation to open the market by January 1, 1999. I am pleased to report that over the last 2 years, we have gone through that transition process. On January 1, 1999, the market for 66 percent of all consumers in Pennsylvania opened, and we believe, in our humble opinion, it is a tremendous success story. Let me just give you some basic facts. Beginning in July, when we asked people to begin to enroll for the first 66 percent of capacity available under electric choice, out of 5.2 million customers in Pennsylvania, electric customers, 2,000,000 signed up and said, "We want to learn more." And as time passed, about 1.2 million of those 2,000,000 customers actually participated in the choice process, actually went out and looked for alternative suppliers. Now this is a maturing marketplace. We are 2 months into the first 66 percent of our electric choice program. At this date, over 400,000 Pennsylvania citizens and businesses—I'm sorry, just under 400,000. That represents approximately 33 percent of all winter peak load in Pennsylvania are now shopping for alternative energy in the State. Once we passed the legislation, we, of course, had to handle such issues as stranded in-

vestment and the other restructuring issues, and we brought each of our electric utilities in for a prolonged rate case proceeding. At the conclusion of those rate case proceedings, there were, of course, a number of appellate actions which challenged the Commissions authority, rights and obligations to enter the orders that it did.

We then turned around and sought to settle the five major electric utility cases in Pennsylvania so we could avoid litigation. Why did we do that? Because we believe that the marketplace needs certainty. The greater the certainty, the greater the market, the greater fluidity, the greater competition will occur in Pennsylvania. And we were successful in five our of five cases negotiating results that all the parties, with very few exceptions, have signed off on.

So today in Pennsylvania, in 1999, if not a single person shops in 1999, rates will go down by $458 million in 1 year, and at the same time, low-income funding has gone up 122 percent, as compared to what it was under traditional regulations. We have sustainable energy funds that will be funded to the tune of $60 million over 5 years. We have announced $1.1 billion of additional investment and generating capacity in Pennsylvania in 1999 alone. In additional to that, we have rate caps in place under the negotiated settlements which last years in Pennsylvania. And just looking at the energy component that rate payers pay, which you normally see our energy cost rate, which is a direct flow-through, by tapping those costs through negotiated settlements, we project the citizens avoid $8.7 billion, what would otherwise be automatic pass-through under traditional regulations. And we're excited about the possibility of electric choice in Pennsylvania. We look to open up the remainder of the market in 1 year. We have a tremendous amount of consumer education left to do. There is a transition process, there is a need to have States develop their own plans to fit the nature of the demographics, but to say that regulation is a suitable substitute where competition can and should exist, to me, makes very little sense. Regulation was only intended to be a surrogate where competition could not exist. And if generation competition can exist in the United States, it should, and, as a result, free market enterprise should be allowed to develop and regulation should pull back. That is the philosophy which we are operating under, and we think we are beginning to see very quickly the benefits of that philosophy in Pennsylvania.

I'm happy to answer any questions. Thank you.

[The prepared statement of John M. Quain follows:]

PREPARED STATEMENT OF JOHN M. QUAIN, CHAIRMAN, PENNSYLVANIA PUBLIC UTILITY COMMISSION, ON BEHALF OF THE COMMONWEALTH OF PENNSYLVANIA

Good afternoon, Mr. Chairman and members of the Subcommittee. Thank you for your kind invitation to speak on the role of state regulators in restructuring the electric industry. I come before you today to discuss the Pennsylvania Public Utility Commission's ("PaPUC") role in electric industry restructuring, and the steps taken by the PaPUC to foster competition in electric energy generation. I will also discuss the effects these steps have had on the PaPUC's traditional role in electric regulation, and identify issues the Pennsylvania Public Utility Commission believes should continue to be addressed by the states as the electric industry changes.

Retail electric competition in Pennsylvania is a success story. It represents the vision of our Governor, Tom Ridge, the will of our state General Assembly, and the cooperation of all of the parties involved in the process. Pennsylvania's Electricity

Generation Customer Choice and Competition Act[1] ("Competition Act" or "Act") was signed into law by Governor Tom Ridge on December 3, 1996. The Act provides for a careful transition to full retail generation choice by January 1, 2001. Sixty six percent of retail electric customers in all classes are already eligible to choose their electric generation providers. After January 1, 2001, all retail customers will have the opportunity to choose their electric generation provider. The purpose of the Act is to open up the electric generation market for competition in Pennsylvania. Transmission and distribution services continue to be regulated by the F.E.R.C. and the PaPUC, respectively.

Pennsylvania's Act provides for a four-year transition and phase-in period to prepare utilities, shareholders, consumers and regulators to achieve the maximum benefits of competition. This phase-in period began on April 1, 1997, and will continue to January 1, 2001, at which time transition to full customer choice will be complete. The purpose of the phased transition was to permit our traditional, vertically integrated utilities a chance to file restructuring plans functionally unbundling their services while allowing all parties to grow into competition. The transition has been challenging, but it has also been a success. Retail customers now have the choice of who will provide their electricity.

As I come before you today, more than 1.2 million customers in Pennsylvania are eligible to shop for electricity. I should note that even if one single customer did not select an alternate supplier, Pennsylvania ratepayers will still save approximately $458 million in guaranteed rate reductions over the next year by virtue of the economies of restructuring and mandatory rate relief. However, I am pleased to report that approximately 400,000 customers say they have already switched to a competitive market supplier. Those who have elected to remain with their traditional utility have also made a choice—a choice that was not open to them before the passage of this innovative and dynamic legislation. Pennsylvania's consumers are leading the nation in exploring the benefits of electric choice. These numbers are a strong indication that Pennsylvania is well on its way to developing a viable competitive electricity market.

The Act was the result of a considered process. Prior to facilitating the stakeholder process that led to the Pennsylvania Act, the PaPUC undertook an investigation into retail competition[2] which concluded after two years of extensive testimony. Among other things, the investigation confirmed that restructuring the electric industry at the retail level would be a formidable challenge. On the most basic level, it is imperative to balance full retail access and customer choice with the need to assure utilities and their shareholders a reasonable level of financial stability. Pennsylvania's Competition Act provides a reasonable opportunity for utilities to make the transition to retail competition and customer choice while preserving their financial stability through the opportunity to recover stranded costs—utility assets rendered uneconomic by the move to competition.

In its role as arbiter and adjudicator in each of the restructuring proceedings which have taken place since the effective date of the Act, the PaPUC has analyzed all the evidence submitted in favor of and in opposition to each company's stranded costs and has led negotiations among all parties addressing the appropriateness of each company's proposed stranded cost recovery. Ultimately, the PaPUC adjudicated the stranded cost issue for each utility in a way which has proved fair to both the consumers and the utility shareholders.

The Act also contains a clear set of directives that electric system reliability must be maintained at present levels, or it must exceed those levels. The PaPUC has issued competitive safeguards in the nature of a proposed rulemaking and continues to ensure that utilities adhere to this mandate. Further, the Act guarantees that all consumer protections now in place under the Pennsylvania Public Utility Code and its attendant regulations will continue in the new era of customer choice. The role of the PaPUC in this regard continues, as the Commission modifies its regulations as necessary and adjudicates consumer complaints. The PaPUC has also implemented the universal service provisions contained in the Act, and will continue to do so through the issuance of orders and the promulgation of regulations as necessary.

Electric industry competition and restructuring transcends state borders. Many of the electricity generation providers licensed to do business in Pennsylvania are located outside of our Commonwealth. Pennsylvania's Competition Act recognizes that

---

[1] PA H.B. 1509, Session of 1995, 66 Pa.C.S. §2801 *et seq.*, "The Electricity Generation Customer Choice and Competition Act", effective January 1, 1997.

[2] See, *Report and Recommendation to the Governor and General Assembly on Electric Competition: From the Investigation into Retail Competition,* PaPUC Docket No. I-940032 (July 3, 1996). http://www.pa.us/PA—Exec/Public—Utility/electric—competition

the interconnected electric system is a regional and national as well as a state resource. The PaPUC is committed to working with the federal government and with other states in the region to accomplish the goals of industry restructuring, open access and competition. I would be remiss if I did not point out that to date, the cooperation which the Commission has received from the Federal Energy Regulatory Commission has been exemplary and indeed indispensable. Open communication and cooperation between the states and the federal government, as well as within regions, is essential to realize the full potential of competition. Regional cooperation is also necessary to maintain system reliability.

Pennsylvania prefers that each state be allowed the opportunity to set its course into retail competition; however, we recognize that there will be those states who choose not to act. We therefore submit that the implementation of retail competition on a national basis by a date certain is a logical and equitable approach that the PaPUC endorses. In order to insure that all states are subject to the same competitive forces and that no state is disadvantaged by the creation of a new market, reciprocity, nationally and regionally, is imperative. Accordingly, any federal legislation which is enacted should contain a reciprocity clause.

Notwithstanding the recognition that federal legislation providing for retail competition is necessary, Pennsylvania's Competition Act reflects our desire to maintain a necessary measure of control of our state's destiny in this area. Accordingly, it is our hope that any federal legislation would allow the states an opportunity to act on their own by a date certain and would "grandfather" existing state legislation to the extent that a states' actions are not inconsistent with the principles of open access, on a non-discriminatory basis, for all of the market participants. We have provided draft language on this subject as an attachment to this testimony.

Additionally, the PaPUC's proposed language includes specific language addressing Pennsylvania's desire to have any federal initiative preserve the states' authority to collect taxes on energy provided to end users situated within the states, regardless of the source or its location. One of the stated goals of the Pennsylvania legislation was to make competition "revenue neutral" with respect to tax matters. The proposed language would ensure that any federal legislation also remains "revenue neutral" as applied to the states.

In the event that federal legislation is drafted which does not contain a grandfathering clause, the PaPUC submits that the legislation should preserve the states' authority to enforce regulations to implement the requirements of the Act, to the extent feasible, without compromising the legislative intent to open up retail competition on a state, regional and national basis. Particularly, the PaPUC believes that any issues relating to system reliability, universal service, retail stranded costs and consumer protections should remain within the states' jurisdiction. Pennsylvania has successfully addressed these issues through its Competition Act and the issuance of Commission orders and regulations, and we hope any federal legislation will preserve our authority to do so.

The consensus-building process that led to the adoption of Pennsylvania's Competition Act was intense, sometimes contentious, but ultimately very rewarding for Pennsylvania's consumers and, I believe, for the electric industry. Managing the transition from regulation to increased competition has been our greatest challenge. However, we are confident that our efforts will result in benefits for all Pennsylvanians, as they have access to safe, reliable and efficient service at competitive prices. We will continue, as a state, to do everything within our power to make electric competition work for Pennsylvania and for the region. We look forward to cooperating with Congress in an effort to further the goal of customer choice in electric energy.

I thank you for your attention, your consideration, and I await your questions.

Mr. BARTON. Thank you, Mr. Quain.

We would now like to hear from the Honorable Mr. Craig Glazer from the great State of Ohio. Your statements in the record in its entirety, and we'll give you 7 minutes to summarize.

STATEMENT OF CRAIG A. GLAZER

Mr. GLAZER. Okay. Thank you, Mr. Chairman, and members of the committee. It is a great honor to testify before you on the subject of evolving Federal and State responsibilities in electric competition.

My name is Craig Glazer. I'm the Chairman of the Public Utilities Commission of Ohio, and have served in that role for the last 8 years and under three Governors, at this point.

I have to sort of let you in on a little bit of a secret. One of your esteemed colleagues on this committee, Representative Tom Sawyer—unfortunately, he's not here; used to work for us. He worked at the Commission many, many years ago, and we still find memos from him——

Mr. BARTON. He's complained about that repeatedly. No, he spoke very positively of it. I think you have 4 or 5 Ohioans on this committee, so I think your State's position is going to be well represented when we get to the mark-up.

Mr. GLAZER. Well, that's good. That's good. We like it that way, and we consider ourselves one of the other great States, along with the great State of Texas. I've also worked with your esteemed minority counsel. I spent many years in the law library at Vanderbilt University trying to figure out this thing called the ''Interstate Commerce Clause'' years ago.

We are something of a bellwether for the national mood, as you all know. On election night, Ohio is one of the swing States that people watch to get a feeling for what's happening in the national elections. By the same token, McDonald's and Wendy's test markets products in our cities and towns, and so we kind of consider ourselves sort of a good indicator as to where the national mood is. And like Pennsylvania and Illinois, we also were something of a microcosm of the Nation. We have high costs and low costs in the same State. We're both a large energy producer and a large energy consumer. We are coal State. We are also a natural gas producing State. We have strong transmission systems, have two competing ISO's going in our State at the same time, and we have more registered holding companies under PUHCA, the Public Utility Holding Company Act, than just about any other State. So we have a great interest in these issues.

Where are we at? Well, it's interesting. Literally, we are in the throws of trying to pass electric deregulation in our State. We feel the heat from my esteemed colleague, Chairman Quain, from Pennsylvania. The Governor just last week announced, ''We want to get this done,'' and the House and Senate are in intensive discussions. I literally was faxing back amendments this morning to proposed legislation. With that being said, how do you get your hands around this and what can the Federal Government do. That's sort of the questions I heard this morning. I'd like to propose a path that would avoid some of the mandate problems, of date certains, but also be very constructive, I would argue, in moving this issue forward. Because, I think this is a Federal and State partnership and think there are important things this Congress can do to move this forward without stepping over the line and mandating the States that might not want to move forward.

We've got to come up, in my opinion, with a harmonized plan that moves forward and serves individual State goals, but has incentives, the things that the Federal Government might want to see happen, as well. But I would definitely—First, I'm going to talk about what I would recommend you not do and then talk about what you might do.

What I would recommend you not do is pull out any one piece of legislation, repeal the Public Utility Holding Company Act, for example, and do nothing else. It think that that would be huge mistake, and there's a lot of reasons for that. I think, instead, you ought to borrow a page from your own Telecommunications Act of 1996, which set up a checklist for States to follow, some incentives for things to happen, but also provided for some State flexibility. And I think I would argue that that might be the key here, and I can talk about that in a minute. But let me go back to sort of what you shouldn't do and why, taking PUHCA for a minute, I think it would be a mistake to just rip up PUHCA, to just repeal it on its own. Let's look at PUHCA for a minute. Well, it addressed a number of issues that we are still talking about today, issues this Congress dealt with in 1935 that are still issues today. PUHCA had provisions about corporate structure. We're still talking today about corporate structure; should people be in this business or that business. It was an issue back then, an issue today. PUHCA talked about cross-subsidization from competitive businesses into monopoly businesses, from one business into another. That's also a subject we're still talking about today. PUHCA was concerned about the effectiveness of State regulation on the monopoly parts of the business. There are provisions in PUHCA that deal with that. That is also something we are still dealing with today. And, frankly, the statute is not exactly ancient. This Congress just modernized it in 1996 as it related to electrics going into the telephone business. PUHCA, in effect, was a market power statute, because it dealt with many of these same issues. Is it the right statute for the 1990's? Absolutely not. Does it need modernization? Absolutely, it does.

With that being said, my fundamental point is, I think, the biggest mistake would be to just rip it up without addressing the market-power issue in some other way. And it is for those reasons I ask the committee to consider sort of a different approach where you would, in fact, adopt a checklist approach. How would that work. Let's take PUHCA. PUHCA has line of business restrictions, its got merger restrictions, et cetera. Those would be lifted under this model, once the individual States certified that they had appropriate protections under State law that addressed abuses in market-power by large multi-state holding companies. So a State that has moved toward retail competition, those utilities operating in that State would be free of PUHCA, as long as there, in fact, was some other market-power protection that the State legislature or State commission had come up with. For a State that doesn't want to move toward retail competition at all, PUHCA could also be lifted for those States, but those States would certify that the effectiveness of State regulation would still be available over a large multi-state holding company. They would certify that issue. Just like in the Telecom Act, we certify that certain things have happened, and then the FCC, in fact, takes some action. So, too, would I suggest you could use that model.

Now, what happens if one State says, "Well, I don't want to play, I just want to be a hold-out"? I'd be willing to say, if there's one State holding out, and it's holding out in a way that's having an adverse effect on other States, then and only then should there be

some kind of override provision, some kind of preemption provision. And there is language in the Federal Telecom Act that dealt with that. With a State that just didn't want to move forward, the FCC then had some authority to move forward.

But under this checklist approach, you could craft a number of things. You could give incentives for the very issues that you raised. You could give incentives for independent transmission. You could give incentives for States to resolve stranded costs in a fair way. You could address all of these issues and have the States make certifications of them, rather than have this one-size-fits-all solution being decided here inside the beltway. The bottom line is I think we can work through this issue, I think we can find the appropriate balance. You did it in the Telecom Act. It hasn't worked perfectly, but it's a very sound piece of legislation, and I think if you adopt an approach like that, you might be able to accomplish some of the ends. I stand ready to work with this committee on putting some of these ideas into action.

[The prepared statement of Craig A. Glazer follows:]

PREPARED STATEMENT OF CRAIG A. GLAZER, CHAIRMAN, PUBLIC UTILITIES COMMISSION OF OHIO

Chairman Barton and Committee Members: It is a great honor to testify before you on the subject of the evolving Federal and State roles in electricity competition. My name is Craig Glazer and I have had the honor of serving over the past eight years and under three Governors as Chairman of the Public Utilities Commission of Ohio. In fact, my appointing authority and former boss, George Voinovich, now serves as a U.S. Senator in this Congress as does my former Cabinet colleague, then Ohio Lieutenant Governor now U.S. Senator Mike DeWine. I bring you greetings from the Buckeye State, which, coincidentally, is in the throes of legislative debates on this very topic this week. I want you to know that these are my comments and not necessarily those of the Public Utilities Commission of Ohio.

As you may know, our state is something of a bellwether for the national mood. We are often one of the swing states that is closely watched on election night. By the same token, McDonald's and Wendy's often test market products in our cities and towns since Ohio is considered a good testing ground of the tastes and fancies of the nation.

Not surprisingly, the same is true with the issue of electricity competition. We are something of a microcosm of the nation on this issue: we have high-cost and low-cost power in the same state; we are both an energy producer and energy consumer; we have large reserves of both coal and natural gas; we have strong electric transmission systems; we have two different ISOs forming with a border which slices our state in two; and we have more registered holding companies subject to the Public Utility Holding Company Act (PUHCA) than any other state. For all these reasons, we consider ourselves something of a bellwether with some unique perspectives from being both a high-cost and low-cost state.

Although only seventh largest in population, Ohio is the fourth largest energy consumer in the nation. We are very much part of the industrial heartland of the nation and our steel and auto industries have retooled and have taken on the international competition. Because of our heavy industrial base, the issue of electric competition is very important to us. Ohio has high electric costs in the northern part of our state (up to 12 cents per kWh), and much lower costs in the southern part of the state. However, we are surrounded by states such as West Virginia, Kentucky and Indiana, which have lower costs still. Even more pressing, at least two states which border us, Michigan and Pennsylvania, are aggressively moving forward with restructuring implementation.

For the third year in a row, our state is attempting to pass comprehensive restructuring legislation. The leadership of the House and Senate of the state legislature are involved, and our Governor, in his State-of-the-State message just last week, indicated that the time to move forward is now. We've tried to learn from the good and bad of the states around us. The proposal now on the table, put forward by a bipartisan working group of state legislators, calls for a number of things:

a. The commencement of full retail competition on 1/1/01;

b. A "black box" approach to stranded costs wherein a specific company-by-company time period for recovery of revenues is set forth in legislation, thus avoiding protracted proceedings;

c. An aggressive stance on ensuring against abuses of market power harming competitive markets. A number of tools are put in place by legislation including: mandatory independent operation and separation of transmission from generation; elimination of pancaked transmission rates; large shopping credits designed to provide an approximate 10% up-front savings for residential and commercial customers if they switch providers; an auctioning off of default customers after the transition period to avoid the incumbent realizing the horizontal market power associated with incumbency; and, incentives for divestiture;

d. Various state tax reforms to ensure a level playing field between in-state and out-of-state generators.

We are hopeful that this proposal will be passed by June of this year enabling us to meet the 1/1/01 start date.

I firmly believe that there is a role for BOTH state and federal legislation in the area of restructuring of the electric industry. I want to compliment this particular Federal Energy Regulatory Commission under the leadership of Chairman Jim Hoecker, and with an excellent group of Commissioner, for reaching out and working with the states. There is a dual role here that, if we get it right, can lead to a success story for the nation.

As I mentioned, I firmly believe there is a role for both the states and the federal government. Because the provision of electric service has BOTH interstate and intrastate qualities, I think it critical that we come up with a harmonized plan that moves forward and serves individual state goals while recognizing the national and international nature of the markets being created. To pull out any one piece, be it PUHCA repeal, PURPA repeal, or the imposition of mandatory date certains without examining the complex role of how the pieces all fit together, would be a mistake. For this reason, I urge the House not to pass stand-alone PUHCA repeal or mandatory date certain legislation at this time. Rather, I suggest the crafting of a complementary role for states and the federal government similar to that embodied in the Telecommunications Act. The 1996 Act hasn't worked perfectly; there have been state and federal conflicts. But the Congress correctly recognized a dual role with states setting local interconnection agreements and arbitrating disputes on local matters concerning same, and the FCC, after mandatory state consultation, ultimately passing on the national issue of the Regional Bell Operating Companies' (RBOC) entry into long distance. The basic framework of the Act was sound, although the FCC and individual states have gotten in trouble when they pushed too hard one way or the other and tried to occupy the field rather than recognize the delicate state/federal role.

I think we can achieve a similar harmonized role if we look to and adopt the basic structure of the Telecommunications Act passed by this Congress in 1996.

Let's look at PUHCA for a moment. PUHCA basically provided for a corporate structure of this industry which revolved around "home town" utilities locally based rather than spread across the country. PUHCA, through its geographic integration requirements and line of business restrictions, was, in effect, a market power statute—one designed to address the market power abuses as well as the investor abuses of the 1930's multi-state holding companies. After all, one cannot forget that a big part of PUHCA was the recognition of the otherwise inability of the states to properly regulate a large multi-state holding company operating through many subsidiaries in multiple jurisdictions so as to prevent abuses of markets and customers. In fact, the statute was just modernized in 1996 by this Congress to include a section to address the complex issues of cross-subsidization that can arise when electric companies enter the telecommunications market. The statute certainly isn't a perfect one—it definitely needs modernization, but that's my whole point. We shouldn't just rip it up without carefully ensuring that the market power issue, which can so harm competitive markets, is addressed. The same holds true for PURPA or provisions of the Federal Power Act.

It is for these reasons, that I ask the Committee to consider a "checklist" approach to federal legislation as was done in the Telecommunications Act of 1996. PUHCA line of business and other restrictions would be lifted once the states certified that they had appropriate protections under state law that address abuses of market power by a large multi-state entity in a state moving toward competition. For a state not moving toward retail competition, the state would certify that the effectiveness of state regulation over a large multi-state holding company is not impaired. There could also be a safety valve for federal preemption of a state if the

state's actions in not certifying lead to a "one-state holdout" that is having an adverse effect on interstate commerce.

There has been much talk about the FERC and the states developing incentives for companies that take steps to structure themselves in a way which fosters independent transmission. Companies that participate in ISOs or otherwise eliminate pancaking of rates and improve reliability through large multi-state Transco's should get credit for that under the checklist approach, leaving clear incentives in federal relief from statutes if the underlying goals are met. Through a checklist approach, the Congress would be fostering movement toward a restructured industry, providing a clear path to the industry itself and indicating its intent to be flexible and respectful of individual state policies rather than holding a gun to the heads of industrial states or centralizing the solution for the country inside the halls of FERC, the SEC or this Congress. I would be happy to work further with this Committee on the development of such a checklist approach.

I also want to briefly discuss the issues of setting a mandatory date certain for retail electric competition nationwide. At some point, the forces of competition are going to force a state to open up its markets. But that shouldn't be done through Congressional fiat, but rather through the actions of the marketplace and the inevitable demands that customers will place on the system. Thus, I would discourage a date certain approach in favor of a state opt-out approach, so long as the state's actions do not unduly harm the interests of other states. I have much respect for the interests of the low-cost states. I have low-cost power in my own state. But, at some point, in order to maintain a state's competitive position, the low-cost generating plants will have to be replaced and then this issue would be faced. It is in no ones interests to have investors passing over investing in a particular state in the process.

For all these reasons, I encourage a harmonized approach through the development of a checklist, with state certification and appropriate overrides for an errant state's refusal to cooperate if such refusal has a serious impact on interstate commerce and is affecting the states around it. Regional oversight would be encouraged, and a harmonized patchwork would be developed that would avoid the problems of a one-size-fits-all solution on one hand, or the dangers of total inaction on the other.

I look forward to working with this Subcommittee on these concepts in the weeks and months to come. Thank you for this opportunity to testify today.

Mr. BARTON. We thank you, Commissioner.

Now, I would like to recognize the Honorable Susan Clark from the Great State of Florida and the Chair noticed with great sense of envy the show of public affection you gave to Congressman Bilirakis as he left the hearing room earlier. We'd hope you would extend that to all the other members of the subcommittee at the appropriate time.

Your entire statement is in the record and you are recognized for 7 minutes.

STATEMENT OF SUSAN F. CLARK

Ms. CLARK. Well, for a minute, I'm speechless, but if I turn to the substance of what I want to say, I think I may recover a bit.

Obviously, we disagree on the mandate. And I'm going to put that aside, because I think we've had questions on that and I'll await any questions on that particular issue. I would only point out that what savings you might realize depends on where you start from. If you are a high cost State, you are likely to recognize much more savings than one that is a low cost State. And I know with interest, the savings that were articulated with respect to deregulation in Pennsylvania, I would only point out to you that recently we approved a rate decrease in Florida for Florida Power and Light that will represent over $1 billion in savings to Florida customers of FP&L over 3 years. That isn't to say, I think that is justification for continued regulation, but I would only point out that we continue to look at how our companies provide power and continue to

look at whether or not it is at the appropriate price. But let me tell you what we do agree on, and I think there are a number of things that you can do, Congress should do, and let me start with the first one, and that has to do with reliability. I think you will get agreements that there needs to be some Federal legislation with respect to liability. And I believe that authorizing a self-regulating reliability organization to establish mandatory standards for reliability and operations of the Nation's transmission system are in order. There is a need for mandatory compliance with reliability standards and a provision of explicit authority for FERC and for States to enforce those necessary standards. I would note that we have been working with Bonnie Suchman and we have worked with FERC. There is a sticking point on the language on the savings clause with respect to what jurisdiction and the authority the States might have with respect to reliability. And on that point, I would remind you that when the lights go out, it's not likely that they will call you all, it's not likely they will call up here to Washington; they are going to call our Governor, and the Governor is going to, in turn, call us at the Public Service Commission. So, in course, we feel if we are going to be held responsible for it, we should have some responsibility in that area. The other thing is, with respect to market-power, I think there are areas in which we will need your assistance in ensuring that there is not an abuse of market power. We recommend, for instance, authorizing, but not mandating, the formation of voluntary regional transmission organizations or other kinds of entities to promote regional reliability and fair and nondiscriminatory open access.

You know that FERC, at this time, has undertaken a proceeding to hear from the States on that subject and hopefully come to some resolution with respect to those areas that would like their help and those areas that they think need further guidance. I can tell you that in Florida, in response to FERC's concern about the fairness and nondiscriminatory nature of the transmission system, we have workshops, where the transmission owning utilities, the transmission dependent utilities, and all interested parties are trying to work out exactly how we can manage, and by that I mean plan and operate the transmission system in Florida, to the advantage of everyone. I attended one of those workshops this last Monday and I can tell you that there is movement on the part of transmission owning companies to accommodate those concerns, so that we can have a truly fair and nondiscriminatory open process.

With respect to PUHCA reform, I think it's appropriate to repeal PUHCA, provided that there are other measures to guard against market power abuses. And the repeal of PUHCA should include a provision that State commissions and FERC continue to have access to holding company books and records.

Finally, I agree with the idea that PURPA should be repealed. I would note that our commission hasn't taken a formal position on this, at this point. But, it would seem if you were going to have an open competitive market for generation, a mandatory obligation to purchase is inconsistent with that. I would point out that I think we should be careful in any PURPA legislation, with respect to mandating stranded cost. I think that PURPA contracts should be handled in the same way utility investment is handled that might

be stranded. There should be an obligation to mitigate those costs. I believe the State commissions are in the best position to deal with stranded cost. They are likely to have been involved in the decision in the first place, with respect to those investments or the contracts. And so, they have some ideas as to the way they may be mitigated and the fairness of the recovery, with respect to them.

I suppose I'm here as one of those States that has not moved forward with retail competition and, at this point, there is nothing on the horizon with respect to State legislation to do that. But, I would point out that we have been a leader in bringing competition to our regulated industries, when we think it's a good idea. We have had competition in the wholesale market importer since the late 1970's. We have what is called a broker system. We mandated the formation of the broker system and then provided incentives to utilities to buy and sell their power on that system, so the lowest cost generation would be the next generation to be dispatched at any time.

Also, with respect to telecommunications, we passed our Telecommunications Deregulation Act in 1995. We found local competition would be beneficial, and so we moved to introduce that competition.

I make those comments today in response currently to Ms. Moler's comments, with respect to mandating retail competition. In my mind, it assumes that State regulators and State legislators will not move to do that, when it is in the interest of the people of the State they represent. I think that's a false premise. We will move to do that when we see the benefits of it. And with that, I will turn my time over to Ms. Smith.

[The prepared statement of Susan F. Clark follows:]

PREPARED STATEMENT OF SUSAN F. CLARK, FLORIDA PUBLIC SERVICE COMMISSION

Mr. Chairman and members of the subcommittee: Good afternoon. My name is Susan Clark. I am a Commissioner on the Florida Public Service Commission and Chair of the Committee on Electricity of the National Association of Regulatory Utility Commissioners, commonly known as the NARUC. Today, I am here representing the Florida Public Service Commission (Commission). I have submitted a written statement that I respectfully request be included in today's hearing record.

I understand this subcommittee may soon be dealing with profound issues surrounding changing the electric utility industry. You have asked me to offer my opinion as to what issues require federal intervention to restructure this industry, what areas are best left to state authority, and what areas are best addressed by joint state/federal authority. Before responding, I would like to take just a few brief minutes to give the historical backdrop and explain why we find ourselves at this junction in reforming the electric industry. For over a half century, state public utility commissions (PUCS) have been charged with the duty of regulating the retail rates and services of electric, gas, water and telephone utilities operating within their respective jurisdictions. We have the obligation under state law to assure the establishment and maintenance of such energy utility services as may be required by the public, and to ensure that such services are provided at rates and conditions which are just, reasonable and nondiscriminatory for all consumers.

The Energy Policy Act of 1992 (EPAct) injected a mandatory open access requirement for the transmission system that acted as a catalyst to promote and encourage wholesale competition. Wholesale competition is the sale and purchase of bulk power between utilities and suppliers which will ultimately be delivered to the end-use customer by regulated companies. Both before and after the competitive changes brought about by the EPAct, the U.S. has enjoyed the most economical electricity rates among the Western industrialized nations not heavily dependent on hydropower. Times and fashions change, of course, and now the electric utility industry is one of the last regulated industries to undergo the transformation from a monopoly franchise to an open access system. States are taking the lead in promoting this

change when the state PUC and legislature have judged it to be in the public interest.

Some seventeen states have gone beyond the EPAct and have adopted retail electric restructuring programs that enable end-use customers to choose among energy suppliers while ensuring the safety, reliability and quality of electric services. A substantial number of other states are examining whether and when to permit retail access.

While some argue that this level of activity is insufficient, the states that have adopted retail open access electricity programs are home to nearly half of the nation's population. All this activity has taken place within the last three years, and I believe states will continue to pursue restructuring programs if those programs benefit the retail customers.

The states pursuing retail open access are acting with great care and precision to ensure the continued reliability of electric services, universal access to retail services and public benefits previously provided by a vertically integrated industry. Careful review of these activities discloses that state restructuring initiatives contain many common elements: customer choice, functional unbundling, pricing reform, stranded cost recovery, protection of public benefits, market power mitigation, and mechanisms to support emerging regional markets. It should also come as no surprise that the timing and implementation of such initiatives differ from state to state in ways that reflect local customer needs and other market realities including such factors as climate, demographics, indigenous resources, environmental impacts, past choices of technology, current resource preferences, system capacity, geography, and form of utility ownership—to name a few.

It is just this attention to detail that warrants that the states continue to have the ultimate responsibility for deciding if and when retail competition is permitted. I strongly believe that it would be a mistake for any federal legislation to require a mandated date certain for retail competition. Clearly, a federally mandated one-size-fits-all approach cannot and will not account for the unique concerns and circumstances of the individual states. We have seen confusion created by the federalization of the telephone industry. Therefore, my most important message as a regulator of a state that is taking a more deliberative view of retail competition is to not force a federal mandate on us. Recently, commissioners from 23 states (The Low-Cost States Initiative) addressed a letter to members of Congress confirming this stance.

ESSENTIAL ELEMENTS OF FEDERAL LEGISLATION

Federal Energy Regulatory Commission's (FERC) Order No. 888 spurred the creation of a competitive wholesale power supply market and is still in the early stages of development. We believe it prudent for Congress to not risk disrupting these policies through prescriptive national models, but rather consider targeted and focused legislation that facilitates state restructuring efforts. Congress can take steps to help the states by removing uncertainty and reducing the prospect of tortuous litigation. I believe there are four areas where federal action would be helpful in facilitating electric restructuring. These four areas include reliability, market power, and PUHCA and PURPA reform. Let me address each one of these in some detail.

As I mentioned earlier, the EPAct opened up the transmission grid to promote wholesale competition. Retail competition has imposed even more demands on the nation's transmission system in terms of more transactions, greater power flows, and therefore higher risks of power interruptions and system failures. It is important to keep in mind that the overwhelming number of transmission lines that have been constructed were primarily designed to serve native retail load. Over time, utilities extended transmission lines to import and export limited amounts of power and to help backup each other's electrical control areas. The system was not designed to act as a huge seamless network to transmit bulk electric power around the nation, but FERC Orders 888 and 889 specifically intend for these systems to perform this function.

Historically, regional coordination councils have operated voluntarily in geographic areas with interconnected transmission or control areas to maintain reliable and uniform standards for all users of the transmission system. These voluntary and regional councils operate under the auspices of the North American Electric Reliability Council or NERC. Again, these are voluntary associations with the common objective of maintaining a safe and reliable transmission system.

However, with the increased volume of users and new competitive users of the system, the NERC recognized the need for a more open and representative council that would balance the needs of both the historical owners of the system (i.e. the regulated utilities) and the new competitive users created by FERC Orders 888 and

889. The NERC has worked on legislation that would authorize this self-regulating entity to establish mandatory standards for reliability and operations of the nation's multi-transmission regions.

Both the NERC and the NARUC have concluded that Federal legislation would be useful in this area. In fact, the NERC has voted to move forward with specific language this year. While I do have some concerns about the specific NERC legislation because of its lack of mention of any role for the states in ensuring planning and operational reliability, I am personally convinced that any authorizing legislation to give certain regulatory powers to the NERC is needed. Any such legislation should explicitly confirm the public interest in transmission grid reliability, the need for mandatory compliance with reliability standards, and a provision of explicit authority for the FERC and the states in cooperation to enforce the necessary standards. I emphasize the cooperative nature of this task. This kind of focused legislation would further the goals and objectives of the FERC Orders and therefore encourage wholesale competition.

As you consider reliability legislation, I would encourage you to remember that the state commissions are the ones that have the ultimate responsibility for keeping the lights on, and we are the ones who are held accountable when the lights go out. When there is an outage of an essential service like electricity, utility customers do not call, nor should they be expected to call, the NERC, the FERC or the DOE. Rather, customers call the staff and commissioners of the individual state PUCs. Our legislative leaders and governors also call us to find out when the problem will be resolved.

Secondly, Federal legislation should authorize, but not mandate, the formation of *voluntary* regional transmission organizations or other kinds of entities to promote regional reliability, and fair and nondiscriminatory open access. Some movement in this direction is happening with the recent announcement by the FERC that it intends to consult with the states to explore such organizations. The DOE recently transferred its authority under Section 202(a) of the Federal Power Act to the FERC with the stated purpose in its news release to, "provide the FERC with the authority to establish boundaries for ISOs, or other appropriate transmission entities which could aid in the orderly formation of properly sized transmission institutions and enhance the development of ISOs in a rational, comprehensive manner." The FERC recently issued a Notice of Consultation to pursue this stated objective. I am optimistic at this time that the voluntary and cooperative approach that I am advocating will be championed by the FERC.

The third area in which federal legislation would be helpful is in repealing the Public Utility Holding Company Act (PUHCA) and the Public Utility Regulatory Policies Act (PURPA) provided certain conditions are met. As you may recall, the PUHCA statute was established during the 1930s to give regulatory oversight to multi-state utility holding companies. With today's dramatic transformation of this industry and the many mergers and acquisitions that are occurring, the PUHCA appears to have outlived its usefulness. The PUHCA law probably is inconsistent with the goals of a highly competitive wholesale and retail market, but states do not have the authority to grant waivers or exempt utilities from the provisions of this act. There is, however, concern that some states may not have the authority to address market power issues. In light of this concern, Congress should specify in any repeal of the PUHCA that state commissions and FERC have access to holding company books and records.

Finally, with respect to PURPA, I would recommend that this statute be repealed, but that any existing contracts not be abrogated. Please note that our Commission has not formally addressed this particular point, however, so my comments here are my own. This statute derives from the late 1970s when this law required utilities to purchase power from qualifying cogeneration facilities at full avoided costs. Now, with a vibrant wholesale market, this requirement simply burdens retail customers with long-term power obligations that are usually above market rates. However, any legislation on this issue should preserve state utility commissions' authority to require electric utilities to mitigate costs associated with above-market contracts.

HELPFUL ELEMENTS OF FEDERAL LEGISLATION

Florida has not taken steps to introduce retail choice. Nevertheless, we recognize that other states have found such restructuring efforts to be in their best interests. To that end, we believe legislation should be aimed at assisting those states' efforts by:

- Affirming states' authority to order and implement retail access/customer choice programs free from the threat of preemption under the Commerce Clause or the Federal Power Act;

- Affirming states' authority to impose wires charges to support the recovery of stranded costs, state-sponsored energy efficiency and/or environmental programs, and universal service programs;
- Clarifying state jurisdiction to regulate rates, terms and conditions of unbundled *retail* transmission services;
- Affirming states' exclusive jurisdiction over the rates, terms and conditions of retail electric services.

With these issues resolved legislatively, while continuing to accord states the discretion to determine whether, when and how to open retail electricity markets to competition, states would be confident of their legal authority to move forward on restructuring efforts. Without these changes, states contemplating market reforms may find themselves in the position of states like Michigan and New Hampshire where federal court litigation, although not yet successful in attacking state programs, has slowed restructuring processes.

CONCLUSION

While many believe that wholesale competition provides the vast bulk of any uncaptured economic efficiencies for ratepayers, I respect the fact that many states have concluded that additional benefits are to be gained from direct retail access. In Florida, we are carefully watching the more experimental states to learn what models work and what lessons are applicable to Florida. At this time, neither the Commission nor the Florida legislature has opted to initiate the necessary changes to permit retail access. Just last week however, the Commission did approve a petition for determination of need for the state's first merchant power plant that will be constructed to compete on the wholesale level. While still subject to judicial review and approval of our governor and cabinet, this project is a major step in promoting ever greater wholesale competition in Florida.

The states are now performing their historic role as laboratories to test how the words "greater competition for retail consumers" can be turned into real-world services that customers will buy. As the FERC moves forward in its implementation of Order 888, the state commissions and legislatures must be allowed to continue to experiment with retail access, including customer choice initiatives. As the consequences of competitively-based wholesale markets become clearer, states are putting in place complementary retail policies which are adapted to regional market conditions. State commissions are developing and implementing compatible retail policies which preserve reliability, prevent the stranding of "public goods," ensure consistency with environmental values, minimize cost shifting, provide for stranded cost recovery, and most importantly, improve economic efficiency. Over time, states will work together, as some are now doing, to devise and implement regional institutions to adapt their regulatory responsibilities to the reality of regional power markets.

If Congress chooses to act in this area, any federal legislation should preserve broad state authority to implement these policies flexibly in response to the conditions in local retail markets. The development of retail customer choice should be implemented in a manner that respects these differences. In our view, that can only happen if decision makers closest to these conditions—State commissions and legislatures—enjoy the flexibility to adapt pro-competitive policies to the needs of local retail consumers. In the weeks and months ahead, my colleagues and I look forward to working with Congress, with our colleagues at the FERC, and with all interested parties to develop workable policies that support an efficient and environmentally sound electric services industry that meets the needs of all retail customers.

Mr. BARTON. Thank you, Ms. Clark. We would now like to recognize last, but not least, the commissioner from the great potato State of Idaho——

Ms. SMITH. That's right.

Mr. BARTON. Ms. Smith, and point out that when Congressman Craig was in the House, he had a photograph, and I don't know if he still does, on his Senate office wall of Marilyn Monroe in an Idaho potato sack.

Ms. SMITH. Well, I think everyone would look good in an Idaho potato sack.

Mr. BARTON. Well, Ms. Monroe did look very good in a burlap Idaho potato sack.

Ms. SMITH. Just eat them spuds.

Mr. BARTON. Your testimony is in the record in its entirety and you're recognized for 7 minutes.

STATEMENT OF MARSHA H. SMITH

Ms. SMITH. Thank you, Mr. Chairman, and members of the committee. It's a great honor to be here. Although I would note that airline deregulation may work differently, my ticket here was $1,764. But, you're worth it.

Mr. BARTON. Doubt that.

Ms. SMITH. Well, maybe I'm worth it.

Mr. BARTON. That's definitely true.

Ms. SMITH. I just want to make some brief remarks, basically reacting to comments that I heard earlier today in opening statements and from questions of members, because, like you say, my comments are in the record. And I am definitely here as a State that's not going to retail competition anytime soon. And I guess I'd like to point out first of all, in my mind, competition is not a goal. Competition is a tool, just like regulation is a tool. And the question is: when and where do you use which tool to bring adequate, reliable, and reasonably price electric service to consumers.

Many opening remarks seem to be based on the assumption that retail competition in this industry will benefit all Americans. And I don't believe that's a foregone conclusion or a self-fulfilling prophecy. Instead, I would like to turn that back to you, as a challenge: if you're going to do something, it has to benefit all Americans. And I think that's a big challenge.

And, of course, the key is: first do no harm. So far in the past 3 years plus of working on this issue, Idaho hasn't found a way to make that happen for our citizens, so that they will all benefit. We enjoy some of the lowest electric rates in the Nation, due in part to a longstanding active wholesale market in the northwest and the west, a market that existed before the Energy Policy Act of 1992, and I might add a market that's essential to Idaho as a net power importer.

Another key to our uniqueness in the northwest is the predominance of hydroelectric generation, both publicly owned and privately owned dams, immense in scale and generation output, both, of course, not without its own set of concerns and problems. Given our circumstances, Idaho has adopted a go slow approach. Just because we've said be cautious, don't rush into it, and know what you're doing before you do it, doesn't mean we haven't done anything.

As pointed out in my written remarks, the Public Utilities Commission has instituted several pilot programs with our investor-owned utilities. Results of one showed some savings in the first year of a 2-year pilot, and a change in the wholesale market meant there were no savings for those participants in the second year and, therefore, they were not anxious to have the pilot continued. And at its end, it was terminated. In another pilot, they got no one to sign up for it.

So, I guess another approach we took for which the Commission was criticized is for a large industrial customer. We allowed them for half of their load to be priced at a market rate. In other words,

they buy and sell power through their local utility, but the utility does it at their direction, and they're essentially playing the market. Reports are that they've learned a lot. They may be marginally ahead price-wise. The price varies, so sometimes they're up and sometimes they're down. But, the important thing they told me to point out was that this contract has been operating in a time of exceptionally good water conditions, where power is plentiful, low-cost power is plentiful in the wholesale market. So, everybody is kind of concern what happens when we don't have a good water year and low cost power isn't plentiful. Because, if they're barely saving money now, we don't know what will happen in the future. And if this sophisticated large industrial customer can't save a lot of money, we worry for the other customers.

The region has also been very active. I think several years ago, the four Governors of the northwest States, Washington, Oregon, Idaho, Montana, developed a regional review committee that gave several recommendations. And out of that has come a subscription process for the power of Bonneville Power Administration, which, as you know, is a large Federal power marketing entity in our region. So the region hasn't been inactive and has been going forward in the manner that they see might benefit our citizens.

We've, also, been working hard on the area of interconnection. The western interconnection has a group that works regularly together, called the Committee for Regional Electric Power Cooperation or CREPC. We meet at least twice a year on these important issues. It includes Canadian provinces and also some States of Mexico, because the interconnection is international in scope. And I think one of the most important things that Ms. Moler mentioned in her list today, but which she didn't emphasize in her oral comments, was that you should recognize the regional nature of markets and allow regional solutions. And I'm a strong proponent of that, because I think the west has a system set up to address issues of a regional nature that come up and to see that the region solves its own problems.

Mr. Chairman, I said I wanted to be brief. I found your questions very interesting, and I enjoy that interaction. So, I'll just close with the comments of one of my colleagues in Montana, who when I said I was coming here to do this and did he have any suggestions, he said, well, for sure, there shouldn't be a Federal mandate. He said, every State should be free to do it, even like Montana, to do it in the wrong way at the wrong time.

Thank you, Mr. Chairman.

[The prepared statement of Marsha H. Smith follows:]

PREPARED STATEMENT OF MARSHA H. SMITH, IDAHO PUBLIC UTILITIES COMMISSIONER

Good morning. I would like to thank Chairman Barton for this opportunity to address the United States House Subcommittee on Energy and Power. This valuable process of defining our respective roles in the evolving era of electric restructuring will serve the best interests of the American public.

The first issue I've been asked to address this morning is a review of the State role in electric regulation. Idaho law requires the regulation of investor-owned electric companies, of which there are three, but not municipal and cooperative electric providers. Eighty percent of Idaho citizens are served by regulated investor-owned electric companies. Idaho's electric companies are protected from encroachment by other service providers through the state's Electric Supplier Stabilization Act. Un-

less the incumbent provider consents to allow service by other providers, it has an exclusive right to serve in the geographic area assigned to it.

In its regulatory authority, the Idaho Public Utilities Commission has quasi-legislative and quasi-judicial as well as executive powers and duties. In its quasi-legislative capacity, the Commission sets rates and makes rules governing utility operations. In its quasi-judicial mode, the Commission hears and decides complaints, issues written orders similar to court orders and may have its decisions appealed to the Idaho Supreme Court. As an executive agency, the Commission enforces state laws affecting the utility and transportation industries.

Idaho residents consistently enjoy some of the least expensive electric service in the nation, according to surveys conducted by the National Association of Regulatory Utility Commissioners (NARUC), the Edison Electric Institute and the Energy Information Administration of the U.S. Department of Energy.[1]

According to NARUC, Idaho's electric utilities—Idaho Power Co., Avista Utilities and PacifiCorp (application on file to merge with ScottishPower)—ranked 1st, 6th and 25th among the investor owned utilities nationwide with the least expensive rates for residential customers during the 1996-97 winter season.

Our role, then, as state utility regulators is to ensure our citizens continue to enjoy affordable, adequate and reliable service from providers, which are assured a fair, reasonable and just return on their service to and investment in Idaho.

The second issue I have been asked to address this morning concerns any "dramatic changes" occurring at the state level and within the electric industry which may require changes to the state role in regulating our electric service providers.

Let me begin by saying that electrically, Idaho is in the Northwest and part of the Western Interconnection. The key to the uniqueness of the Northwest is its hydro predominance, both federally- and privately owned dams immense in scale and generation output. In addition there is a major federal presence in transmission and an already advanced integration of power markets. The Western Interconnection will continue to be, in essence, electrically separated from other Interconnections in North America. Thus, the power market for western consumers is defined by the boundaries of the Western Interconnection.

As far as any "dramatic changes" occurring at the state level and within the electric industry, there really haven't been any as far as Idaho is concerned. Initially in Idaho, as the national debate over restructuring the electric industry heated up, there seemed to be a sense of urgency to figure out what was happening before we got run over. Now that some states have taken steps, however, many problems and unintended consequences seem to have arisen even in states that actively sought to restructure in their belief it would be a real source of relief from high costs. The blush is off the rose, so to speak, and low cost states feel a little more comfortable stating openly the real doubts we have had from the outset.

As a low-cost energy state, Idaho has been and remains very interested in the role federal and state policy makers have in restructuring the nation's electric industry. And while our perspective and concerns may appear somewhat unique to members of this committee, particularly those esteemed members from high-cost energy states, I can assure you that nearly half the states in the Union[2] share Idaho's concerns and they too are determined to play a vital part in defining and fulfilling these roles.

The Low Cost Electricity States Initiative[3], in brief, states, "As a restructured electric industry becomes a reality in many parts of the nation, little attention has been given to the concerns of low cost states . . . these low cost states are being pressured into opening their electric industries to competition with little or no consideration of the effects on native retail customers."

This is an important document and I strongly encourage the members of this committee who may not already be familiar with it to study the Initiative closely as it represents the views of 23 states.

Because we could not find a clear potential for significantly lower rates, the Idaho Public Utilities Commission in 1996 issued Order No. 26555 (Case GNR-E-96-1) which stated that we should be "cautious with respect to an outright deregulation of Idaho's electric markets." Because our citizens already pay some of the lowest electric rates in the nation, deregulation may actually result in lower quality of

---

[1] Attachment #1

[2] Low Cost Electricity States Initiative signed by the Commission's of Alabama, Florida, Georgia, Idaho, Indiana, Kentucky, Louisiana, Minnesota, Mississippi, Missouri, Montana, North Carolina, North Dakota, Oklahoma, Oregon, South Carolina, South Dakota, Tennessee, Utah, Virginia, Washington, West Virginia and Wisconsin.

[3] Attachment #2

service. We also believe that deregulation has the potential to introduce significant rate volatility—something we know from past experience that customers do not like.

Before proceeding to the third and final topic of discussion this morning, I would like to take a moment to address the Committee's inquiry pertaining to what specific restructuring issues are best addressed at the state level. Let me just say that the decision on whether to authorize retail competition with a state remains and must continue to remain a state decision.

This brings me to the third issue you have asked me to address . . . a review of the steps taken by Idaho to open its retail markets.

It has been almost two years ago that I appeared here and reported to this subcommittee that our Legislature had appropriated $100,000 to fund a committee to study electric restructuring. Their work has led to a series of generally negative conclusions indicating a feeling that electric restructuring is more likely a source of peril than of benefit for the state of Idaho. The legislative report[4] also vigorously reinforces my earlier testimony to this subcommittee that water resource questions of the sort unlikely to even appear on the national scale are of vital importance to any consideration of electric restructuring in Idaho as well as for other Northwest states.

In it's final report to the Idaho Legislature, the legislative committee formed and funded to study electric restructuring made seven recommendations. The first two of these seven recommendations are strong position statements that best sum up the political and, perhaps, social position in Idaho toward electric restructuring. Recommendation One: "The Committee recommends that our Congressional delegation vigorously oppose further deregulation at the federal level." Recommendation Two: "The Committee recommends that no state legislative actions be taken at this time that would encourage retail electric power restructuring."

The Idaho legislative committee on electric restructuring has been extended by the current Legislature, but their focus seems to have become even more clearly, how can Idaho protect itself from restructuring.

Although Commission Order No. 26555 encouraged a cautious approach to electric restructuring for Idaho, it also encouraged utilities and other interested groups to continue to make innovative proposals. The Idaho Commission has approved several utility pilot programs that allow for limited tests of retail access.

Two of these pilot programs were conducted by Washington Water Power Co., now known as Avista Utilities, and the third was conducted by the Idaho Power Co. The two Avista pilot programs targeted industrial, commercial and residential customers. The two programs combined had a total eligible customer base of 5,581. Of that base, the two pilots attracted 66 participants. Out of fairness, it should be noted that 61 participating customers did realize some small savings in the first year of the retail pilot. Those savings, however, had completely disappeared by the pilot's second year of operation. The pilot program offered by Idaho Power Co. to 11 of its industrial customers failed to attract even one participant.[5]

The Commission has also approved a special contract between Idaho Power and its largest customer that some opponents claimed was a de facto restructuring pilot. The contract allows Idaho Power's largest customer—constituting 20-percent of Idaho Power's total load—to shop on the market, through an Idaho Power employee, for half its power needs.

Early results of this contract seem to indicate that even this major customer, whom one would expect is sophisticated enough to fend for itself in a market environment, has not fared any better during the first few months of trying the market than it would have with regulated rates. It is important to note that the Northwest has experienced banner water conditions since the approval of this contract. Thus, power has been plentiful and low priced on the wholesale market. If this type of customer doesn't benefit under these favorable circumstances, what will happen to the majority of Idaho's small commercial and residential customers as they try to cope with real market choices?

The Idaho Commission will continue with a number of efforts aimed at bringing our state closer to full and informed participation in a restructured electric environment[6], but past programs and their numbers graphically illustrate the definite lack of interest for electric restructuring in Idaho and other low-cost energy states.

Given this resistance by state lawmakers, a coalition of 23 states and customers overcome with a complete and utter lack of interest to engage in pilot programs imitating free-market conditions, we in Idaho do not feel federal authorities should simply impose a "one size fits all" mandate on the theory that deregulated electric con-

---

[4] Attachment #3
[5] Attachment #4
[6] Attachment #5

ditions may—and I emphasize the word "may"—benefit some customers in the high-cost energy states . . . states that comprise less than half of the country.

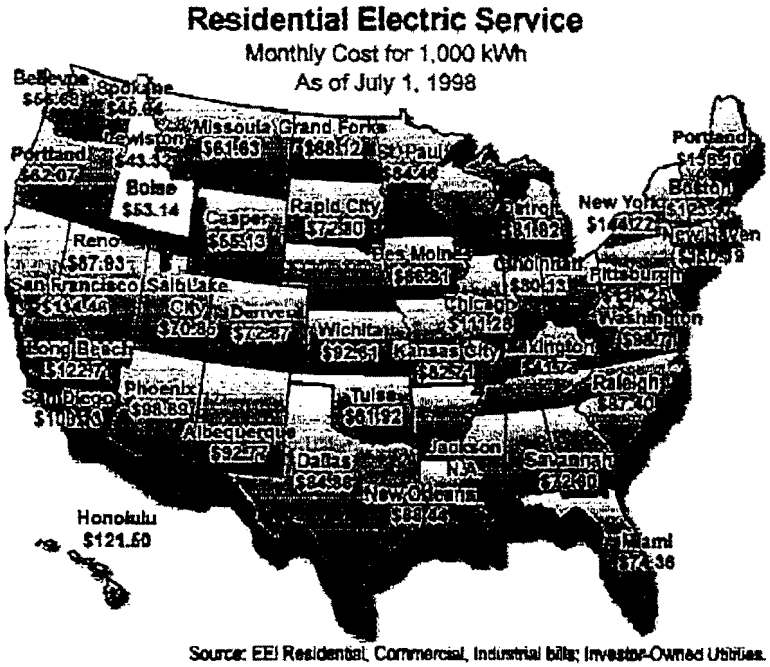
It is the role of citizens and authorities at the state level, and where appropriate, the regional level—not federal lawmakers, agencies or commissions—to decide and shape this issue according to our own energy use patterns, geography, market dynamics, values and interests.

If Congress is to consider electric restructuring legislation, a "Northwest Chapter" should be incorporated to address the unique situation and circumstances of Idaho and her Pacific Northwest neighbors. This Northwest Chapter must also include provisions for the future of the Bonneville Power Administration.

Most importantly, the states must have assurances that any federal legislation will not force local utilities to renounce their native service areas in order to survive in a restructured environment. And finally, if you determine that some federal electric restructuring policy is unavoidable, we implore you to develop this policy to allow for regional differences. The states can work out regional differences within the context of broad federal policy guidelines, but without federal interference.

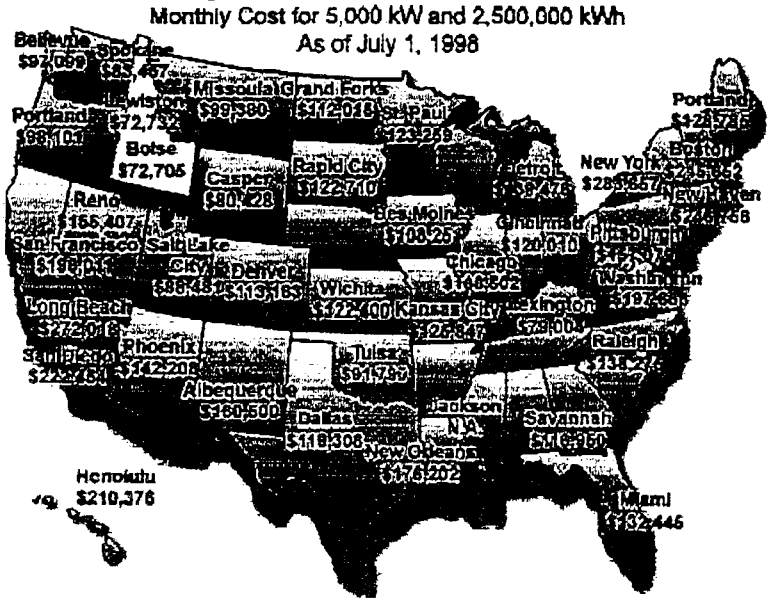
In closing, I would again like to thank you for this opportunity to address the subcommittee. Idaho has taken a proactive approach to determining what will work best for Idaho industry and Idaho consumers. We are a fiercely independent sort in Idaho and while we believe the federal government should address broad principles that are of national necessity, the details of implementing those principles and other matters that are local and regional in nature really belong and must remain under state jurisdiction.

ATTACHMENT 1



Large Industrial Electric Service

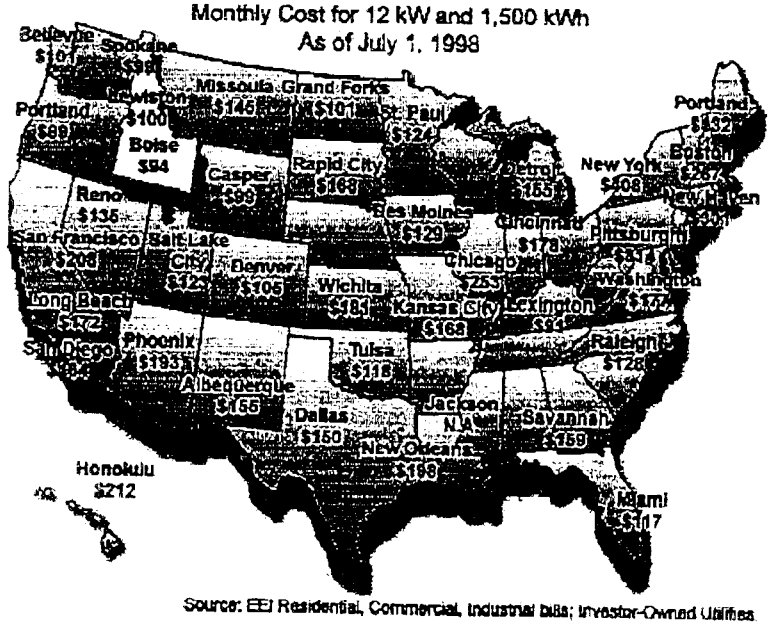
Monthly Cost for 5,000 kW and 2,500,000 kWh
As of July 1, 1998



Source: EEI Residential, Commercial, Industrial bills; Investor-Owned Utilities

Small Commercial Electric Service

Monthly Cost for 12 kW and 1,500 kWh
As of July 1, 1998



Source: EEI Residential, Commercial, Industrial bills; Investor-Owned Utilities

COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION
730 SCHENKEL LANE
POST OFFICE BOX 615
FRANKFORT, KENTUCKY 40602
www.psc.state.ky.us
(502) 564-3940

FOR IMMEDIATE RELEASE:
December 10, 1998

CONTACT: Neal Fitch
(502) 564-3940

LOW COST ELECTRIC STATES VOICE DEREGULATION CONCERNS TO CONGRESS

Today, some 23 State Public Utility Commissions of low cost energy states joined together to inform Congress of various concerns regarding electric restructuring.

Currently, Congress has several bills relating to electric restructuring under consideration. As this debate has reached a national level, a majority of the low cost energy states have become concerned that several issues which directly affect them may not be given adequate consideration.

A letter addressing these concerns was sent by the utility commissions to Congress for consideration. These low cost states are asking for the ability to determine whether electric restructuring is appropriate on a state by state basis without a federal mandate.

The letter states, "...We want to ensure that low cost states have a "National Voice" in the debate; that Congress understands how "Low Rates" serve consumers and states in a variety of ways; that "Rural Electricity Rates" are not disadvantaged; that "Stranded Costs" are given thorough consideration; and that "Economic Development" advantages are not eroded by restructuring."

Attachment #2

AN EQUAL OPPORTUNITY EMPLOYER M/F/D

The letter further states, "We do not want to impede the progress of any state that has decided to implement a competitive retail market in order to bring choice and lower electric rates to their consumers. We do, however, want to make sure that Congress gives equal consideration to the issues facing the low cost states."

The 23 state commissions include: Alabama PSC, Florida PSC, Georgia PSC, Idaho PUC, Indiana URC, Kentucky PSC, Louisiana PSC, Minnesota PSC, Mississippi PSC, Missouri PSC, Montana PSC, North Carolina Utilities Commission, North Dakota PSC, Oklahoma Corporation Commission, Oregon PSC, South Carolina PSC, South Dakota PUC, Tennessee Regulatory Authority, Utah PSC, Virginia State Corporation Commission, Washington Utilities and Transportation Commission, West Virginia PSC, and Wisconsin PSC.

Of these 23 states, the average retail electricity price is 5.52 cents per kilowatt hour, more that one cent below the national average of 6.87 cents per kilowatt hour.

###

AN EQUAL OPPORTUNITY EMPLOYER M/F/D

December 3, 1998

«Name»
«address»
«city»

Dear Senator «LastName»:

Congress currently has under consideration several bills relating to restructuring the electric industry in this country. As this debate has reached the national level, we are concerned that several issues directly affecting low cost electric states may not be given adequate consideration.

The issues that are driving restructuring in higher cost electric states are very different from the situation in lower cost electric states. We do not want to impede the progress of any state that has decided to implement a competitive retail market in order to bring choice and lower electric rates to their consumers. We do, however, want to make sure that Congress gives equal consideration to the issues facing the low cost states.

The Low Cost Electricity States Initiative includes twenty-three NARUC member public utility commissions. The five issue briefs attached represent a consensus among the undersigned participants and focus on a handful of the most important issues in restructuring. In short, we want to ensure that low cost states have a "National Voice" in the debate; that Congress understands how "Low Rates" serve consumers and states in a variety of ways; that "Rural Electricity Rates" are not disadvantaged; that "Stranded Costs" are given thorough consideration; and that "Economic Development" advantages are not eroded by restructuring.

While these issues are vitally important to changes in the electric industry, it should be clear that there are other issues not discussed here which are of equal importance to all states. These subjects include reliability of the electricity grid, universal service, and environmental responsibility.

AN EQUAL OPPORTUNITY EMPLOYER M/F/D

We would like to point out that the National Association of Regulatory Utility Commissioners believes that the decision to alter the relationship between electricity consumers and their retail utilities should be left solely to state legislators, utility regulators, and their constituents. This was first expressed in NARUC's "Principles to Guide the Restructuring of the Electric Industry" in July 1996 and reiterated in a resolution passed in November 1996 at our annual meeting. This "Resolution Regarding Electric Industry Restructuring Legislation" is explicit that states should have "exclusive jurisdiction...to implement retail competition under appropriate State laws and policies."

We hope these issue briefs bring the concerns of the Low Cost Electricity States Initiative to your attention. Without question, the outcome of electric restructuring will have a profound effect on our economy and the way we live. In this matter, Congress should allow the states to determine the appropriate course of action for our constituents.

Sincerely yours,

Alabama Public Service Commission
Florida Public Service Commission
Georgia Public Service Commission
Idaho Public Utilities Commission
Indiana Utility Regulatory Commission
Kentucky Public Service Commission
Louisiana Public Service Commission
Minnesota Public Utilities Commission
Mississippi Public Service Commission
Missouri Public Service Commission
Montana Public Service Commission
North Carolina Utilities Commission
North Dakota Public Service Commission
Oklahoma Corporation Commission
Oregon Public Utility Commission
South Carolina Public Service Commission
South Dakota Public Service Commission
Tennessee Regulatory Authority
Utah Public Service Commission
Virginia State Corporation Commission
Washington Utilities and Transportation Commission
West Virginia Public Service Commission
Wisconsin Public Service Commission

Attachment

AN EQUAL OPPORTUNITY EMPLOYER M/F/D

Low Cost Electricity States Initiative

A National Voice

Issue

- As a restructured electric industry becomes a reality in many parts of the nation, little attention has been given to the concerns of low cost states. Making up more than half of the country, these low cost states are being pressured into opening their electric industries to competition with little or no consideration of the effects on native retail customers. The Low Cost Electricity States Initiative believes it is time to make Congress aware of our concerns.

Background

- In 1996, the average retail price of electricity for all users was 6.87 cents per kilowatt hour. Two-thirds of the country pays electric rates below the national average, and 20 states pay below 6 cents per kilowatt hour for electricity. Only 10 states pay over 9 cents per kilowatt hour for retail electric service.

- The average retail price of electricity in the fifteen states that have restructured to date is 8.62 cents per kilowatt hour, or more than 25% higher than the national average.

- Montana, Nevada, Oklahoma, and Virginia are the only low cost states that have chosen to restructure their electric industry.

- Supporters of electric restructuring tend to be from high-cost states, and are often industrial customers.

- In some regions of the country, such as the Northwest and Southeast, there is very little momentum to restructure the retail electric industry.

- A host of studies and research papers introduced into the restructuring debate have failed to reach a clear consensus as to the benefits of retail restructuring, particularly for low cost states.

- Legislation introduced in Congress has, in large part, been modeled after restructuring plans and experimental programs adopted in high-cost states.

Low Cost States Initiative Position

- The Low Cost Electricity States Initiative believes that as the restructuring debate continues, the concerns of low cost states must be considered. Specifically, Congress must consider the benefits low cost electricity states currently receive from low cost power and ways to preserve such benefits.

- Congress should allow state governments and regulators to choose if, when, and how to restructure the retail electric industry. States are in the best position to evaluate the effects of restructuring on their citizens and to address the myriad of issues associated with restructuring.

Low Cost Electricity States Initiative

Low Rates

Issue

- The Low Cost Electricity States Initiative is made up of utility commissions from 23 states, with an average retail electricity price of 5.52 cents per kilowatt hour, more than one cent below the national average. Under the current movement toward retail electric competition, the price advantage to customers in low cost states could be taken away if it becomes attractive for low cost utilities to sell their electricity to high cost states for higher profits.

Background

- The Low Cost Electricity States Initiative is composed of 23 state commissions throughout the nation. They include: Alabama, Florida, Georgia, Idaho, Indiana, Kentucky, Louisiana, Minnesota, Missouri, Mississippi, Montana, North Carolina, North Dakota, Oklahoma, Oregon, South Carolina, South Dakota, Tennessee, Utah, Virginia, Washington, West Virginia, and Wisconsin.

- These 23 states experience some of the lowest electricity prices in the nation. In fact, the average per kilowatt hour charge in these states is 24% lower than the national average.

- Low electricity rates are an advantage to these states in a variety of ways. Low rates provide lower costs for producers of goods, greater economic development incentives, and inexpensive heating and cooling for homes. All of these factors contribute to a lower, and more desirable, cost of living.

- Proponents of retail electric competition argue that regional prices of electricity should be similar. Therefore, competitive markets across state borders "should" be allowed. Only a handful of studies have suggested that prices will fall for all users in a competitive environment.

- Traditional logic may suggest otherwise, as higher cost states find it attractive to purchase the electricity of low-cost states, effectively raising prices for any native low-cost electricity. In fact, a research paper that supports restructuring says that "regions of lowest price…may experience slightly higher prices[1]." The Energy Information Administration agreed in a 1997 paper on prices in a restructured market that predicted competitive prices in the Northwest and parts of the Midwest would be higher than average (or regulated) prices[2]. Finally, a paper from the Oak Ridge National Laboratory suggests that retail competition will cause electricity prices in the Northwest to rise as producers of electricity sell their inexpensive power into nearby high-cost electricity markets[3].

Low Cost States Initiative Position

- Whatever the outcome of the debate on electric restructuring, all states, including the low cost states in this Initiative, should be able to choose their own destiny in restructuring, and not be subject to the changes in other states or a mandatory date-certain restructuring by Congress.

Low Cost Electricity States Initiative

Rural Electricity Rates

Issue

- Rural residents benefit from low-cost electricity as much, and perhaps to an even greater degree, than urban residents do. Under retail electric competition, rural residents could be unnecessarily worse off relative to other customers.

Background

- Rural homes were among the last to receive electric power. Thanks in large part to FDR's New Deal, even the most remote homes were made part of the larger electric system for the first time. This allowed the standard of living among rural residents to increase at a dramatic rate.

- Many rural residents have been served by nearby sources of inexpensive electricity such as coal and hydro.

- A competitive electric industry will likely mean that utilities will be more interested in their 'bottom line' and not necessarily the good of their native customers.

- Deregulation in similar industries such as rail and airlines has shown that choices for rural customers tend to go down, while prices tend to go up.

- Research has considered the effects of competition on rural customers. A study by the University of Kentucky's College of Agriculture predicts rural residents in Kentucky will be worse off under a restructured electric industry[4].

Low Cost States Initiative Position

- Any attempt to restructure the nation's electric industry must provide benefits for all customers, including rural residents.

- Congress must consider the effects of restructuring legislation on both the urban and rural customer. Congress should not enact legislation that may unintentionally, yet unfairly, discriminate against rural residential electric customers.

Low Cost Electricity States Initiative

Stranded Costs

Issue

- Many states that are switching to a competitive retail electric market allow recovery of a utility's "stranded costs." The customers, no matter who their supplier may be, usually pay these costs. In some cases, however, customers lose significant benefits of a regulated electric industry and efficient sources of power. Few legislative efforts have addressed this issue.

Background

- Whether due to legitimate historical monopoly investments or inefficient decisions, many states restructuring their electric industry have stranded costs. Stranded costs are generally defined as utility investments that are not recoverable or financially viable at market based prices. These stranded costs are particularly prevalent in high cost states, where they range up to $10 billion in a single state. In most cases, customers are required to cover these costs through a charge at the distribution level.

- Several low-cost states expect to have little or no stranded costs. In fact, it is widely believed that a handful of states will experience 'negative' stranded costs. These negative stranded costs occur when the market value of a utility's assets are greater than their book value.

- Most restructuring legislation allows utilities to recover their stranded costs from customers, but has not made similar efforts to protect consumer benefits.

- A number of state policy makers and regulators in low cost states are considering returning negative stranded costs back to customers. Such actions can off-set short-run cost increases for consumers.

Low Cost States Initiative Position

- Congress should not mandate that utilities be allowed to recover all stranded costs. State governments and regulators are best qualified to determine the appropriate level of stranded cost recovery.

- States should be able to consider if and how to distribute any negative stranded costs.

- If restructuring legislation is adopted, Congress should clarify states' authority to adopt provisions that will allow customers to recover stranded benefits, including appropriate efforts to mitigate any stranded costs.

Low Cost Electricity States Initiative

Economic Development

Issue

- Economic development efforts in many states have succeeded over the last decade in part because of low electricity rates for both residential and industrial customers. As other states restructure their retail electric industry, low cost states could lose part, or all, of their economic development advantage.

Background

- An important selling point for many states in terms of economic development is low cost retail electric power for all classes of consumers.

- Much of the successful economic development has come in areas that have long been underprivileged and underemployed.

- Vertically integrated utilities have traditionally been proponents of economic development efforts because of load and revenue benefits. In a restructured market, where vertical integration will be the exception and not the rule, utilities may no longer have the incentive to work in cooperation with local and state governments for economic development.

- A 1997 report from the University of South Carolina explained that the economic development advantages of low cost states will not only shrink, but will disappear under retail electric competition[5].

- As states restructure their retail electricity industry, high-cost areas are expected to see prices fall, lessening the advantage of low cost states. If retail prices rise in low cost states as a result of federally mandated competition, the competitive advantage in economic development will be unfairly taken away.

Low Cost States Initiative Position

- The Low Cost States Initiative does not question the ability of a competitive retail market to set rates, but is concerned about the inherent unfairness of forcing low-cost state customers to subsidize other states' economic development programs.

- The legislators and regulators of low cost states, and not the Federal government, should decide how and if their particular state will restructure its retail electric industry.

Low Cost Electricity States Initiative

References

[1] Maloney, Michael T., Robert E. McCormick, and Raymond D. Sauer. *Customer Choice, Consumer Value: An Analysis of Retail Competition in America's Electric Industry*. Washington, DC: Citizens for a Sound Economy Foundation. July 1996: 33.

[2] Energy Information Administration. *Electricity Prices in a Competitive Environment: Marginal Cost Pricing of Generation Services and Financial Status of Electric Utilities*. Washington, DC: DOE/EIA-0614, August 1997: 51, 57.

[3] Hirst, Eric and Stan Hadley. "Will Electricity Competition Benefit Customers in Low-Cost Regions?" Energy Division, Oak Ridge National Laboratory. Reprinted in NRRRI Quarterly Bulletin. Vol. 19 No. 1, Spring 1998.

[4] Freshwater, David, Stephen Goetz, Scott Samson, Jeffrey Stone, Tulin Ozdemir Johansson, and Monica Greer. *The Consequences of Changing Electricity Regulations for Rural Communities in Kentucky*. College of Agriculture, University of Kentucky, December 1997.

[5] Chilton, John B., Ronald P. Wilder, and Douglas P. Woodward. *Electricity Deregulation in South Carolina: An Economic Analysis*. University of South Carolina. 1997: 8-14.

Legislative Council
Committee on Electric Utilities Restructuring
Final Report

98 DEC 24 PM 12 53

Charge

The Legislative Council Committee on Electric Utilities Restructuring was created under House Concurrent Resolution No. 2 (HCR2) by the First Regular Session of the Fifty-fourth Idaho Legislature. The Committee's assignment was to examine the possible restructuring of Idaho's electric utilities industry and appraise the impact on Idaho of market structure changes in the national electric industry. The Committee was to issue an interim report to the Second Regular Session of the Fifty-fourth Idaho Legislature and a final report to the First Regular Session of the Fifty-fifth Idaho Legislature. HCR2 included an appropriation of $100,000, and the Committee has used a portion of these funds to hire a consultant who has assisted the Committee in its activities.

General Discussion

The electric utility industry is experiencing rapid changes, emanating from a variety of sources. The main drivers have been federal government actions over the past six years--specifically, the National Energy Policy Act of 1992 and FERC Orders No. 888 and 889--which have fostered an expansion of the wholesale buying and selling of electric energy and transactions between independent energy producers and traditional electric utilities. But the industry has also been strongly influenced by market-based considerations, technological advances, and the general popularity of the unregulated market model. A major market factor has been the disparity in electric rates between regions and between user classes, creating interest in retail restructuring that would allow end-use customers--residential, irrigation, commercial, or industrial--to buy their electric power from a variety of suppliers rather than from their current monopoly provider.

States will face continuing pressure to restructure their electric markets, much of it from the federal level. Proposed legislation runs the gamut from plans to make the electric industry fully unregulated to slight rearrangements of the present system. One plan, offered by the White House, deregulation of the electric industry would be nationwide; however, states--after study and review-- could retain some aspects of their regulated electric markets if they found deregulation detrimental. This plan includes restructuring mandates that would limit options for the states that choose to remain regulated.

Within some states the road to electric deregulation has been rocky. California, with very high electric costs, was one of the first to pass electric utility restructuring legislation. Although its competitive marketplace was scheduled to open last January 1,

Attachment #3

software and other logistical problems pushed the opening back to March 31, 1998. So the market is now barely seven months old.

During the run-up to the original start date, some 200 electric marketers bombarded California consumers with ads that urged them to switch suppliers. However, despite a multimillion dollar advertising campaign sponsored by power marketing firms and the state of California, to date only a fraction of eligible customers have signed up for retail choice--just over 3% percent of small commercial customers, and less than 1% of residential customers. The economics of choice have held somewhat more appeal for the largest industrial users, 20% of which now have selected to purchase power from suppliers other than their monopoly provider.

Montana has also opened its electric markets. One startling result has been the decision by Montana Power Company--the state's largest supplier of power--to put all its generating units up for sale and enter the telecommunications business. On November 3, 1998, Montana Power completed the sale of its generating units to a multinational utility holding company for $988 million or 1.55 times book value. The sale included eleven hydro electric plants, with 577 megawatts of output, along with their associated water rights. Because many of these hydro facilities were constructed at the turn of the century their associated water rights predate many irrigation water rights, causing concern among Montanans.

The deregulation of wholesale power markets by the federal government has put massive pressure on the states to restructure at the retail level. Yet it is by no means clear that a deregulated wholesale market is incompatible with a regulated retail market. The natural gas wholesale market has been deregulated for several years, while the retail market for all but the largest industrial customers has remained regulated.

Activities

The Committee has been together in some form since September 1996 and has held 22 regularly scheduled meetings over that span. During this time the Committee has heard presentations from 150 witnesses--some several times--including members of current and past congressional delegations, elected and appointed state officials, federal representatives, and officials from other states. In addition, the Committee has listened to and questioned representatives of investor-owned power companies, representatives of the public power industry, and experts in water law, tax law, and the electric power industry. The Committee has also heard from other interest groups, including representatives from Indian tribes, labor unions, environmental organizations, and consumer federations. In addition, the Committee has reviewed plans and position papers issued by the Northwest Power Planning Council, the Bonneville Power Administration, the Governor's Task-Force, and the Idaho Public Utilities Commission; and it has examined transmission and power reliability issues. Yet, the more the Committee studies the subject, the more complexity it finds--complexity with consequences that

reach into every sector of Idaho society.

Several states, including Montana, Nevada, and California, have adopted retail restructuring legislation. The Committee has monitored activities in these regional states; it has participated in meetings with legislative members of northwest states and listened to witnesses that have been involved in restructuring. The Committee has also followed the restructuring activities of states in other regions in order to better understand the wide variety of restructuring schemes that are being proposed throughout the nation. Members of the Committee have also met with their legislative counterparts from other northwest states in BPA-sponsored meetings that allowed a free exchange of views and focused on restructuring issues unique to the northwest.

Many of these states, including Idaho, have offered experimental programs that allow customers to purchase power from suppliers other than their current utility for part or all of their electric load. These pilot programs, which contain sunset provisions, are aimed at gaining knowledge about potential impacts from electric restructuring. The Committee is monitoring many of these programs and plans to continue studying their progress and results.

1997 Legislative Action

In 1997, The Idaho Legislature passed House Bill No. 399, designed to begin investigating whether deregulation is indeed in the public interest. The purpose of HB399 was to require the unbundling of costs. *(Unbundling* means the actual breakdown of costs by the utilities into separate categories for energy generation, transmission, and distribution.) HB 399 provides for unbundling by requiring electrical utilities to develop cost information on the various utility functions. The bill was deemed the first step in helping the Public Utilities Commission, legislators, the Governor's Office and the general public understand the issue of electric utility deregulation. The Idaho Public Utilities Commission has held hearings and issued an order dealing with unbundling (the issue of stranded costs is discussed below).

In addition to HB 399, the Legislature adopted Senate Concurrent Resolution No. 119, urging the Governor to respond to an invitation by Idaho Power to engage in discussions relative to the relicencing of federal dams and the protection of Idaho ratepayers from market structure changes. The Governor deferred to the Legislative Council Committee. A four-member subcommittee was designated and is currently engaged in active discussions with representatives of Idaho Power Company, drawing support from the Idaho Public Utilities Commission, the Attorney General's Office, and other affected state agencies. The Committee is concerned about a possible sale or merger involving Idaho Power that could have adverse rate impacts and affect land use and the state's water resources. The Committee wants to ensure continued state protection of these resources .

Issues of Concern

The retail restructuring of power markets entails considerable risks. Any potential benefits to be derived from retail restructuring must be measured against the accompanying costs. The Committee is concerned about maintaining the low power rates the state now enjoys in the face of federal actions or court mandates.

Water Resources

As the Committee entered its deliberations, the members gained a renewed awareness that deregulation, in the context of hydroelectric generation, is a major natural resource issue. Members wondered how restructuring would affect or impact the value and statutory regulation of water rights. Other water-resource-related questions include: *How would deregulation affect river operations and river governance? Would changes resulting from deregulation affect conjunctive management issues? How will deregulation fit into issues arising under the Endangered Species Act and the Clean Water Act?* The Committee feels that the water resource questions deserve more study and scrutiny; they are concerned that the state's water resources may be at risk if the state's retail power markets are deregulated.

Power Rates

Several studies dealing with potential rate impacts in Idaho from electric restructuring have been examined by the Committee. Some project that electric prices will rise with restructuring; others project that prices will fall. Each of these studies has its defenders and detractors. The most widely discussed study was one by the United States Department of Energy concluding that while under deregulation average electricity prices would decrease in many sections of the country, in Idaho's region they would increase dramatically.

Tax Impacts

The members of the Legislature need to be aware that there will be state and local tax consequences from deregulation. The Committee has examined some of the implications of these tax impacts. Moody's, a national bond rating firm, has published a major advisory to state and local governments expressing its concern that deregulation could adversely affect bond ratings. The Committee also received studies from the Idaho State Department of Revenue and Taxation analyzing the revenue impact from the tax shifts incident to the deregulation of power generation.

Stranded Costs

For an electric utility, the term *stranded costs* means a generating unit's power production costs that are above the market price of power. Because the market price of power is constantly changing, electric production costs that would be above the market price need to be calculated at a time certain. At this time the level of stranded cost, if any, for any of Idaho's electric utilities is unknown. The Committee feels that the risks to ratepayers from any stranded cost recovery need to be fully understood. There are a variety of ways that stranded costs could be recovered from ratepayers, including end user charges or increases in transmission rates. Some analysts suggest that where the costs of producing power are below market prices, there exist 'negative' stranded costs. In this case the utility would owe customers for the difference.

Power Reliability

The Committee is concerned about a loss of reliability of electric service under restructuring. The 1996 summer blackouts cost Idaho businesses millions of dollars in the form of lost productivity, lost revenues, and other downtime. Micron, Inc. made a presentation to the Committee describing the costs to Micron and other industries from 1996's blackouts and voicing its concerns about the reliability of service from new transmission system operators that are not currently regulated. (Micron cited the California PUC's finding that one such utility had cut its tree-trimming budget below the required level in order to increase the return to shareholders, thereby endangering reliability.) The Committee also listened to electric reliability concerns expressed by labor union representatives from the IBEW.

Economic Development

Because our electric rates are among the lowest in the nation, Idaho can offer lower costs to firms seeking business locations. Electric restructuring could significantly impair the state's ability to retain and attract businesses. Higher electric rates would also lower the profitability of farms and businesses, in turn impacting supporting firms and local tax revenues.

Mergers and Acquisitions

One effect of electric restructuring on both the federal and state levels is a marked increase in the merger and acquisition activity among energy utilities. Electric utilities are also undergoing internal reorganization in order to more efficiently deal with restructuring issues. The Public Utilities Commission needs authority to allow it to inspect the books and records of subsidiaries and affiliates of energy-producing utilities so that activities of these otherwise nonregulated entities do not deleteriously affect the ratepayers.

BPA Process

The Bonneville Power Administration is undertaking several actions in preparation for electric restructuring. BPA has split into two divisions--one dealing with its transmission system and the other dealing with power supply. The actions of either division impact electric rates and service in Idaho. BPA's grid provides about three-fourths of the regions's transmission capacity; thus, any change in its transmission policies could result in significant changes in Idaho's electric rates. In addition, BPA is currently in the process of allocating its power supply among regional customers for the post-2000 period.

Exchange Credit

The Northwest Power Act of 1980 required the Bonneville Power Administration to provide low cost power benefits to residential users and small farmers who were customers of investor owned utilities. These benefits became known as BPA exchange credits and were calculated by taking the difference between BPA's average cost and the utility's average cost and multiplying that figure by the utility's residential and small farm loads. In Idaho only the Utah Power and Light Company's (now PacifiCorp) average power costs were significantly higher than BPA's average power costs to merit utilizing the BPA exchange credit and will result in reduced power costs of over $46 million through the year 2000.

The BPA exchange benefits have been declining because of increased BPA power costs. BPA has recently recommended instead of exchange credits, that residential and small farm customers be allocated a portion BPA's firm power resources. Currently the state's three private utilities are in discussions with BPA about the future of the residential exchange program. The issue is currently under review by BPA and its outcome is extremely important to Idaho's electric ratepayers and the economy of the state.

Recommendations

Given these considerations, the Committee recommends that:

1. **Our Congressional delegation vigorously oppose further deregulation at the federal level;**

2. **No state legislative actions be taken at this time that would encourage retail electric power restructuring;**

3. **State statutes dealing with the production and delivery of electric power be reviewed and clarified, where appropriate;**

4. **Water resource questions be given more study and scrutiny to determine any risks to water rights, to changes in river operations, and to the management of the state's water resources;**

5. **Legislation be considered to allow inspection of books and records by the Public Utilities Commission of subsidiaries and affiliates of energy-producing utilities so that activities of these otherwise nonregulated entities do not deleteriously affect ratepayers;**

6. **There be follow-up on the issues of the BPA Residential Exchange Credits;**
7. **The Committee be authorized to continue for the next Legislative Term.**

Respectfully submitted,

John D. Hansen

Ron Crane

IDAHO PILOT PROGRAMS

	WWP- DADS (Direct Access Delivery Systems)	**WWP- MOPS II** (More Options for Power Service)	**IPC** Schedule 20
ELIGIBLE CUSTOMER CLASS	Schedule 25 Industrial	Residential & Commercial	Industrial with loads 5-10 MW
NUMBER OF CUSTOMERS ELIGIBLE	11	Hayden, Idaho only 5,570	11
EFFECTIVE DATES	9-14-96 to 8-31-98	7-1-98 to 4-30-00	4-7-97 to 8-1-99
ENERGY RATES	As agreed with third party provider	Market-based rates from company	Market-based rates from company
PERCENT OF LOAD AT MARKET RATES	33%	100%	33-100% at customer option
ANCILLARY SERVICES PROVIDED?? (scheduling, voltage support, load following, etc.)	Yes	Yes	Yes
NUMBER OF PARTICIPATING CUSTOMERS	5	61 (by 7/24/98)	0

Attachment #4

ELECTRIC RESTRUCTURING IN IDAHO

I. WHAT THE IPUC HAS DONE

1. PREPARED A STATEMENT (GNR-E-96-1, O.N. 26555) SAYING THAT IDAHO SHOULD BE "CAUTIOUS WITH RESPECT TO AN OUTRIGHT DEREGULATION OF IDAHO'S ELECTRIC MARKETS" BASED ON THE FOLLOWING REASONS:

   a.) IDAHO CUSTOMERS CURRENTLY PAY SOME OF THE **LOWEST ELECTRIC** RATES IN THE NATION (WWP AND IPC ARE #1 AND/OR #2)

   b.) DEREGULATION **MAY** RESULT IN LOWER QUALITY OF SERVICE

   c.) CONCERN THAT DEREGULATION **MAY** BENEFIT A SELECT FEW LARGE INDUSTRIAL CUSTOMERS AT THE EXPENSE OF (OR AT LEAST WITHOUT IMPROVEMENT FOR) THE MAJORITY OF RESIDENTIAL AND SMALL BUSINESS CUSTOMERS

2. ENCOURAGED UTILITIES AND OTHER INTERESTED GROUPS TO CONTINUE MAKING INNOVATIVE PROPOSALS (GNR-E-96-1, O.N. 26555)

   a.) APPROVED SEVERAL UTILITY PILOT PROGRAMS ALLOWING LIMITED TEST OF RETAIL ACCESS (IPC-E-98-9, O.N. 27712) (WWP-E-96-2, O.N. 26615, WWP-E-97-1, O.N. 26884, AND WWP-E-97-11, O.N. 27351)

   b.) ALLOWED PURCHASE AT MARKET RATES FOR PART OF LOAD OF IDAHO POWER'S LARGEST INDUSTRIAL CUSTOMER (FMC) (IPC-E-97-13, O.N. 27463)

3. CONDUCTED A MAJOR PROJECT TO EXPLORE UNBUNDLED COSTS OF IDAHO'S THREE IOUS PLUS COOPS AND MUNIS (GNR-E-97-1, O.N. 27111, IPC-E-98-2, O.N. 27676, UPL-E-98-1, O.N. 27678, WWP-E-98-1, O.N. 27679)

Attachment #5

II. ADDITIONAL STEPS THE IPUC INTENDS TO PURSUE

1. CONTINUE TO COLLECT INFORMATION, ESPECIALLY ON OTHER STATE ACTIONS RELATIVE TO RESTRUCTURING AND DEREGULATION.

2. CONTINUE TO PARTICIPATE IN EFFORTS TO PROVIDE REGIONAL SOLUTIONS TO TRANSMISSION PROBLEMS.

3. ALIGN RATES MORE CLOSELY WITH COSTS. RATE CASES WITH UP&L AND WITH WWP PROVIDE FIRST OPPORTUNITY IN SOME TIME TO CREATE RATES THAT MORE ACCURATELY REFLECT CURRENT COSTS.

4. EDUCATE CONSUMERS ABOUT ELECTRICITY AND ITS COMPONENT COSTS. UNBUNDLING OF COSTS AND EVENTUALLY OF RATES THEMSELVES WILL ALLOW CUSTOMERS TO SEE ON MONTHLY BILLS THE SEPARATE CHARGES FOR GENERATION AND OTHER PORTIONS OF ELECTRIC SERVICE.

5. INVESTIGATE PILOT PROGRAMS MORE THOROUGHLY, REQUIRING UTILITIES TO CONDUCT FORMAL EVALUATIONS TO HELP US ALL UNDERSTAND WHAT WORKS AND WHAT DOESN'T.

6. ANALYZE STRANDED COSTS FOR EACH UTILITY TO DETERMINE THE RANGE OF VALUES. THE KEY ELEMENT IS TO DETERMINE WHETHER COSTS ARE MORE LIKELY NEGATIVE OR POSITIVE, BECAUSE NEGATIVE COSTS WOULD ALLOW REMAINING CUSTOMERS TO BE BETTER OFF IF OTHER CUSTOMERS DEPART THE SYSTEM. LARGE POSITIVE COSTS MAKE IT NECESSARY TO TAKE PRECAUTIONS LEST DEPARTING CUSTOMERS SHIFT THEIR COSTS TO THOSE REMAINING.

7. ALLOW LARGER CUSTOMERS TO WORK WITH UTILITIES TO NEGOTIATE MUTUALLY ACCEPTABLE SPECIAL CONTRACTS. THESE CONTRACTS SHOULD HAVE PROVISIONS TO COVER ALL COSTS OF SERVING THEIR LOAD, LIKE THE FMC CONTRACT DID.

Mr. BARTON. Sounds like a Texan talking, if you ask me.

The Chair's going to recognize himself for 5 minutes and we expect to vote any time between 3:30 and 4, so, hopefully, we can get one round in before we break. Unless there's just a huge interest, we'll only ask one round of questions of this panel and then let the rest be in writing. So, I'm going to recognize myself for 5 minutes.

Commissioner Smith, you obviously have come from what we call a low cost State, so it's not exactly a surprise that you tend not to want a Federal role in this issue, at this point in time. But, I think that you're aware that Idaho did participate in a comprehensive review of this issue, along with three other States: I think Washington, Oregon——

Ms. SMITH. Montana.

Mr. BARTON. [continuing] and Montana. What were the findings of that comprehensive review?

Ms. SMITH. Well, I didn't bring the entire list with me. The Bonneville subscription process was one of those I mentioned. I believe they also had a finding that the region should go to retail choice by July of this year or next year. I would say the only State in the region that's enacted legislation has been Montana, and they did not choose the date in the regional review.

Mr. BARTON. What was the conclusion of the regional review about the need, if any, for Federal legislation in this area?

Ms. SMITH. I don't recall that. Perhaps, you have a better idea than I do right now.

Mr. BARTON. Well, my staff has the idea that it said that there was some Federal legislation necessary.

Ms. SMITH. Well, and I think that's correct. And we've heard the areas of Federal legislation that need to be addressed. The Holding Company Act, the PURPA purchase requirement, I think, are some things that are in Federal law now that only Congress can fix.

Mr. BARTON. Again, the staff——

Ms. SMITH. And, I guess, the other item that I think I mentioned when I testified here not quite 2 years ago was that we need some help with the Bonneville Power Administration, in how to deal with that Federal entity as the region restructures, because only Congress can address some of the requirements and restrictions.

Mr. BARTON. Well, again, we're not here to be argumentative and we know that your State, as any low-cost State, is going to be less than effusive about the Federal position preempting anything in your State. But, this comprehensive review, at least according to my staff, did indicate that you needed some changes in the Federal Power Act and the Bonneville Power Administration that would require Federal legislation. So, even in a low-cost State like yours, there has been some political input, at least at the gubernatorial level, that you might support some change without going whole hog into the issue.

Ms. SMITH. Absolutely. I think you're entirely correct, that the northwest does need help in dealing with Bonneville. I think what we'd like to work toward is having a place for what we have been calling the northwest chapter in any legislation that Congress would draft, that would then directly address the specific and unique concerns that deal with those agencies in our area.

Mr. BARTON. Now, my general question to the other three panelists that are still with us: is there anyone at the table that doesn't support any type of Federal legislation at all this year? Ms. Clark, would Florida's position be——

Ms. CLARK. Well, I have indicated to you the areas that I think that you need to act: in reliability market power, PUHCA reform, and PURPA repeal. I guess I would characterize it as you need to clear out the brush, so that we can move forward, as is appropriate for us to do.

Mr. BARTON. Mr. Glazer and Mr. Quain?

Mr. GLAZER. As I indicated, Mr. Chairman, in my remarks, I think you can do actually the whole hog, if you will, but do it in an incentive based way, such as was done in the Telecommunications Act. And that way, you can respect the rights of the low-cost States, but still put some stamp on moving forward on the national issues.

Mr. BARTON. Okay. Mr. Quain?

Mr. QUAIN. I find myself being very much in agreement with many of the comments of the first panel, that I think it's appropriate to move forward with Federal legislation. I would go farther than some of my colleagues sitting at this table, but I think a lot of the discussion you had in the first panel gave you good ideas as to what needs to be done and I think it's appropriate that you do it.

Mr. BARTON. Now, with respect to the grandfathering issue in a State like Pennsylvania or a State like Illinois that has acted or is in the process of acting, some of the issues that both those two States mentioned in their testimony was low-income energy assistance. So, I would assume that if we pass a Federal statute, that grandfathered States, specific activities within State boundaries may preempt some of the transmission issues, because of the interstate nature of the interconnection and the reliability, that that would be an acceptable grandfather compromise. And, again, I'm only talking in general terms, now. But, as long as we didn't tell you how to dot the Is and cross the Ts on how you do low-income energy assistance or be too specific on stranded costs recovery, if you've allowed for stranded cost recovery and we focused on the interstate aspect of the electricity generation and transmission system, your State would tend to find that acceptable. Is that a fair statement?

Mr. QUAIN. I think that's a fair statement, Mr. Chairman. I'd be happy to work with you on the details of that. Some of those issues seem to fall into the general transmission category at first blush, that may have unintended impacts on a delicate balance in our legislation, just as Mr. Persico talked about it in Illinois. But, I think it's a general proposition, that's correct.

Mr. BARTON. Well, I can assure that, as the representative of the States, my State of Texas has moved the bill out of the State Senate yesterday. It has a number of provisions on low income energy assistance and market allocation, and I don't think Congressman Hall or myself intends to preempt those. So, we're very aware that if the States have acted and it's not directly an opposition to the goal of the Federal legislation, we see no reason to preempt that.

My time has expired. I recognize the gentleman from Ohio, Mr. Sawyer, for 5 minutes.

Mr. SAWYER. Thank you, Mr. Chairman. Welcome, Craig Glazer. I used to work where he works and——

Mr. BARTON. He was bragging on you when you weren't here. He was.

Mr. GLAZER. I've got some secret memos of yours still in the file.

Mr. SAWYER. That was 25 years ago. In any event, I wasn't here for the testimony. I read some of your testimony. And so, I'm reluctant to consume a lot of time asking questions. Let me ask you, though, Craig, you mentioned incentives for fostering independent transaction. Could you develop that a little bit more for us?

Mr. GLAZER. I think if we borrow the telecommunications model, there could be incentives for companies that went forward with independent transmission, that separated out transmission, from generation. And that would be part of the checklist and that would get them some PUHCA relief or some other additional incentives. Those are the kind of things that I was talking about.

Mr. SAWYER. Do you have strong feelings about the design of independent transmission entities or do you believe we should simply describe characteristics that we'd like to see and let them develop as they will region by region?

Mr. GLAZER. Well, Representative, it's an excellent question. And there was discussion earlier about the price spikes in the Midwest that were felt in Illinois and felt in Ohio. The Federal Energy Commission did a report on what caused that and what's the prospect of the future and the Ohio Commission did a report, as well.

The Federal Energy Commission, I'm not criticizing them. The report was excellent. But, it said, it was a one-time thing. I don't think we have to be concerned about. We actually found, no, this really could happen again and in a retail environment could really then affect customers. And your constituents start calling you, as they'll call us when they see their bill fly up.

Part of the problem we found is there are no rules for of road. There are separate transmission companies. There are five just in Ohio. There are five different toll booths to move power just from Cincinnati to Akron, Ohio. And there's no rules of the road. I sort of analogize it to the air traffic control system. Imagine if the air traffic controllers, each worked for a different airline, and had an incentive to move their planes from their airline, as opposed to having some neutral system——

Mr. SAWYER. Sounds like Europe.

Mr. GLAZER. [continuing] and then imagine on top of that that all of them around the country had a different set of rules. The planes are flying and nobody knows what the rules of the road are. That's kind of where we are in transmission.

Mr. BARTON. That sounds like Congress.

Mr. GLAZER. And the Federal Energy Commission says they don't feel that there's a debate whether they have enough authority from this Congress to move forward to deal with that issue. We think it's got to be solved.

Mr. SAWYER. Let me ask—take a different task here. I don't know whether you saw Energy Daily today. There is an article I don't want you to comment on. It's Ohio IOUs take stock hit over

State deregulation bill. And I think their point is that Ohio, being—sitting there betwixt and between now for an extended period of time, with legislation on the table that gives some people heartburn and the cures aren't there yet and being uncertain about whether or not it's going to be able to move forward, has had this kind of consequence.

Mr. GLAZER. Yes.

Mr. SAWYER. Without commenting on that, at some point, it seems to me that we run the same risk nationally, having legislation that—in many different forms, where we don't move and, yet, the market and the technology and the economy is moving all around us. Would any of you care to comment on problems that that might create within the industry, itself?

Mr. GLAZER. The only comment I would make on that, I think it's a very good point, that's why I sort of had suggested this checklist approach. There's some broad Federal things you want to see happen: independent transmission, some easing of the PUHCA restrictions; but, then, still having the flexibility to deal with the specific problems of Florida, of the northwest, of Pennsylvania. There might be a way around having to tackle this very difficult issue, a date certain. And what is that date? Is that the same date in Ohio as it is in Idaho?

I wouldn't want to be in your shoes, having to make that decision.

Mr. SAWYER. Well, Pennsylvania, it's yesterday; in Ohio, it's tomorrow; and in Idaho, it's never; right?

Thank you, Mr. Chairman.

Mr. BARTON. Okay. Mr. Quain, do you want to comment on it?

Mr. QUAIN. Well, I just had the comment that I think if you set the date certain out far enough and make it clear that you're going to give the States individual opportunities to craft a piece of legislation that makes sense for their jurisdiction, I think you've accomplished the best of both worlds, because I think you do run the risk, without a date certain, that you do get a patchwork type of approach to this and we end up with the same kind of problems with market barriers that Chairman Glazer talked about in the transmission system. And they ought to be avoided. We ought to have a free-flowing, open marketplace, but give each State plenty of time to develop their own solutions as to how we get there.

Mr. Sawyer. Thank you, very much.

Mr. BARTON. We recognize the gentleman from Oklahoma for 5 minutes.

Mr. LARGENT. Thank you. Ms. Smith, a question I have for you is, we refer to Idaho as a low cost State. Does that also mean that your cost of production is low?

Ms. SMITH. The costs that we have related to electric that are low are generation costs and transmission costs. Actually——

Mr. LARGENT. So, generation costs are low?

Ms. SMITH. Our generation costs are low. I think right now they're probably below the wholesale market. Our transmission costs are low. We found that out when we tried to create INDIGO. But, however, I would note that our distribution costs are significantly above the national average, because of our low density and our terrain.

Mr. LARGENT. Right. The question I have for you, then—I mean, I guess I'm taking the opposite view of our Chairman, who concedes we understand why low-cost States would not want to participate in a competitive market. I don't understand that. If you are the low cost producer in a competitive marketplace, you have a distinct advantage in a competitive field. You've got a lot of States to choose to sell to, if you can get to a competitive market. You're the low cost producer. Why wouldn't you want to compete and earn money? I mean, that's the nature of a de-monopoly, that you can do that.

Ms. SMITH. And I agree. And I've often wondered if I were sitting on the Board of one of my investor utilities and one of my goals was to maximize the company's profits, why wouldn't I divest my generating assets, thumb my nose at the State Public Utility Commission and the State legislature and make all the money I could in the wholesale market. I guess from a regulator's point of view, the rates are based on a return that the Commission allows. Maybe the company could make more money in the market; I'm not sure. But, you see the dilemma.

Mr. LARGENT. Not yet. I'm trying.

Ms. SMITH. It's a distinction of whether you're looking at it from the point of view of an investor of a utility company and whether you're looking at it from the point of view of a customer in Idaho. Is that something, if you're the customer, that you want your utility to do.

Mr. LARGENT. Okay, let me ask you this question: would deregulation cause the cost of production to increase?

Ms. SMITH. I don't think so. And I guess I would say that in the market we have today, when there is surplus power by one of our investor-owned utilities, they do sell that on the market, and those revenues are then used to keep our rates lower for the regulated side of the company.

Mr. LARGENT. So, you like to compete when it benefits you?

Ms. SMITH. That's right.

Mr. LARGENT. Well, of course. I mean, that's true for anybody. But, I guess what I'm not understanding is, you have low cost of production. And you go into a unregulated market or a free market, where you have competition, you still have low cost production. And now, you are the low cost producer. That's the term we hear all the time in free enterprise. You want to be the low cost producer. So why would a low cost producer in the electric generating industry not want to compete, when you've got so many opportunities? I don't get that.

Ms. SMITH. Well, I think you have to distinguish between the wholesale market and the retail market.

Mr. LARGENT. That's what we—we've already——

Ms. SMITH. Right. Wholesale is deregulated.

Mr. LARGENT. We're there; right. We're talking about retail. And so what I'm saying is to your customers, who are paying a low cost, your cost of getting that electricity to him does not go up in a competitive market. So, you don't have to raise the rates. You still get to produce it at the same cost. You see what I'm saying?

Ms. SMITH. Well, the other complicating factor, I think that always snags our legislators is water rights and the issues of river

governance, because as I stated before, in an average water year, 60 percent of our State's electricity is generated by hydro projects. And I think Montana has deregulated in Montana Power, their generating assets. And I believe that they're finding that there are some complications with priority rights over the use of that water and the availability of the water. So, it's not just the price of power that you tinker with when you're dealing with, basically, hydroelectric system. And that's one of our legislation's major concerns.

Mr. LARGENT. That's above our pay grade for sure, because I think God is in control of that water issue. But, are we going to get another round?

Mr. BARTON. I don't——

Mr. LARGENT. I have one short question.

Mr. BARTON. Well, then ask it right now, because we are expected to vote in the next 15 minutes. And I think once we break for voting, we won't be able to come back.

Mr. LARGENT. Okay. This question is for Ms. Clark. You were talking about Ms. Moler's comments. But, I'm trying to figure out if, say the administration bill passed to deregulate electricity and they had a opt out for a State. Why would you be opposed to that, when you would have the ability, and it sounds like its fairly easy, for your permission to say, you know, we've decided that our State is not going to benefit from that and so we elect to opt out of this? Why would that—why would you be opposed to that?

Ms. CLARK. Let me answer it this way. First of all, if those were our choices, you're either going to mandate or opt out, we certainly want the opt out.

Mr. LARGENT. Well, it's a mandate with an opt out clause.

Ms. CLARK. Well, I know there is, in some legislation, that's a pure mandate.

Mr. LARGENT. Yeah, right. Okay, we're talking about the——

Ms. CLARK. We're moving up the ladder of what's acceptable. What I take issue with is the premise that State commissions and State legislators will not make the move to retail competition, when they see it as in the best interest of the customers in their State. And I agree with what Ms. Smith said, competition, in itself, is not the goal. The goal is to get lower rates, adequate and reliable service to your customers.

Mr. LARGENT. Are commissioners in the State of Florida elected or appointed?

Ms. CLARK. No, we are appointed.

Mr. LARGENT. Well, I would say that as an appointee, you're probably not as sensitive as somebody who would be elected. But, I agree with you, I think that you are sensitive to—I mean, I think that your serving the public in the capacity that you're——

Ms. CLARK. Well, let me point out, and I'm not sure if you were here, we have had competition in the wholesale market in Florida since the late 1970's.

Mr. LARGENT. Yeah, I heard you say that.

Ms. CLARK. We saw the benefit of that. We moved more quickly than you all did to introduce competition into telecommunications.

Mr. LARGENT. Right, I heard you say that.

Ms. CLARK. And we are now taking further steps to assure that our transmission in Florida achieves better the goal of nondiscrim-

inatory and open access. And we're dealing with the issue of merchant plant.

Mr. LARGENT. And did you benefit from moving to wholesale deregulation in the State of Florida?

Ms. CLARK. You bet. In 1978, I think that was the year, and then up through the early 1990's, when we took——

Mr. LARGENT. And did you benefit from deregulating telecom?

Mr. BARTON. We do need to recognize Mr. Shimkus, here.

Ms. CLARK. Well, I think there's still a debate going there and just let me say, the demographics of Florida are such that some of our elderly population don't feel that they've benefited from it.

Mr. LARGENT. Thank you, Mr. Chairman.

Mr. BARTON. The Chair would recognize Mr. Shimkus for 5 minutes.

Mr. SHIMKUS. Thank you, Mr. Chairman. As many of you know, Illinois was very close to rolling blackouts last summer. One of the clear problems that the FERC report pointed out was that transmission constraints reduced the ability of utilities to move power where it was needed. To address this problem, the administration's bill and Congressman Largent's bill have included provisions to set up regional transmission planning agencies.

Would your State consider joining voluntary regional transmission planning agencies, even if that meant giving up some authority to site transmission?

Mr. QUAIN. Pennsylvania, yes.

Mr. SHIMKUS. Good answer.

Mr. GLAZER. That's hard to top, if you like that answer. We are a member of a regional transmission organization. I'm not sure that organization has to go so far as to actually locate lines in people's backyards, because as Commissioner Clark mentioned, at the end of the day, they're going to call the Governor and they're going to call us. And giving them the name of a regional transmission organization to call to complaint about that is just not going to satisfy them.

Mr. SHIMKUS. But, you understand the problem in Illinois last summer?

Mr. GLAZER. Very much so. We had the same problem.

Mr. SHIMKUS. Right. And for us, it was getting through the transmission lines that kind of crossed the State of Ohio.

Mr. GLAZER. Well, we actually think it was Pennsylvania that was the problem. We are cooperating. They were not cooperating. But putting that aside, again, I think, Representative, the problem is we have this patchwork system, but we don't have any rules of the road. It's like the air traffic control system operating——

Mr. SHIMKUS. But, you know, when you make that argument, you're making the argument for a Federal role.

Mr. GLAZER. I agree. I am suggesting a Federal role on transmission. I don't think it has to go so far as to literally siting the lines. That's figuring out whose backyard the line goes in. But, I am totally in agreement that the Federal Government needs a role in transmission——

Mr. BARTON. Would the gentleman yield? You're saying you support something, I think, that former FERC Commissioner Stalon

talked about, where the Federal role is to say there is a need and it is the State role to dictate the siting of the transmission line?

Mr. GLAZER. I'd certainly be willing to work out something along those lines. I think that we need to take a broader view of the need for lines, than just the not in my backyard syndrome.

Mr. BARTON. Right.

Mr. SHIMKUS. Can we go to—let's go to Florida and then let's go to the great State of Idaho, where my brother lives.

Ms. CLARK. I'm not quite sure how to answer that, because siting transmission is a very difficult problem. Our commission has a responsibility for finding a need for a transmission line and then it goes to a separate siting board to determine where it goes. Last time we sited a transmission line where we said there was a need, it did not get built, because they couldn't get through the litigation and all the problems of putting it in my backyard. I don't know if you'll be any more successful.

Mr. SHIMKUS. I'm going to have a follow-up question to this, so Ms. Smith——

Ms. CLARK. But, I would just say, I would urge you to be aware of that issue, the difficulty of siting transmission.

Mr. SHIMKUS. Ms. Smith?

Ms. SMITH. I guess I just want to first say that I don't think the western interconnection operates in the same patchwork manner that apparently there exists in the Midwest. So, I just want to clear up that and state that electrically, the western interconnection is separate from the east, so you can do anything you want.

Mr. SHIMKUS. Okay, let me follow up with this question.

Ms. SMITH. Because, it's people in the east.

Mr. SHIMKUS. Let me follow up with this question. Isn't it true, though, that in the west, in your area, Bonneville has got 80 percent of the transmission grid?

Ms. SMITH. That may be true for the northwest as a whole. But, if you look at the map, you will see that there is very little Federal transmission in Idaho and most of ours is owned by investor-owned utilities, which has given rise to the big debate of how you do this RTO. And one way around constraints, some of the investor owners say, is let's look at a for-profit transco., which would have the incentive to build the line, because they're going to make money.

Mr. SHIMKUS. Let me follow up: it is most likely that Congress will not take away the duty of siting from the States. However, if the Federal Government does not site lines and the States are reluctant to move forward, how will high quality regional markets be established?

Mr. GLAZER. Let me jump in to say I think you need to give the FERC some clear authority, relative to these regional transmission organizations, so that we get out of this debate that we're in, as to do they have authority or not. I would strongly suggest that that is a key to getting effective wholesale markets; and with effective wholesale markets, then effective retail markets can happen. Without effective wholesale markets, you can pass all the retail laws you want, all the date certains you can, it won't work. So, we've got to get the wholesale structure, and really that is something for Congress to do.

Mr. QUAIN. I think you're exactly right, Representative. I think that's the problem in a nutshell. If we're going to move toward a new paradigm, we've got to let go of the old and we've got to be willing to talk about new structures. And the way I heard your question, you didn't say the States were going to give up all rights; you said would you be willing to give up some. I mean, we have to start talking about new ways to look at the movement of power in a reliable fashion, which also provides cost benefits to the consumer. And you can't hold on to old paradigms just because you're afraid to let go and try something different. To have that kind of discussion, to sit down and look at those details and determine whether it's a better way to handle a developing marketplace is absolutely appropriate.

Mr. BARTON. The Chair recognizes the gentleman from Texas, Mr. Hall, for 5 minutes.

Mr. HALL. Mr. Quain, I'll let you answer what you've tried to answer for me a while ago. Go ahead.

Mr. QUAIN. Well, I thought the question was, do we all agree there should not be a Federal mandate for a time line certain, and I think there ought to be.

Mr. HALL. That's one. And you're uncertain, I reread your testimony to this.

I'll stay on the issue that we're on here about transmission capacity. I think most of you heard the testimony of the first panel and you heard Mr. Stalon, who expressed his concern about new transmission capacity, in order to have a competitive market. He just felt like you had to have it. And I may or may not have misread his testimony as to his recommendation that Congress enact legislation to set up a Federal authority. And did I understand, Mr. Glazer, that's what you think they ought to do?

Mr. GLAZER. I seem to recall there were two different Federal authorities he was talking about. If he was talking about a regional transmission organization, some independent transmission organization, I totally agree with him, and making that same argument.

Mr. HALL. Are you saying "transition" or "transmission?"

Mr. GLAZER. Transmission, I'm sorry; transmission. If he was talking about physically some Federal organization physically siting lines, that's all bound up in local zoning and local issues, and they want to hear from somebody locally on that. So, I think that, frankly, would be stepping over the line, if you did that.

Mr. HALL. Well, I couldn't detect in any of his testimony any practical suggestion, if he had his way to craft the Federal authority. I think what you're saying there certainly carries that out. But, then Mr. Naeve, also, went on to talk about making a case for Federal authority. He didn't say transition or permanent or what. And he cited the Gas Act and you remember I asked him if he could tell us the difference in using it for electricity, if it's the Gas Act, and I'll have some questions to send to him on that.

Now, the other witnesses were, I guess, kind of all over the place on whether or not the country could truly realize the benefits of competition, if FERC, and that was kind of the suggestion of the first gentleman, Mr. Moler, or some other national entities—he said FERC or another national entity—couldn't fully realize the benefits, unless some of those people were given the authority to

site new transmission lines. And you may have hit on the answer to it, to give somebody some initial transitory authority, but leave it with the States, leave it with the local people.

So, you know, it's pretty easy to understand from the viewpoint of just a purely economic theory, that it might easiest just to turn it over to feds and let them have full power. But, that would be a very controversial political decision. I know the chairman here remembers well that we've had difficult deciding a permanent nuclear repository site in one State, let alone punishing all the other 49. So, I just don't think that would sell. But, I think we do well—and I may send some more questions to you about some more suggestions that you have about an initial thrust that would be transitory only. Maybe something good comes out of these hearings.

Mr. BARTON. Wouldn't that be a revelation.

Mr. HALL. And I thank you for your visit by my office yesterday—the day before yesterday. I'm sorry I wasn't there, because I enjoyed your testimony. I believe in Atlanta and maybe Chicago. I don't know, where you at Chicago—Atlanta? You testified in Atlanta?

Ms. CLARK. It was in Atlanta. I don't think it was in Chicago, but it's hard to remember.

Mr. HALL. It was another nice looking lady in red, then. I think I've asked everything that I don't intend to ask in my letter. Thank you, Mr. Chairman.

Mr. BARTON. We recognize the distinguished vice chairman, Mr. Stearns, for 5 minutes.

Mr. STEARNS. Thank you. Thank you, Mr. Chairman. Of course, my colleague from Florida, Mr. Bilirakis, already recognized the Honorable Susan Clark. And so, I'm belatedly——

Mr. BARTON. She gave him a smooch when he left the hearing room. And I'm told that's why you came back.

Mr. STEARNS. That's why I came back. Let me ask you: do you know all about—I mean, you studied the Clinton proposal for deregulation of energy, Susan?

Ms. CLARK. I have looked at it. But to be honest, you know, you get so many things in between, I can't remember the details of it, and there have been so many other issues. Unless I have it right before me, I don't——

Mr. STEARNS. Oh, I understand.

Ms. CLARK. So, I'd be willing to try and answer your question.

Mr. STEARNS. Well, let's just try it. The two things that I think are controversial are the portfolio standard and the Public Benefits Fund. And I think I was going to ask you and I was going to ask all the witnesses what their impressions are of that. Maybe if you would care to——

Ms. CLARK. With respect to the portfolio standard, as I recall it, it increases costs to Florida, because it calls for some percentage of renewables.

Mr. STEARNS. And it mandates it.

Ms. CLARK. Right. And while we are the sunshine State, there are problems with solar energy, as far as its cost effectiveness. We don't have any wind to speak of either. Well, just to indicate that that kind of mandate would not bring costs down in Florida.

Mr. STEARNS. Okay. Marsha Smith?

Ms. SMITH. I think that probably the issue is, as Commissioner Clark had said it, it probably won't bring costs down. But I guess the judgment call for policymakers is, is it something that's good for us, even if it cost us money. And I guess in my State, it's hard for me to imagine us getting public benefits program, unless Congress told us we had to. So, if you think that's a good thing, then maybe Congress should tell us we have to.

Mr. STEARNS. Well, what the President is proposing is through this Public Benefits Fund, a national transmission tax and then distributing these funds to the States, if they provide matching funds.

Ms. SMITH. Right.

Mr. STEARNS. And so what we're trying to get a feel for, if you support that idea, if so, why, and if not, why not?

Ms. SMITH. Well, it's a terrible dilemma for me, personally, here, because I suspect that a majority of Idaho legislature would not support that. But, I, personally, think there may be some benefit to it.

Mr. STEARNS. So, you, personally, support it, but you don't think your State legislature would?

Ms. SMITH. I don't think so.

Mr. BARTON. Would the gentleman yield on that?

Mr. STEARNS. Yes.

Mr. BARTON. Well, Pennsylvania and Illinois both have a State low income or public benefits funds. So why would we need to have a Federal fund, also? Wouldn't that be an area we'd just let the States do what they want to do? Wouldn't that solve your problem?

Ms. SMITH. Well, I think the Public Benefits Trust Fund that I think Mr. Stearns is speaking of is something different from a low income assistance program that's on a State level.

Mr. BARTON. But, they go toward the same general purpose. It would just balance the needs of the less affluent in those States, in some way.

Ms. SMITH. Well, I think the public purposes, as I understand it, is to encourage the development of renewables or alternative energy sources and research and development, as opposed to helping individual low income consumers.

Mr. STEARNS. Of course, once you set up a government fund, you sometimes don't know where it's going to go.

Ms. SMITH. That's true.

Mr. STEARNS. Mr. Glazer, maybe you would like to comment, as well as Mr. Quain.

Mr. GLAZER. Thank you. Two things on that, and they're sort of two different things. This Public Benefits Fund and then the portfolio standard, as I understand it——

Mr. STEARNS. Those are the two that I——

Mr. GLAZER. Two, yes, and——

Mr. STEARNS. [continuing] want to know what you feel about it.

Mr. GLAZER. Okay. This Congress actually has a Public Benefits Fund, in the form of the LIHEAP program, the Low Income Home Energy Assistance Program, and, frankly, my State and some other States are very dependent on that program. We would have people literally going cold in the winter without that program.

The fear is that that program, because of various other Federal requirements, gets cut and there's nothing put in its place. So, perhaps if there was some kind of ability to put a wires charge, we could get out of this every 2 year debate about the LIHEAP program, which has been difficult for the Congress and difficult for the States.

The issue of a portfolio standard, which goes to do we have renewables, to me, that's a national energy security issue. And I think this Congress is uniquely qualified to render a judgment on that. We did have energy security problems in the 1970's and we went to war in the Middle East. So, I don't think we should just brush away that on the grounds that it may cost us some money. I think it's really an issue to consider, in terms of international energy security and national energy security.

Mr. QUAIN. I thank you. I think this is one that's clearly best handled by the States. We do have a low income energy assistance program built into our statute and to all of the settlements I talked about. We do not have a portfolio requirement in the law. But, I would note that when we sat down and negotiated each of the settlements for the five major electric companies in Pennsylvania, we came up with one, and we came up with one that was a little different and funded a little differently for each of the five, taking into note that the specific characteristics of that utility and the goals that that fund was trying to reach. It's different in Philadelphia than it would be in the western part of the State, out near Allegheny County. So, I think my preference on that would be to let that one to the States.

Mr. BARTON. I thank the gentleman from Florida. I recognize the gentleman from Ohio, Mr. Strickland, for 5 minutes.

Mr. STRICKLAND. Thank you, Mr. Chairman. Mr. Glazer, you said, I think correctly, that Ohio is a microcosm of the Nation. And as you know, in Ohio, we have low cost energy regions and high cost energy regions. I happen to represent what is a low cost energy region. So, I assume my question to you, if Ohio is a microcosm, means that there are such conditions existing across the Nation.

Is it possible or are you concerned that deregulation in Ohio will result in the electricity cost for some of the low cost regions, which tend to be the poorer parts of the State of Ohio, will actually increase, while they may be reduced in higher cost parts of the State?

Mr. GLAZER. Representative, it's an excellent question. In fact, it is an issue in the Ohio General Assembly right now and it's essentially going to tear the General Assembly apart on just that very issue. I don't see it, though, as being a situation where, oh, if we do this, rates automatically go up in the southeastern Ohio, for a couple of reasons. One is although southeastern Ohio is low cost, there, in fact, is lower cost around us, in Kentucky and West Virginia. And the national wholesale market is even cheaper today than the rates that your constituents in southeast Ohio pay. So, there's some room to move there, to even go lower. Also, we're looking at rate caps, some protection for the low cost regions. For example, American Electric Power, we would put a rate cap on, so they cannot see an increase for a period of time.

Over the long term, one of the concerns is if we don't move at all, what happens is the investment community just says, we're not going to invest in generation, in those States that are just closed. And, in fact, an AEP or utilities like that start disinvesting in southeastern Ohio. And, in fact, then, service goes bad and rates then potentially can go up.

So, I think we have to take some steps to protect the low cost areas of the State. I am very concerned about those. And I think we can achieve that proper balance. It's an excellent question.

Mr. STRICKLAND. I would like to ask our friend from Pennsylvania, have there been regions in Pennsylvania where consumers have actually experienced an increase in what they have paid versus—prior to deregulation?

Mr. QUAIN. We have in our legislation, in our law, rate caps for all of our electric utilities in Pennsylvania. And it's a two-piece rate cap. There's a generation rate cap that runs generally the length of your stranded investment recovery and there's a separate transmission distribution rate cap for local line rates. So, if you choose to do nothing or you choose to stay with your host utility, your rates are capped.

Interestingly enough, one of the major players that we've seen in the early parts of our choice marketplace are renewable energy companies coming in that say, I will sell you green energy and, yes, it's more expensive than what you're currently paying now under rates—we started this whole process, because we thought they were too high, and they're more expensive than that, but we will guarantee you that it's green energy. It's compatible with the environment. And lots and lots and lots of people are buying it. So, in that instance, the rates are going up. But, it's their choice to do that. They have the protection of the rate caps not to make that decision. But, they're consciously doing it, because they want to use energy that's environmentally compatible.

Mr. STRICKLAND. And Mr. Glazer, one other question. As you know, my region has coal mines.

Mr. GLAZER. Yes.

Mr. STRICKLAND. And I'm interested in your opinion, as to the effect of deregulation on the coal industry. And if the other panel members would have thoughts about that, as well, I would be interested in what they may think.

Mr. GLAZER. Representative, I'm really glad you're asking me this question this morning. I thought Mr. Pallone would come after me on environmental stuff from New Jersey.

I actually see deregulation as having a huge benefit for the coal industry, because where does low cost power, which they'll be such a demand for, come from. It comes from coal. We've got to make sure we deal with these environmental issues, in a way it doesn't make coal obsolete, which would be a disaster. But, in fact, I see it as a great benefit for the coal industry and for the coal miners, because all these States around us, Pennsylvania, Illinois, are looking for low cost power. That comes from the coal fields in southeastern Ohio.

Mr. STRICKLAND. Thank you, sir. And I'll try to deal with my friend, Mr. Frank Pallone. Help you out there. Thank you.

Mr. BARTON. We thank the gentleman from Ohio. And may I ask the gentleman from North Carolina to bring us home; bring us around home, third base, and home run down at the home plate.

Mr. BURR. The pressure is tough.

Mr. BARTON. I know. The Tar Heel State can deliver. Although North Carolina didn't exactly shine in the NCAAP tournament.

Mr. BURR. The word is Duke.

Mr. BARTON. My team didn't even make it, so—five minutes.

Mr. BURR. Mr. Glazer, tell me what significant difference the Ohio Commission's position would be, other than yours. You made a note in your testimony, "I speak as an individual and not as the Commission."

Mr. GLAZER. It was just a CYA here, if you will. We didn't actually have the time to vote on these comments as a Commission, sir.

Mr. BURR. But not—your views are not inconsistent with what's going on in Ohio?

Mr. GLAZER. No, they are not.

Mr. BURR. Thank you. Ms. Clark, let me just ask you a real bold question. Do you believe that there's any generating company out there that can bring to Florida cheaper prices than what you have today?

Ms. CLARK. You mean the average price?

Mr. BURR. I'm talking about is there anybody out there, given that we went to retail competition that could supply Florida customers cheaper than they currently pay for electricity.

Ms. CLARK. Well, you need to remember, we price on average cost. And I'm sure there are marginal cost plants and the new plants are going to be lower cost. I would point out to you that I think those benefits come from wholesale competition. The question is how much more benefits come from retail competition.

Mr. BURR. If one believed that to be really a solution, then I would suggest that Mr. Glazer wouldn't have—as a matter of fact, I might even go to Mr. Quain, because I think Pennsylvania had the biggest disparity between high price and low price power of any State. Am I right, Mr. Quain?

[Witness nodded yes.]

Mr. BURR. And given that there's wholesale capabilities to buy, you would think that they wouldn't have a disparity of that kind, wouldn't you?

Mr. CLARK. A disparity in cost from different plants?

Mr. BURR. A disparity in what the consumer pays.

Mr. STEARNS. Would the gentleman yield just to follow up what you said? I think he's asking what the average residential family pays, kilowatt per hour——

Ms. CLARK. Right.

Mr. STEARNS. [continuing] is pretty good, relative to New Hampshire and New York.

Ms. CLARK. Florida, yes.

Mr. STEARNS. But, if we had retail competition, do you foresee the average residential customer getting it cheaper than it is today?

Ms. CLARK. Not necessarily.

Mr. BURR. All right. Let me rephrase my question in the way it was asked.

Is it possible your customers might get lower cost electricity?

Ms. CLARK. Again, I would point out that you need to make a distinction between if you introduce it in wholesale competition and you're assuring that the next unit you dispatch is the least cost unit, then everyone benefits from it. You spread the cost across the whole body of ratepayers.

Mr. BURR. Ms. Smith, is it true that Bonneville does supply some power to Idaho?

Ms. SMITH. Yes. About 20 percent of customers in Idaho are served by either cooperative or municipal utilities. And while some of those own a small amount of generation, most of them are full requirements customers of Bonneville, which means they take power wholesale from Bonneville at a preference rate.

Mr. BURR. Would you have any objection if Congress passed a bill that required Bonneville, over some period of time, maybe 5 years, to pay back the Federal Government and to recover that through the power cost of their sale price?

Ms. SMITH. I believe Bonneville is paying back the Federal Government. I've sat at lengthy meetings, where they discussed their revenue and their debt payment and how they're going to cover it. So, I believe that Bonneville is paying back the Federal Government.

Mr. BURR. Actually, I would challenge you on that. I've heard the same statements by them and, unfortunately, on the balance sheet, there's very little effort. As a matter of fact, I don't believe that we can give Bonneville away today, as a Federal entity, that there's any power concern out there that we can turn it over to and that they would accept it.

But, let me ask you about—Congressman Crapo, I think, drilled in and said, you can't reach much lower prices than you have in Idaho. So, I'll give you that. Do you believe that if Idaho were to stay closed, but everywhere else stayed open, should the investor owners in Idaho be able to sell into the other States?

Ms. SMITH. Absolutely.

Mr. BURR. So, reciprocity would both you, if you didn't open up your market, but—and other States said to your investor owners, sorry, if you're not—if your State isn't open, then you can't sell into ours.

Ms. SMITH. Well, I wouldn't see why a State, which advocated competition, both wholesale and retail, would want to foreclose the opportunity of their citizens to buy from anyone, who had the lowest price. So, to me, I don't understand that kind of thought.

Mr. BURR. I guess we would have trouble understanding why a State, who had the lowest cost, would close their State from retail competition.

Ms. SMITH. Well, like I pointed out in my response earlier, when you're dealing with a hydro system, it's not just the price of power that people are worried about, and it's all these other things they haven't figured out how to manage in that transition.

Mr. BURR. But, you wouldn't see an inequity in the fact that you chose not to open your marketplace, and your investor owners were not offered the opportunity to sell into other States? You would see a problem with that?

Ms. SMITH. Well, I would not understand the State that opened that said we're foreclosing some people from participating in selling to our customers, especially if those are entities that maybe could provide the lowest cost energy.

Mr. BURR. I'll wait and try to ask you some further questions written, because I think just your actions sort of answers the questions for me, as far as Idaho's position. Currently, it's fairly easy for that to happen or for people to understand it. It doesn't make much sense to me.

Mr. BARTON. We know North Carolina and Idaho can disagree agreeably. So, let's wrap this up, Ms. Clark has a plane to catch at 5.

Mr. BURR. I thank the chairman and I thank all of the witnesses. And the attempt here is not to highlight the differences, it's to really figure out where the consensus is; but more importantly, as we proceed forward, either as States or as a Congress, to find out how we do it right. And I thank the chairman.

Mr. BARTON. That's correct. The Chair would ask unanimous consent that a statement by the National Retail Federation be put in the record. It's been reviewed by the staff and both the majority and minority, and there's no objection.

Do I hear an objection from any of the members?

[No response.]

Mr. BARTON. Hearing none, so ordered.

[The statement follows:]

PREPARED STATEMENT OF THE NATIONAL RETAIL FEDERATION

The National Retail Federation is the world's largest with membership that comprises all retail formats and channels of distribution including department, specialty, discount, catalogue, Internet and independent stores. NRF members represent an industry that encompasses more than 1.4 million U.S. retail establishments, employs more than 20 million people—about 1 in 5 American workers-and registered 1998 sales of $2.7 trillion. NRF's international members operate stores in more than 50 nations. In its role as the umbrella group, NRF also represents 32 national and 50 state associations in the U.S. as well as 36 national associations representing retailers abroad.

NRF's vision of the way in which electricity will be purchased in the future is quite simple. A large network of electricity generators and power marketers will sell electricity to end-users across the country, either directly or including power marketers, at prices set by the competitive markets. Prices will be determined as they are with any other commodity, based on supply and demand, through both spot and future markets. Power will be purchased from power plants across the country, transported through transmission systems operated by independent systems operators and delivered through distribution companies which will appear, to consumers, to resemble today's public utility companies. Distribution and transmission companies will remain regulated monopolies for the foreseeable future.

Our view of the future is a FEDERALLY deregulated electric industry in which:

- All customers benefit from deregulation.
- Deregulation is achieved through universal direct access, rather than a government-mandated pool approach.
- Direct access occurs simultaneously for all customers. If technical constraints require that, in a few instances, direct access to be phased-in, the phase-in will not disadvantage any class of customers.
- Generation, transmission, and distribution services, are unbundled, either functionally or through divestiture.
- Smaller electric consumers participate in the competitive market place through aggregation.
- Stranded cost recovery is shared equitably by utility customers and by utility shareholders.

All Customers Will Benefits From Federal Deregulation. Deregulation will lead to a competitive environment which will benefit all customers. The benefits to be de-

rived from competition are evident in the federal deregulation of the natural gas, airline, trucking and telecommunications industries. When pressure builds for electric rate relief, regulated monopolies react by giving relief to large customers who threaten to self-generate or to leave the service area of the monopoly. Everyone else pays for the benefit received by the few customers who have the economic power to negotiate discounts.

- A deregulated environment will not allow for such distortion of the competitive market. NRF member companies want to purchase electricity competitively so that they can share in the benefits of competition at the earliest possible time. NRF members also want their customers, the residential electric consumer, to share equally in those benefits. After all, retailers benefit whenever their customers have additional disposable income.
- Competition Is Best Achieved Through Universal Direct Access. Direct access to competing generators of electricity provides consumers with the incentives necessary to participate in the competitive marketplace. Those incentives are muted in the poolco approach which has been proposed in some states. Direct access, whether through bilateral contract or through aggregation, provides the opportunity for a willing buyer and a willing seller to set prices through competitive negotiation, rather than relying on a price auction controlled by utilities, which could distort free market pricing. Mandatory pools will, in essence, result in a shift from multiple utilities within a state to a single larger utility. Such a shift will not create competition and does not drive prices down. The pool approach will most likely lead to a re-regulation rather than to deregulation. If pools develop they should develop through the action of market forces rather than as a result of government mandate.
- Direct Access Should Occur Simultaneously For All Customers. In the few instances where technical constraints might prohibit immediate direct access for all customers, no class of customer should be disadvantaged by any resulting phase-in of universal direct access. In those instances where a phase-in is necessary, it should be implemented in such a way which will benefit all classes of customers simultaneously.
- Unbundling is Necessary to Promote Competition. Unbundling, whether it is functional unbundling or unbundling through divestiture, is necessary to insure that utilities do not unfairly shift generation expenses to their transmission and distribution functions, or otherwise give unfair advantage to their generation components, which will be to the detriment of true competition.
- Smaller Electric Consumers Can Participate in the Competitive Market Through Aggregation. Some consumers, especially large consumers, will aggregate off of their own facilities in a given area. Other consumers, including small commercial and residential consumers, will aggregate with a number of unrelated companies or individuals in a geographic area. Aggregation could provide participants an average rate reduction of 18 percent. Innovative planning such as aggregation will define the electricity market in years to come, insuring that electricity consumers, large and small, will benefit from competition.
- Stranded Cost Recovery Dominates Much Of the Electricity Utility Deregulation Debate. We do not believe that utilities are entitled to total stranded cost recovery. Stranded Costs caused by government mandate should be recovered to the extent utilities are unable to mitigate those costs. Stranded costs caused by bad management decisions should not be recovered.
- We envision a burst of competitive pricing as deregulation becomes a reality. This will be followed by a period of reflection as consumers and electric generators analyze the effect of this new pricing. As competition forces utilities and other power suppliers to become more efficient, as stranded costs are dealt with and as competition encourages innovation in load management and conservation techniques, electricity prices will enter into a period of long, steady decline and savings will increase over a period of many years.
- In Conclusion, the National Retail Federation looks forward to the development of a federally deregulated electric market throughout the United States which will provided competitive benefits for all consumer classes on a non-discriminatory basis through customer choice. The Congress is encouraged to enact legislation which will facilitate nationwide retail competition as soon as possible and which will insure that federal regulatory activity will not impede competition.

Mr. BARTON. We want to thank you, ladies and gentlemen, for testifying. We will work with the minority next week to determine the next hearing on this issue, and we hope that we will be able

to reach agreement, as to the subject and the time and be able to announce that sometime next week.

The next hearing the subcommittee is going to convene is on the Iraqi oil for food program that's been sanctioned by the United Nations. There will be additional questions for each of you in the record. We appreciate your timely response.

And this hearing is adjourned.

[Whereupon, at 4:15 p.m, the subcommittee was adjourned.]

[Additional material submitted for the record follows:]

PREPARED STATEMENT OF AMERICAN PUBLIC POWER ASSOCIATION

The American Public Power Association, the national service organization representing the interests of the nation's 2,000 community- and state-owned, not-for-profit public power systems, commends Chairman Barton on restarting the hearing and discussion process on the details of electricity competition. Sorting out the appropriate federal and state roles in this matter is among the most important activities that can be undertaken in order to move the process forward.

Public power systems have long played a vital, pro-competitive role in the electric utility industry, and APPA supports the enactment of federal legislation that removes federal barriers and encourages the creation of retail competition. Since the first municipal systems were established over 115 years ago, public power has fostered competition by serving as a comparison "yardstick" for consumers against which to judge the performance of private utilities. Today, APPA's members are actively participating in efforts at the state and local level to implement retail choice initiatives. Public power associations in several states have endorsed "customer choice" initiatives under consideration by their respective legislatures. In addition, cities like Cleveland, Ohio, and Lubbock, Texas, have had "door-to-door" retail competition in place for decades.

With this in mind, APPA believes the following issues are appropriate and necessary to deal with at the federal level:

- ensure there are no federal legal impediments to state and local decision-making regarding retail competition and clarify jurisdictional questions, while preserving the traditional authorities of state and local governments over retail electric service;
- mitigate market power through provisions such as a revised merger standard that provides FERC with clear authority to condition proposed mergers on divestiture of such generation and transmission facilities as necessary to prevent market power in any relevant geographic or product market;
- remove federal tax impediments on public power systems' ability to compete and participate in independent regional transmission organizations by including the provisions contained in H.R. 721, the Bond Fairness and Protection Act;
- provide clear and specific authority to require the creation of strong, truly independent regional transmission organizations in order to facilitate the development of vigorously competitive regional power markets;
- maintain or enhance the reliability of the electric system by including the industry consensus language which assists in the transition of the North American Electric Reliability Council (NERC) to the North American Electric Reliability Association (NAERO);
- address regulatory impediments to hydropower's competitive position in a restructured marketplace;
- ensure that electricity is available to all consumers at a reasonable price through options such as municipal aggregation programs;
- encourage cost-effective renewable energy without prescribing quotas;
- promote energy research and development.

The balance of the detailed decisions should be left up to state and local authority. Examples of decisions better left to the states include:

- When (or 10 the state can realize benefits from choice and is prepared to move to retail competition;
- Determination of reasonable stranded cost recovery for generation assets;
- The percentage (if any) that electricity providers are required to generate from renewable resources, including hydropower;
- The level at which all participants in the electricity market, including non-traditional power providers, are required to contribute toward the costs and other obligations of public interest programs;

- Deference to regional and customer decisions in certain areas of the country served by federal power marketing administrations on how best to deal with those entities in a restructured environment. These regional approaches should be encouraged and respected by Congress in any federal restructuring legislation. In the Pacific Northwest, for example, issues regarding the Bonneville Power Administration involve a multitude of complex and interrelated concerns. Stakeholders in this region, including public power systems, are in the best position to develop consensus solutions to the unique concerns affecting their region. The same is true in the Tennessee Valley, where TVA power distributors, TVA, and the Department of Energy are developing a consensus proposal on how best to deal with the complex issues surrounding the evolution of TVA in competitive markets;
- Maintaining ultimate decision-making authority over customer safeguards and service quality protections;
- Determination of which ancillary services should be opened to competition, such as metering and billing functions in order to retain the highest levels of accuracy, customer privacy, and public safety.

RELIABILITY AND TRANSMISSION IN COMPETITIVE ELECTRICITY MARKETS

THURSDAY, APRIL 22, 1999

HOUSE OF REPRESENTATIVES,
COMMITTEE ON COMMERCE,
SUBCOMMITTEE ON ENERGY AND POWER,
Washington, DC.

The subcommittee met, pursuant to notice, at 10:05 a.m., in room 2322, Rayburn House Office Building, Hon. Joe Barton (chairman) presiding.

Members present: Representatives Barton, Bilirakis, Stearns, Largent, Burr, Whitfield, Norwood, Shimkus, Pickering, Bryant, Ehrlich, Bliley (ex officio), Hall, Sawyer, Markey, Gordon, Wynn, and Dingell (ex officio).

Staff present: Cathy Van Way, majority counsel; Joe Kelliher, majority counsel; Donn Salvosa, legislative clerk; Sue Sheridan, minority counsel; and Rick Kessler, minority professional staff.

Mr. BARTON. If the subcommittee could come to order, we would like to start the second in a series of hearings in the electricity restructuring issue. Today's hearing is on reliability and transmission and how that will help us to a competitive electricity market.

I want to welcome everyone today. The changes sweeping the electric industry in recent years have been nothing short of incredible. The industry is rapidly transforming itself from a highly regulated industry to one where competition plays a driving role. I believe this trend toward retail competition is irreversible. At the same time it is becoming apparent it is time for our Federal laws and regulations to catch up where the marketplace is headed.

As Chairman Bliley has said and I have said, the question before the Congress has shifted from whether Congress should pass legislation to open retail markets, to when Congress should pass such legislation. Today we are going to examine what the scope of Federal legislation should be with respect to reliability and transmission.

When I accepted the gavel at the beginning of this Congress, one of the goals we set for the subcommittee was to pass a comprehensive bill that lowers electricity prices for consumers by promoting competition. Toward this end, we are going to hear today from witnesses about two issues that are critical to restructuring. Those issues, as I said earlier, are transmission and reliability. They are certainly issues that are not unfamiliar to this body.

From the input that we have received from the largest and smallest consumers and everyone in between, reliability is a very

big concern. The question that is raised time and time again is, Who will I call when our lights go out? It is a simple question, but it is an important question. Similarly, while everyone recognizes competition changes the way we need to think about reliability, it does not necessarily imperil it. In fact, separating generation, which will be competitive, from transmission and distribution, which are likely to remain regulated, will have a positive impact on reliability.

As the system changes, I believe we need Federal legislation to provide for enforceable reliability provisions. There is a broad consensus that continued reliance on voluntary reliability standards is not viable and will lead to significant reliability problems. Consensus is forming around a self-regulating organization certified by the FERC that will develop reliability standards ultimately enforced by the FERC.

Today we are going to take a close look throughout the reliability proposal developed by the North American Electric Reliability Council, or NAERC.

Similarly, for competition to truly flourish, we must make sure that our transmission system is genuinely open and is governed by one set of rules. It is clear that EPAct and Order No. 888, went a long way to make access to the transmission system more open. However, most of today's testimony verifies that complete open access to transmission lines has not arrived.

We hope to hear some suggestions today about how to assure our interstate transmission lines are as open as possible so that consumers can reap the benefits of competition. We look forward to hearing from all of our witnesses today.

[The prepared statement of Hon. Joe Barton follows:]

PREPARED STATEMENT OF HON. JOE BARTON, CHAIRMAN, SUBCOMMITTEE ON ENERGY AND POWER

The changes sweeping the electric industry in recent years have been nothing short of incredible. The industry is restructuring itself with every diversification, with every merger, and with every voluntary and involuntary divestiture. I believe the trend towards retail competition is irreversible.

As Chairman Bliley and I have said many times before, the question before Congress has shifted from "whether" Congress should pass legislation to open retail markets to "when." Today we examine what the scope of Federal legislation should be with respect to reliability and transmission.

When I accepted the gavel at the beginning of this Congress, one of the goals we set for this Subcommittee was to pass comprehensive Federal electricity legislation that lowers electric prices for consumers by promoting competition in retail markets. Towards this end, today we are going to hear from two panels about two of the most talked-about issues related to the restructuring of the electricity industry in this country. The issues are transmission and reliability and they are certainly not unfamiliar to this body.

From the input we have received from the largest and smallest electricity consumers, and everyone in between, reliability is one of the biggest concerns. The question that is raised time and time again is, "Who will I call if my lights go out?" It is a simple question, and it is important. Importantly though while everyone recognizes this, we must change the way we think about reliability, it does not necessarily imperil it. In fact, separating generation which will be competitive and suppliers will be looking to cut costs from transmission and distribution which are likely to have a positive impact on reliability.

I believe Federal legislation will provide for enforceable reliability provisions. There is a broad consensus that continued reliance on voluntary reliability standards is not viable, and will lead to significant reliability problems. Consensus has developed around developing a self-regulating organization certified by FERC that will develop reliability standards ultimately enforced by FERC. I believe we should

take a close look at the work done by the North American Reliability Electricity Council.

Similarily, for competition to truly flourish, we must make sure our transmission system is genuinely open and is governed by one set of rules. It is clear that EPAct and Order 888 went a long way to make access to the transmission system more open. However, most of today's testimony verifies that access to transmission lines are still subject to problems. I hope to hear some suggestions today about how to assure our interstate transmission are as open as possible.

I look forward to hearing from all of the witnesses on both of these important issues and learning from what they have to tell us.

Mr. BARTON. Now I would like to recognize the distinguished ranking member of the full committee, the gentleman from Michigan, the Dean of the House of Representatives, Mr. Dingell, for an opening statement.

Mr. DINGELL. Mr. Chairman, I thank you. Mr. Chairman, I commend you for holding today's hearings. These hearings will touch on one of the most important issues in this entire debate on electrical utility restructuring.

Historically, the United States has enjoyed the most reliable electric transmission system in the world. It also has enjoyed the cheapest and the best service. This gives a tremendous advantage to ordinary citizens, residential dwellers, business and consumers alike and also to American industry. It is a major factor in the high competitiveness of the American economy.

The electrical utility industry faces changes on every front, all of which bear upon the issue of reliability. About 20 States are now at some stage of switching over to retail competition. This raises question about how generation reserves will be maintained and how adequate transmission capacity will be preserved under even more competitive circumstances. It is evident already that reliability in certain areas of the country may be jeopardized by constraints in the transmission system at a time when building new lines is more difficult than ever.

Last summer we saw real stress on the system and we came very close to serious trouble, including major blackouts and brownouts, particularly in the Middle West.

On the environmental front, the timing of new regulatory requirements is going to result in plants being temporarily shut down. This means that reliability is going to again be stressed. I would note this threatens to occur at the worst possible time in the need to maintain the system's reliability. And that is something to which EPA and others who are pushing for changes in the system could better direct their attention.

Last summer, as I mentioned, the Midwest experienced real difficulties which should be unsettling to anyone concerned with electric reliability and the well-being of consumers. Although we did not have blackouts, these were narrowly averted and only then because a number of customers were curtailed and because things like rolling cutbacks occurred. Utilities in this region did it by the book, but that did not lessen the inconvenience and the costs to those whose service was interrupted.

I would note that a lot of wholesalers got into the business and a fair number of them were incapable of delivering power at the time and under the terms that their contracts required. I think that is something we better take a look at because I would note that in most instances, the bills before us, and other proposals, im-

pose less requirements for good character, financial capability, and other things important than do the requirements of State law with regard to beauticians.

Let us look a little bit at what happened last year. Only a small volume of power was sold at spectacular prices but those were in the range of $7,000 per kilowatt hour. In California, they went $9,000 and more per kilowatt hour. These price spikes should warn us that we can ill afford to take the stability of our electrical utility system for granted in a time of power change, particularly as it appears that the level overall of reserves is falling.

State regulators and utilities in the Midwest are braced for another difficult summer. And it behooves all of us to closely examine the forces at work in this rapidly changing marketplace.

I want to commend you again, Mr. Chairman, for holding this hearing. And I want to tell you how important it is that we look to see what is going to occur with regard to the question of reliability of service. Clearly, this must be one of the committee's central concerns as it considers—as it continues its deliberations on these matters. Again, I commend you and I thank you, Mr. Chairman.

[The prepared statement of Hon. John D. Dingell follows:]

PREPARED STATEMENT OF HON. JOHN D. DINGELL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Today's hearing touches on one of the most important issues in the electric restructuring debate. Historically, the United States has enjoyed the most reliable electric transmission system in the world. This is a tremendous advantage to residential and business consumers alike, and one which we simply must maintain.

The electric industry faces change on every front, all of which bear on reliability.

About twenty states are at some stage of switching over to retail competition. This raises questions about how generation reserves will be maintained, and how adequate transmission capacity will be preserved, under ever more competitive circumstances.

It is evident already that reliability in certain areas of the country may be jeopardized by constraints in the transmission system, at a time when building new lines is more difficult than ever.

On the environmental front, the timing of new regulatory requirements will result in plants being temporarily shut down, which threatens to occur at the worst possible time in terms of the need to maintain the system's reliability.

Last summer the Midwest experienced difficulties which should be unsettling for anyone concerned with electric reliability and consumers' wellbeing. Although we did not have blackouts, these were narrowly averted and only because certain customers were curtailed. Utilities in the region did this by the book, but that did not lessen the inconvenience and cost to those whose service was interrupted.

And while only a small volume of power sold at the spectacular prices in range of $7,000 per kilowatt hour, these price spikes serve notice that we can ill afford to take the stability of our electric system for granted in this era of rapid change. State regulators and utilities in the Midwest are braced for another difficult summer, and it behooves all of us to closely examine the forces at work in this rapidly changing marketplace.

I thank the chairman for holding this hearing and for focusing on what certainly must be this Committee's central concern as it continues its deliberations on the future of the electric industry.

Mr. BARTON. Thank you, Mr. Dingell.

We recognize the distinguished gentleman from Kentucky, Mr. Whitfield, for an opening statement.

Mr. WHITFIELD. Mr. Chairman, thank you very much. Although I was not in Congress at the time, I was involved in deregulation of the airline industry, the railroad industry, and the trucking industry, all of which I supported. And when you represent an area

of the country that has some of the lowest rates in the country for electricity, you want to proceed with these hearings with an open mind but also to look closely at issues like reliability and others and their impact on the district that you represent.

So I am delighted that we are continuing these hearings and particularly today to focus on reliability. I noticed that we have two panels of nine witnesses, all of whom have a lot of experience in this area, and I know that their testimony will be quite helpful to us as we proceed to explore this opportunity of deregulation. I yield back the balance of my time.

Mr. BARTON. Thank you. I recognize the distinguished ranking member, Mr. Hall.

Mr. HALL. Mr. Chairman, thank you very much. I think today's hearing on transmission and reliability issues is probably one of the most important hearings that we will have today as we address the Federal Government's role in the restructuring of the electric utility industry.

It seems to me that the issues that are before us today are not mandates and the dates certain are the real centerpiece of what might be contained in any Federal legislation. Reliability has got to be the one word that we can't give up on, our right to rely or someone to call in case it fails. And quality. And, of course, quality is the end word for reliability and transmission.

So I am glad to see us get away from talking about mandates and dates certain and all of that and get to what the real centerpiece of what this thing is. These are unique Federal issues, issues that can only be dealt with by Congress, and what we ultimately do will have profound implications on reliability, and that is reliability of the power system and the viability of all the stakeholders that use it.

Now, Mr. Chairman, I expect that there will be a number of questions and additional issues raised here today that are going to need even some further examination, which will lead us into other questions and answers that we need to seek to make the puzzle fit together. While I am not a fan of endless hearings, I think we owe it to ourselves to make certain we have a good grip on all the policy options. It looks as if we need it. If it looks that way, why I know and hope you will schedule such additional days as are required to develop a thorough and complete record.

I know you, Mr. Chairman, and I know your background. I know that you have been recognized as engineer of the year in your own State, that you have an inquiring mind—and I am buttering you up here.

Mr. BARTON. Keep buttering.

Mr. HALL. You are enjoying it, aren't you?

Mr. BARTON. It is good.

Mr. HALL. And the courage to act. You know, those are ingredients that a good chairman needs. Believe me, Joe Barton has every one of those. So it is a pleasure to work with him and take this information. That is the reason we have the interest in this legislation. That is the way you attracted "his honor" here to testify for us today, so it is too important to the economic well-being of this country not to build a complete and accurate record and that is what we are doing.

I think we need the best minds to come before us and the consequences of not doing it and not doing it right can be very unfortunate. Speaking of the best minds, we have some of them here today, Mr. Chairman. Thank you for being here, and other witnesses. I want to issue a special welcome, if the chairman hasn't already done it, to Trudy Utter of Garlington, Texas, who is on our second panel.

I yield back the balance of my time, Mr. Chairman, unless you would like me to talk about you a little more, but I think I read it just exactly as you wrote it.

Mr. BARTON. I don't think the recording clerk got it down, though.

Mr. HALL. Would you like a second reading?

Thank you, Mr. Chairman.

Mr. BARTON. Thank you, Congressman Hall. The Chair would like to recognize the distinguished gentleman from the great State of Tennessee, Mr. Bryant, for an opening statement.

Mr. BRYANT. Thank you, Mr. Chairman. I was going to echo the remarks of Mr. Hall up to the point where he started talking about you, and then I realized what we had was two Texans here. I looked down there at Ed Markey from Massachusetts, and we kind of shook our heads. I just want Texas fans to realize there would not be a Texas were it not for Tennessee, Sam Houston, David Crockett, and all those good volunteers we sent down there to help them out.

Mr. BARTON. Amen to that, brother.

Mr. BRYANT. Amen. Along that line, I do want to echo what Mr. Hall and Mr. Whitfield said, and others I am sure had said before I arrived, about this issue being an important one—along with the cost, I think, low cost, I think reliability is the other key to any system that we go to in restructuring. I am just pleased to be here today and also to welcome Matthew Cordaro, a friend I have known from years past in Nashville. He is the President and CEO of the Nashville Electric Service and will be testifying today on behalf of the Large Power Council. I look forward to hearing from Matthew and the other distinguished members of this panel, and would simply remind all of you that, as you know the business of Washington—we are at various meetings throughout the day, and at times you will see us come and go, and it is not anything that you should view as disrespectful. It is just that we can only be at one place at one time. We unfortunately are scheduled to be at other hearings throughout the Capitol area today, so if we have to leave, that is our reasoning or excuse early on; but again, we thank you and look forward to hearing from your distinguished panel. Mr. Chairman.

Mr. BARTON. Thank you. I might point out that my relatives, way back when, came from eastern Tennessee but they got to Texas about 1840.

Does the gentleman from Massachusetts, Mr. Markey, wish to make an opening statement?

Mr. MARKEY. Thank you. Thank you, Mr. Chairman, very much. As we move from the era where the wholesale demonopolization of the electricity marketplace, which was enacted and ultimately implemented pursuant to the Energy Policy Act which was passed out

of this committee in 1992, to an era of retail competition, it is very important for us to deal with the issues of reliability. That is, guaranteeing that the lights don't go out or dim in people's homes, that their television sets work, that they are never interfered with, that industries don't have unfortunate interruptions of their service. After all, that is what the American economy is all about. And I think that is really where our committee once again comes into play.

We have an opportunity to make sure that as we break down these State and relatively small regional conglomerates and create national marketplaces, we have to make sure that as electricity is being wheeled around the country, that there are guarantees that the system is going to be reliable, that all parts of it understand that they have a responsibility now to other parts of the country to guarantee that the electricity is flowing into every home, every industry in the United States.

And toward that goal, I have been able, without question, to partner with a great Texan, a man whom I admire, and I think someone who as a partner is somebody who I believe will help to give us the leadership which we need. And, of course, I am speaking here of Tom Delay, the Majority Whip, who has introduced with me a piece of legislation on these issues to guarantee——

Mr. BARTON. Is he a member of this subcommittee?

Mr. MARKEY. You have got to have a Texan to be in this fight. I feel a little bit like I am at the Alamo a lot of the time, coming in from another State. So I am looking for all the help I can get. These Texans are tough.

So, Mr. Delay and I have introduced a piece of legislation that would establish authority over the North American Electricity Reliability Council and the regional reliability councils, enhance FERC's authority to deal with market power abuses that could degrade reliability, and create incentives for new transmission siting. It seems to me that this is the kind of thing that our subcommittee is uniquely qualified to be able to deal with.

As we move from smaller, more isolated regional and State-based electricity networks to national networks, in turn we have a responsibility to make sure that these national networks in fact are effective.

I thank you, Mr. Chairman. I share the gentleman from Texas, Mr. Hall's admiration for your knowledge in these areas. I think that we are really kicking off this subject with just the right kind of hearing today and I look forward to working with both of you toward the goal of resolving this issue this year. I thank you, Mr. Chairman.

Mr. BARTON. Thank you, Congressman Markey. We recognize Mr. Burr from North Carolina for an opening statement.

Mr. BURR. Thank you, Mr. Chairman. I would be remiss if I didn't also highlight your good qualities and follow up on Mr. Bryant's suggestion that had it not been for Tennessee, there would have been no Texas, and had there not been the kind gift of North Carolina, there would have been no Tennessee. So now that we have gotten to the front of the food chain——

Mr. MARKEY. Can I say something here? I am going to put in a word for Plymouth Rock here.

Mr. BURR. If you can bring that rock in. I have learned one valuable thing this morning: why Texans wear boots and high pants.

Mr. BARTON. I think he has gone to meddling now. Time is up.

Mr. BURR. I do, on a serious note, want to thank the chairman for the continuation of this process. I believe moving forward is the thing for us to do. We have a great set of witnesses today to hopefully guide us through, and I only wish that the answer to the reliability question were as easy as the lights that somebody in the back of the room cutoff just a few minutes ago and very quickly cut back on but. It is not that simple to identify where the problem is, and in many cases the problem exists before you know there is one.

And I think that one of the responsibilities of the industry and of the Congress is as we move forward to better understand how to have the safeguards and to hopefully take—Mr. Hoecker, your first paragraph where you said, "Let markets not regulators, determine the price of," and you had "wholesale power," and I think our attempt is just to say "power." I am confident the markets can do it and that we can have the assurances of reliability and the effectiveness of our transmission system.

And with that, I yield back, Mr. Chairman.

Mr. BARTON. Thank you, Congressman Burr.

We now recognize the gentleman from Ohio, Mr. Sawyer. I am interested to see how he is going to talk about his State in the beginnings of the great State of Texas.

Mr. SAWYER. Mr. Chairman, while I live in Ohio, my family first came to this country through Virginia, one of those dates that you memorized in your history books. I have always hesitated to talk about that and I discovered why when Kika de la Garza told the story that he loved to tell. I am sure you know about when he was first asked, when he first came to the Congress, by the daughters of Texas how long his people had been in this country, and he paused for a moment and smiled and said, "Well, it is kind of hard to tell. You see, first, we lived in Spain. We lived so many places. We lived in Spain and we lived in Mexico. Then we actually lived in the Republic of Texas and then we lived in the Confederacy, and then finally lived in the State of Texas and, you know, we never left the land. We settled in 1604." It puts things into perspective for all of us as you might——

Mr. HALL. I think my uncle Christopher knew your people.

Mr. SAWYER. To get back to the topic, one of my staff clipped an item that noted trade journal, Rolling Stone, in which John "Cougar" Mellencamp observed that in the thirties, rural electrification brought electricity to rural dwellers and with that came radios, record players, music. According to Mellencamp, his upcoming tour will be called the "Rural Electrification Tour." In many ways, he is trying to take from one era and build into another. It is exactly what we are trying to do.

I have a longer opening statement that I would like to offer for the record, but I just want to make one observation; and that is, today's transmission structure works but it works largely by the accident of physics and not through any particularly well-crafted, thoughtful, far-seeing vision of what an effective transmission system ought to look like. It really comes about because various service territories, rate of return, regulated entities, really abut up

against one another, and it provides the capacity for product to move.

In that sense, it seems to me that it is very much like the condition of the U.S. highway system prior to the 1950's. Yes, people could get from one place to another and it worked reasonably well, but it was wholly unsuited to the kind of commerce that developed in the fifties and sixties and since then. With the growth of the interstate highway system, the highway system became a backbone of commerce in the United States and, in many ways, created personal freedom that allowed communities to grow and develop in wholly natural ways. But those systems followed the siting of the interstate highway system, that growth.

We face a similar circumstance here where the development and growth of a transmission system can be the genuine backbone of competition in this industry as it evolves in the next century. It is that which it seems to me offers the greatest opportunity for an effective and flexible Federal framework within which that private growth can take place.

How well we do that is really going to be at the heart of how well we succeed in this large national undertaking of the deregulation and restructuring of a large and complex century-old business. We have the strongest economy on Earth. It is in no small way due to the effectiveness of that system that has grown to this point, and how well we nurture that growth in the coming century may well depend on how well we do this job here.

With that I conclude my comments and thank you, Mr. Chairman, for your latitude in offering——

Mr. BARTON. Thank you.

I recognize the gentleman from Oklahoma who has been one of the strongest advocates for this issue and has worked tirelessly on it for many years. Mr. Largent of Oklahoma.

Mr. LARGENT. Thank you, Mr. Chairman. Thanks for having this hearing. We have got a number of issues to work on. I am excited that we are developing the momentum. The question is not whether we are going to do electricity restructuring, it is just when. And I think reliability is one of those issues that is important to everybody.

And so I look forward to hearing from both panels this morning on what we need to do to make our transmission system—if in fact moving to a restructured environment actually can improve reliability and transmission innovations. So thank you for holding this hearing and I look forward as we continue the march forward on electricity restructuring.

[The prepared statement of Hon. Steve Largent follows:]

PREPARED STATEMENT OF HON. STEVE LARGENT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OKLAHOMA

Thank you, Mr. Chairman, for continuing the forward momentum of comprehensive restructuring of the electricity industry monopoly with this hearing on reliability and transmission issues in a competitive market.

When those with concerns about the federal role in electricity restructuring ask why we need to move at the federal level—ensuring nationwide system reliability is among the best of reasons. In fact, now that 21 states have moved toward a restructured marketplace it is critical that reliability provisions be enacted at the federal level.

While I believe that the need exists for strengthened reliability provisions regardless of whether you support federal restructuring legislation, I also believe that it should be a vital part of any restructuring bill that this subcommittee considers later this summer.

I think the witnesses today can enlighten us on all the major issues associated with reliability and transmission in competitive markets, beginning with FERC Chairman Hoecker. In addition, I look forward to hearing about more pure market solutions to increasing reliability and transmission capabilities. These solutions include superconductor technologies that maximize current transmission capacities by reducing line losses and distributive power advances that place the generation closer to the end user. I look forward to their testimony.

Last week, Secretary Richardson unveiled the Administration Electricity bill and I believe momentum grows each day that this Subcommittee sits down and works through these issues. I think we will soon discover that we can move a good, fair, bipartisan bill to the floor because there is more that joins us then separates us. The importance of reliability of our electrical energy is something I think we can agree on.

Thank you once again Mr. Chairman.

Mr. BARTON. Thank you. Does the gentleman from Georgia, Mr. Norwood, wish to make an opening statement?

Mr. NORWOOD. No, Mr. Chairman. Thank you very much for having the hearing. I would like to offer my statement for the record. It is very lengthy, but frankly I have talked so much this week I am tired of hearing myself talk so I will pass.

Mr. BARTON. The audience appreciates that, I am sure.

Does the gentleman from Illinois, Mr. Shimkus, wish an opening statement?

Mr. SHIMKUS. Thank you, Mr. Chairman. Thank you for holding this hearing. I just look forward to hearing today how the regional transmission organizations, expanded NAERC authority, and additional FERC authority will help address price spikes. Of course, Illinois experienced those last year. I think it would be a good day to get some questions answered. So I want to welcome Chairman Hoecker, and I look forward to the testimony.

Mr. BARTON. Being no other members present—oh, I am sorry. I didn't see Mr. Wynn. I apologize.

Mr. SHIMKUS. He is small.

Mr. BARTON. I recognize the distinguished gentleman from the great State of Maryland, Mr. Wynn, for an opening statement.

Mr. WYNN. Thank you, Mr. Chairman. I will be brief. Let me also applaud you for holding these hearings and continuing this process of moving this forward.

I am particularly interested in today's hearing because I think it hits on an area where we may in fact have a significant Federal role. We are looking at a system that was designed around a regional concept of transmission. We are now entering an era in which we will be looking at a very different interstate, a national interstate system, larger amounts of electricity traveling longer distances. And I think that will pose new challenges in the area of reliability. I am very excited to hear the witnesses and would like to submit a full statement at a later time.

Mr. BARTON. I want to apologize to Congressman Wynn. I recognized two Republican Congressmen who came in after you. I sincerely didn't see you. I apologize.

Mr. WYNN. No problem.

Mr. BARTON. The Chair, taking a very careful look around the room, I see no other members present. All members that are not

present will have the requisite number of days to put a written statement in the record. All members present who wish to elaborate on their statements will do so without objection.

[Additional statement received for the record follows:

PREPARED STATEMENT OF HON. CLIFF STEARNS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Thank you Mr. Chairman. As always is the case, I commend you for the decision to hold a hearing on this subject, and for your diligent work on the broader topic of energy-related matters. Today's hearing is timely considering the current State and Federal efforts toward restructuring.

At the heart of the Federal debate are the issues of transmission and reliability. They are the cornerstone of the electric utility industry. Put simply, Americans expect power to reach their homes and turn on the lights each and every time they flip a switch.

In developing a Federal approach to competition, we have an obligation to consider the merits of competition and its effect on the reliability of the system. The current scheme is remarkable. System reliability is achieved by a dynamic and intricately crafted framework. The organization chiefly responsible for this transmission framework and the reliability of bulk electric systems in the US is the North American Electric Reliability Council, or NERC.

The best and most important features of the NERC is that it was developed by the utilities, not by the government, and that it depends entirely upon itself for guidance and regulation. But there is a drawback in that NERC does not enforce compliance with reliability standards because it lacks enforcement power. Additionally, FERC is not authorized to enforce reliability standards.

Given increasing competition in the electricity industry, some propose that we establish a new self-regulating reliability organization subject to FERC certification and oversight that would develop enforceable reliable standards. A number of legislative proposals provide for enforcement of reliability standards by a FERC-certified self-regulating organization.

Another key issue in this discussion will surely be the fact that the transmission system is not subject to the same set of rules. FERC is only authorized to regulate the transmission systems owned by investor-owned utilities. FERC does not regulate the other 34% of the transmission system owned by the Federal electric utilities, State and municipal utilities, and rural electric cooperatives. Additionally, distributive generation technology presents the question of how to interconnect this dispersed generation with the traditional distribution grid.

Many believe that a competitive market would better operate if the transmission market were fully open and subject to one set of rules. This would require legislation to amend the Federal Power Act and other laws.

Transmission owners are collaborating to create regional transmission organizations, or RTO's to manage and operate the transmission grid and provide nondiscriminatory access to the grid. RTO's are proposed as one response to address concerns that internal practices and procedures would be inadequate to prevent manipulation of transmission systems to limit competition in generation. FERC is expected to issue a notice of rulemaking on RTO's in the near future. This may provide guidance, however some fear that FERC may exceed its authority under current law in the rule.

Clearly a consensus is developing that the transmission and reliability are foremost in the list of issues Congress must deal with in formulating a Federal deregulation strategy. I anticipate a fruitful and enlightened debate today, I welcome our panels and I look forward to their testimony. Again, I commend the Chairman of the Subcommittee for his work on this issue.

Mr. BARTON. The Chair would now like to recognize our first witness, the distinguished Chairman of the Federal Energy Regulatory Commission, The Honorable James Hoecker, and your statement is in the record in its entirety. We will recognize you for such time as you may consume.

We will just simply say as a personal aside that it has been a pleasure to share the dais of several events with you in the last 3 months, and I am sure we are going to continue to do so in a very cooperative and congenial way. The floor is yours.

STATEMENT OF HON. JAMES J. HOECKER, CHAIRMAN, FEDERAL ENERGY REGULATORY COMMISSION

Mr. HOECKER. Thank you, Mr. Chairman, and members of the subcommittee. It is a pleasure to be here today to discuss the current restructuring of the electric power industry. I, too, commend you, Mr. Chairman, and members of the subcommittee for focusing on this critical development involving the Nation's most capital-intensive industry.

As you requested of me, I plan to testify this morning on matters related directly to electrical reliability and transmission issues. Of course, these are precisely the issues that concern the Commission most in its continuing effort to promote competitive bulk power markets, and you certainly have my commitment, Mr. Chairman, that the Commission will support this subcommittee's investigation of these issues in any way you think is appropriate.

Competition is growing in wholesale power markets in response to the Energy Policy Act of 1992, technological and business developments and the Commission's effort to remove barriers to competition and let markets, not just regulators, determine the price of wholesale power.

Wholesale competition will provide substantial benefits to industry and to consumers. Among other things, it offers the prospect of reduced prices for end users, even where retail choice is not available, by lowering the cost of power purchased for them by utility suppliers.

But getting to competitive markets is a journey that is not without its complications, however. The Commission's Order No. 888, which in 1996 made open nondiscriminatory transmission access an important feature of the bulk power market, did not solve all problems. Significant impediments to full competition in wholesale markets remain. Even for utilities already subject to the requirements of Order No. 888, there remain substantial concerns about the use of transmission to deny access to competing sellers of power. Moreover, substantial gaps remain in the availability of open access transmission service nationwide.

Approximately one-third of the Nation's integrated transmission grid is, with limited exception, not subject to the Federal Power Act or to the Commission's open access requirements. These gaps reduce the trading opportunities and prevent customers from realizing the full benefits of competition. And although the laws of physics and the growing number of bulk power transactions mean that wholesale markets tend to operate across States and regions, management of the transmission system which supports this trade is not regional in most parts of the country. So competition and efficiency benefits are consequently being lost.

Ironically, Mr. Chairman, even the arrival of competition itself, for all its promise, creates some new problems. Because there are many more bulk power transactions and because transmission facilities are increasingly used in ways not contemplated when they were planned and built, the need for better congestion management and more efficient pricing and regional planning is likewise increasing.

But, most importantly, reliability of electric service, so vital to the Nation's economy and the welfare of individual citizens, may be challenged in significant ways.

Assigning responsibility for maintaining transmission system reliability is more problematic in a dynamic environment where market participants have competing or conflicting commercial interests in how the grid is to be operated.

Well, what are the solutions? In my view, it would be a mistake to resurrect Federal command and control regulation as our policy goal. The FERC's basic policy continues to be to substitute competition for wholesale price regulation where possible, and to maximize competition in bulk power markets by facilitating access to transmission services everywhere.

It is consistent with these objectives and the competitive goals set by Congress in the Energy Policy Act that I commend to you a select few Federal legislative proposals:

The Congress should first provide that all transmission facilities in the lower 48 States must operate under the same general open access transmission rules that apply to investor-owned utilities.

Second, it should promote regional management of the transmission grid by clarifying the Commission's authority to establish new regional transmission organizations.

And third, it should establish a fair and effective program to protect reliability of the transmission system.

The administration's proposal and various House and Senate bills have addressed these matters. To my mind, development of regional transmission organizations or RTOs that have real control of grid operations, that are independent of commercial interests of market participants and that cover a large market area represent the most effective and expeditious way to view these issues together and to begin developing solutions.

Now, in conclusion, I recognize that these proposals may be misperceived as extraordinary or unnecessary expansions of Federal regulatory powers, contradicting what we at the Commission otherwise are saying about greater reliance on markets and lighter-handed regulation.

And not surprisingly, perhaps my view is quite different and it is different for three simple reasons. First, as I noted in my written testimony, the Commission is already heavily involved in all these areas, often because the electric industry or its customers seek our assistance. Second, the Commission has been careful to recognize the views and to accommodate the legitimate regulatory interests of States. And most importantly, Mr. Chairman, the Commission is aggressively promoting competition and wholesale markets, not more onerous regulation, as our primary policy objective.

I want to thank you, Mr. Chairman, again, for asking me to be here this morning and for the opportunity to offer my views on this important topic, and I would be pleased to respond to any questions you may have.

[The prepared statement of Hon. James J. Hoecker follows:]

PREPARED STATEMENT OF HON. JAMES J. HOECKER, CHAIRMAN, FEDERAL ENERGY REGULATORY COMMISSION

Mr. Chairman and Members of the Subcommittee: I am pleased to appear before you today to discuss key aspects of the current restructuring of the Nation's electric

power industry, namely reliability and transmission issues. Thank you for this opportunity.

The Federal Energy Regulatory Commission (Commission or FERC) is fully engaged in the critical task of promoting competition in the wholesale or "bulk power" market, consistent with the goals of the Energy Policy Act of 1992. To achieve these goals, the Commission's fundamental regulatory policies are to substitute competition for price regulation in wholesale power markets to the extent possible, and to regulate essential transmission facilities so as to enable competition in power markets. Today I will address the progress the Commission and the industry have made in creating an efficient, reliable, fair, and transparent wholesale market, and identify the important ways in which the Congress can further assist the Commission in completion of this important task.

My testimony will focus on three key issues for advancing robust competition—open access to all transmission facilities, efficient regional operation of transmission facilities, and mandatory reliability standards. First, there remain important gaps in the availability of open access transmission service nationwide, which, if left unaddressed, will impede the development of competition and prevent wholesale customers from realizing the full benefits of competition. Second, bulk power markets operate regionally and should be governed to foster competition and efficiency by increasing the trading opportunities of many participants. However, management of transmission systems is not regional in most cases, and thus the benefits of full competition may be lost. Third, the reliability of electric service, so vital to our Nation's economy, may be threatened by the difficulties of assigning responsibility for transmission system reliability in a dynamic environment where participants have competing or conflicting commercial interests in how the grid is administered. The Commission is increasingly asked to exercise its existing, but inadequate, statutory authority to ensure compliance with industry standards. To fully realize the competitive goals set by Congress in the Energy Policy Act of 1992 and promoted by the Commission since then, additional legislation in these areas is needed.

The Status of Open Access Transmission

The Commission works to ensure a well-functioning bulk power market. It oversees sales of electricity by "public utilities" to other utilities—that is, wholesale transactions. "Public utilities" mainly include investor-owned utilities and exclude the federal power marketing administrations, municipal utilities, and most rural electric cooperatives. Moreover, the Commission does not regulate sales to consumers or electric local distribution services. Those retail services are generally regulated by the states. The electricity prices paid by retail consumers nevertheless include the cost of any power purchased by their utility suppliers in wholesale markets. So, competition in bulk power markets ultimately benefits consumers by reducing the cost of power supplied to them, whether or not a state chooses to allow retail competition.

The Commission's pro-competitive approach tracks what is occurring in the industry itself. Once characterized universally as heavily regulated, vertically-integrated monopolies, public utilities have been increasingly subject to the forces of competition over the past two decades ago, due to various economic, legislative, and technological developments. Congress gave competition a strong boost in the Energy Policy Act of 1992, increasing the Commission's authority under section 211 of the Federal Power Act to order transmission service in appropriate circumstances.

The Commission fostered the development of competition by adopting light-handed regulation for power suppliers shown to lack market power. Specifically, the Commission began allowing such power suppliers to sell at market rates instead of rates determined by the Commission based on the cost of service. To date, the Commission has authorized market-based rates for literally hundreds of power suppliers, including power marketers and traditional investor-owned utilities.

Understandably, competition in bulk power markets will never be vibrant unless wholesale sellers are able to deliver power to any buyers in the market. Access to buyers is key. In the electric industry, transmission facilities make this possible. These facilities form an interstate grid for delivering power, in the same way the interstate highway system allows trucks to deliver other commodities. There are important differences, however. Electricity cannot be stored. It is delivered instantaneously over an integrated network of wires and a transaction between two parties can affect the capacity of the system and the transactions of others. Most importantly, the electrical grid is owned by individual utilities and, absent regulation, these utilities can effectively prevent the use of these facilities by their competitors.

Several years ago, the Commission recognized that competition in wholesale markets was being inhibited by the lack of non-discriminatory access to transmission facilities. Sellers owning transmission facilities were stifling competition by dis-

criminating against others seeking to use their transmission facilities, either by denying or delaying transmission service or by imposing discriminatory rates, terms and conditions for service.

Consequently, the Commission in 1996, through a major rulemaking called Order No. 888, ordered open (non-discriminatory) access to the transmission facilities of public utilities. Order No. 888 is an exercise of the Commission's duty under sections 205 and 206 of the Federal Power Act to ensure non-discriminatory transmission services.

Since I last testified before this Subcommittee in October 1997, the pace of change among utility companies has continued to accelerate. The Commission has reviewed and acted upon 18 major utility mergers. Fully ten percent of the Nation's electric generation plants have been divested by traditional electric utilities. Electric utilities and gas pipeline or distribution companies have combined to form major energy concerns. The number of power marketers and independent generation facility developers entering the marketplace has continued to rise, placing additional competitive pressure on traditional utilities. Five independent system operators (ISOs), three of which are currently operational, have been established to operate entire regions of the transmission system. Three state legislatures now require their utilities to join a regional transmission entity. Trade in bulk power markets has continued to increase significantly and the Nation's transmission grid is being used more heavily and in new ways. Finally, 18 state legislatures have enacted legislation to initiate, or set a date for, retail electricity competition. In other words, the industry is changing to meet the strategic and economic challenges of the competitive marketplace.

Yet, despite the successes of Order No. 888 in fostering competition, not all potential market problems have been addressed. The remaining impediments to full competition fall largely into two categories. First are the engineering and economic inefficiencies inherent in the current operation and expansion of the transmission grid, inefficiencies that are hindering fully competitive power markets and imposing unnecessary costs on electric consumers. Changes in trade patterns and industry structure have made it more difficult to maintain reliable grid operations, manage transmission congestion, and plan for expansion of transmission facilities. Without further reform, traditional pricing and transmission practices will likely hinder the further development of competitive and efficient bulk power markets. Among these impediments are the "pancaking" of transmission access charges from one system to the next, the absence of clear and tradeable transmission property rights, and the virtual absence of a secondary market in transmission service.

The second category of impediments consists of continuing opportunities for transmission owners to unduly discriminate in the operation of their transmission systems so as to favor their own or their affiliates' power marketing activities. As profit-maximizers, utilities that control monopoly transmission facilities and also have power marketing interests have every incentive to deny equal quality transmission service to competitors. Order No. 888 addressed many forms of undue discrimination by requiring public utilities to separate transmission and power marketing functions, to take transmission service under the same tariff as available to other transmission customers, and to abide by standards of conduct that prohibit the preferential treatment or sharing of information between the utility's transmission and power marketing functions.

In the wake of Order No. 888, however, many market participants continue to allege, and the Commission has in some cases confirmed, that transmission service problems related to discriminatory conduct remain. Allegations relate to standards of conduct violations and manipulations of the operation of transmission systems to frustrate power marketing competitors, for example by the imposition of transmission curtailments on congested lines. As might be expected in maturing commodity markets, there is a great deal of mistrust among market participants with respect to the fairness of the system. The pace and scope of restructuring and the future of certain companies therefore remain uncertain. Nothing is more detrimental to shareholder values than uncertainty.

These issues represent a challenge to the industry and to the Commission. Although the Commission is committed to full competition in wholesale markets and will pursue that goal through all reasonable means, Congressional action may prove critical to our ability to reach that goal.

Gaps in Open Access

Order No. 888's mandate for open access transmission has key omissions. The Commission's authority does not apply to Federal power marketing administrations, municipal utilities, and most rural electric cooperatives. While the Commission has authority to require these entities ("non-public utilities") to provide transmission

service based on a case-specific application under section 211 of the Federal Power Act, it lacks authority to generically order all of them to offer service under open access transmission tariffs.

Approximately one-third of the Nation's integrated transmission grid is beyond the reach of Order No. 888's open access requirements. For example, because the Federal power marketing administrations that own transmission (such as the Bonneville Power Administration and the Western Area Power Administration) and the Tennessee Valley Authority are not public utilities, their transmission systems are beyond the Commission's authority to require open access. Similarly, many municipal utilities and cooperatives control transmission but need not comply with our open access rules. In fact, approximately 70,000 circuit miles of interstate transmission—over 30 percent of all interstate transmission—are not subject to the Commission's open access authority. An additional 7,000 miles of intrastate transmission within the Electric Reliability Council of Texas (ERCOT) is beyond our open access authority.

Non-public utilities are nevertheless encouraged to offer open access transmission service under the concept of "reciprocity." In other words, when these utilities take transmission service under a public utility's open access tariff, they must also offer reciprocal service to the public utility, unless the public utility or the Commission waives this requirement. Several non-public utilities have begun offering open access service under a FERC-filed tariff. However, many transmission-owning non-public utilities still do not offer open access service.

Efficient markets in network industries generally require that all service providers be subject to the same rules. This gap in the availability of open access service on the interstate grid raises serious questions about how competitive and efficient the interstate power marketplace can become. Gaps in open access to the grid can cause customers to pay more than they should for power. There is little more that the Commission can legitimately do to address this problem under existing law.

Only a change in the Federal law can effectively address this difficult gap in the availability of open access transmission. Such legislation need not unnecessarily intrude into the activities of these entities. In fact, the experience of those non-public utilities that have voluntarily adopted open access tariffs demonstrates that open access service consistent with the Commission's requirements is as workable for non-public utilities as for public utilities, although appropriate legislation is needed to address related tax consequences. However, the benefits of competitive access will be delayed until transmission access is universal. The Administration's proposed legislation addresses these issues, by extending Federal Power Act jurisdiction over the rates, terms and conditions for transmission services provided by non-public utilities that own, operate, or control transmission facilities under the same terms that apply to public utilities.

Regional Transmission Organizations

The wholesale electric business is changing rapidly from many smaller local markets to fewer, larger regional markets that usually span multiple states. Power sales in these large markets involve use of all the high-voltage power lines in a region. I believe it is essential, for reliability as well as for commercial reasons, that all of the transmission lines in a region be under the operational control of a single operator that has no financial interest in the more lucrative generation market. I call them Regional Transmission Organizations (RTOs). RTOs can include ISOs of the transmission system as well as independent transmission companies (transcos) that own and operate the system.

Grid regionalization is not a new concept. Bulk power reliability has been maintained for almost 40 years by voluntary regional industry councils. The Commission encouraged Regional Transmission Groups (RTGs) in the early 1990s to engage in regional planning. Order No. 888 encouraged, but did not require, the formation of ISOs. However, the increasing need for such regional organizations is evidenced by the fact that, without a regulatory or statutory mandate, the industry has already proposed or implemented RTOs in California, the mid-Atlantic states, New England, New York, and the Midwest.

If properly constituted and truly independent, RTOs will be a major step in addressing obstacles to competition and obtaining major efficiencies. First, RTOs will ensure that vertically-integrated transmission-owning utilities do not discriminate in favor of their own generation over another seller's generation. Second, RTOs can be structured to eliminate pancaking of transmission rates that raises the cost of moving power across multiple utility systems. Third, RTOs that have the proper tools can better manage transmission congestion, reduce the instances when power flows on transmission lines must be decreased to prevent overloads, and effectively solve short-term reliability problems. Fourth, RTOs can facilitate transmission plan-

ning across a multistate region and, by operating the grid as efficiently as possible, may give confidence to state siting authorities that new transmission facilities are proposed only when truly needed. Significantly, the Commission also will be more inclined to defer to the planning, pricing and control area decisions of an RTO if it fairly represents the interests of all stakeholders through open membership and fair governance procedures.

To achieve these benefits, the development of RTOs must focus on three criteria. First, RTOs must have real control of the grid, to ensure that use of the grid is efficient and non-discriminatory. Second, RTOs need to be independent of the commercial interests of market participants, so that decisions are accepted by all stakeholders as non-discriminatory and fair. Finally, RTOs need to include a large area, to allow a truly regional market to develop to the full extent desired by market participants. When RTOs meet these criteria, consumers will begin benefitting from the greater competition in broader, more vibrant wholesale markets.

RTOs can provide these benefits while taking account of state and regional preferences and circumstances. RTOs do not require a one-size-fits-all approach and can be custom-designed. The Commission has recognized the need to be flexible in how these organizations are established, in order to accommodate local concerns. For example, in considering RTO policy, the Commission has solicited state views extensively, including by holding eleven hearings—nine of which were outside Washington. The Commission also intends to provide additional opportunities for consultation.

The Commission is poised to act on RTOs generically. A generic instruction from the Congress would dispel uncertainties about the Commission's authority to order establishment of, and participation in, RTOs to promote efficient operation of bulk power markets. I feel confident that the Commission will preserve the ability of utilities joining an RTO to take into account the regional needs in various parts of the country, as well as flexibility to select the organizational format that will serve the region best. In my view, the Administration's proposed legislation addresses these concerns appropriately. A clear directive would enable the Commission to proceed to develop efficient, reliable regional power markets, which will significantly lower the cost of power to consumers, without the likelihood of court challenges.

Reliability

Let me turn next to reliability. In the past, regulators and industry participants relied upon voluntary industry organizations to establish reliability standards and practices. The regional reliability councils and the North American Electric Reliability Council (NERC) were composed primarily of the transmission-owning public utilities. These companies could and did rely upon voluntary cooperation and peer pressure for compliance. The approach worked well before the advent of competition and the Nation's electricity system became the envy of the world.

Competition in power markets increased concern that reliability rules could not be set or enforced in the same manner. Power markets today have extraordinary numbers of participants and numbers of transactions. The Secretary of Energy's Task Force on Electric System Reliability reexamined the consequences of these developments in detail. In brief, new and expanding demands for service on the system change operating conditions and the increasing number of sellers make it harder to stay competitive in many instances. Faced with competitive pressure, some participants may be prompted to cut corners on reliability.

The importance of reliability in America's supply of electricity has never been greater, however. The Secretary's Reliability Task Force recently observed that, as our economy becomes more dependent on computers and other electronic tools, power disruptions pose an ever-greater threat to productivity and even health and safety. The Task Force also found that ISOs are significant institutions for ensuring electric system reliability, and that bulk power systems can and should be operated more reliably and efficiently when coordinated over large geographic areas. Many observers, including NERC and the industry itself, have concluded that a mandatory system for reliability is needed to ensure that competition does not compromise the dependability of our Nation's electricity supply.

With the possibility of noncompliance with voluntary standards, and the current lack of clear authority for anyone to mandate compliance with reliability rules, industry participants have initiated several proceedings at the Commission to address specific reliability issues. In several cases, the industry has asked the Commission to adopt stopgap measures and to decide the lawfulness of new reliability measures under Federal Power Act standards ordinarily used to review rates and commercial practices. However, a Commission finding that reliability measures meet these Federal Power Act standards does not ensure that the measures are themselves sufficient to maintain system reliability.

In 1998, for example, NERC initiated a proceeding seeking Commission review of NERC's new procedures for reducing power flows to prevent overloads on transmission lines, so-called transmission loading relief (TLR). The Commission concluded that these procedures affected the terms and conditions of transmission service provided by public utilities because they determined which commercial transactions would be curtailed to prevent overloads. The Commission required these procedures to be filed and told the affected utilities to take additional steps to ensure that the procedures were non-discriminatory.

Similarly, another Commission proceeding was filed by industry participants to address NERC's "tagging" requirements. NERC's rules required transmission users to provide transmission operators with a variety of information about their transactions, such as the source of the power being transmitted, so that transmission operators could take quick, appropriate action when necessary for reliability purposes. In that case, the collection of information, by itself, did not change the terms and conditions of open access service provided by public utilities and, thus, did not need to be filed. However, the Commission held that public utilities still had to provide service according to the terms and conditions in their open access tariffs, unless and until they sought and were granted permission to apply different terms and conditions of service.

Finally, the Commission this month accepted on an experimental basis the beginnings of an entire set of regional reliability standards, proffered by industry participants. The Commission had previously never entertained such a request. This approach was proposed by the Western Systems Coordinating Council (WSCC), the regional reliability council covering the western United States. WSCC's proposal was contractual. Transmission providers could voluntarily sign contracts with the WSCC, agreeing to abide by the WSCC's reliability rules, and require generators connected to their transmission facilities to abide as well. Violations of the standards would result in penalties or other sanctions, subject to the Commission's review. Several reliability standards were filed with the Commission, which said it would defer to the WSCC's expertise, largely because of the representation enjoyed by diverse industry segments in the WSCC's processes. The Commission's limited role in this instance is to ensure the reasonableness of rates, terms and conditions of transmission service and to offer to mediate any disputes about possible violations.

Congress should make compliance with appropriate reliability standards mandatory. Despite the Commission's cautious acceptance of the WSCC's proposal, it recognizes that it is incapable of ensuring that reliability rules apply to all industry participants or that there is a widely-accepted process for adopting and enforcing reliability rules in this diverse power market. There appears to be an industry consensus that it can continue to work collaboratively to develop reliability standards, using a process in which all market sectors are fairly represented. Sufficient Federal oversight will then be needed to ensure that the standards maintain sufficient system reliability and are not unduly discriminatory or otherwise anticompetitive.

The broad support for both the WSCC filing and the reliability legislation proposed by NERC and included in the Administration's bill demonstrates the industry's recognition that federal reliability legislation and oversight will be important to the future integrity of electric service. It is nevertheless important to note that the Commission's role in a new reliability regime is largely reactive and does not impinge on the industry's ability to set its own standards and to apply them through a fair stakeholder process. By enforcing industry's agreements, the Commission can, however, prevent market participants from "free-riding" on the reliability efforts of others.

I would emphasize, in conclusion, that the states will also continue to play an important role in maintaining the reliability of electric service. Federal legislation should respect this role by striking an appropriate balance that permits states to continue their traditional activities in a manner consistent with the industry's mandatory reliability standards.

Transmission Siting

The construction of new transmission facilities, whether to serve local or regional needs, may represent an important means of obtaining the efficiency benefits of greater competition. As the Secretary's Reliability Task Force found, the reliability benefits of transmission enhancements can benefit many states, not just those where the facilities are sited. The grid is therefore being used increasingly for regional transactions. Even though the grid is being used increasingly for regional transactions, the siting of transmission and generation facilities is nevertheless subject to state law. In evaluating grid expansions, however, states may have difficulty balancing local impacts with regional benefits. State-by-state planning and the

siting of transmission facilities that are used increasingly to support regional markets may be an obstacle to sensible grid development.

The answer is not to federally preempt this traditional state role. I believe instead that it would be beneficial to develop institutions that engage in regional planning and siting of transmission facilities, taking into account the interests of all affected market participants and states. This type of institution could adopt a broad perspective of decisionmaking on proposed transmission expansions and fairly balance the local impacts and regional benefits of such expansions, as well as the suitability of transmission versus generation development. While such regional entities would be novel, the benefits of regional transmission planning may justify such an effort. The Administration's legislation provides one vehicle for balancing these interests, either by authorizing interstate compacts to form regional transmission planning agencies or by convening joint federal-state meetings to consider transmission capacity additions. I also suggest that RTOs could perform a similar planning function, although this would only be advisory to state siting authorities under existing law.

Conclusion

Competition is growing in the electric industry, in response to the Energy Policy Act of 1992 and the Commission's efforts to remove barriers to competition and to let markets—not regulators—determine the price of wholesale electric power. However, significant impediments to full competition remain.

As I stated before this Subcommittee in 1997, I believe that Federal legislation is needed to: establish a fair and effective program to protect bulk power reliability; bring all transmission in the lower 48 states within the Commission's open access transmission regime; and, clarify the Commission's authority to provide for regional management of the transmission grid through RTOs.

Aspects of the Administration's proposal and similar legislation addressing these issues have been criticized by some as expansions of Federal regulatory powers that are inconsistent with the themes of greater reliance on markets and lighter-handed regulation. I disagree. Consistent with the competitive goals of the Energy Policy Act of 1992, the Commission is aggressively promoting competition in wholesale markets. Competition in these markets offers the greatest potential consumer benefits because the cost of generation facilities is the largest part of the cost of electricity to ultimate consumers, far larger than the cost of transmission. Wholesale competition, however, cannot achieve its full potential without improved access to the interstate transmission grid and universal adherence to reliability rules. Thus, effective regulatory oversight of transmission and reliability is a critical prerequisite to greater competition in wholesale power markets. The Commission's objective, in the final analysis, is to create market structures that will permit it to cede important economic decisionmaking to the marketplace and to substitute light-handed regulation and market monitoring for traditional command and control regulation.

Federal action to ensure reliability and promote effective regional market mechanisms in the near future—whether from the Congress or the Commission—will be needed to establish a fully competitive wholesale power market environment for the benefit of all electricity buyers, including residential consumers. Wholesale competition will lay the groundwork for retail competition, where adopted, and continue to ensure efficiency and fairness even where retail access is delayed. I continue to believe that one cannot, in this time of industry transition, be both a believer in competition and an agnostic about market structure.

Thank you again for the opportunity to offer my views here this morning. I would be pleased to answer any questions you may have.

Mr. BARTON. Thank you, Mr. Chairman. I am going to recognize myself for 5 minutes and the question rounds will be 5 minutes. We are only going to have one round because we have the next panel, I think has seven or eight people on it, and we want to give ample opportunity for them.

My first question, Mr. Chairman, is a general question. Do you think that Congress needs to act in a comprehensive way or, as some have said, if we could not do anything and let the States handle this issue?

Mr. HOECKER. Mr. Chairman, I think the issues that I have outlined are issues that the States individually are incapable of addressing because they involve transmission and market issues that transcend State boundaries and cover entire regions. Comprehen-

sive legislation implies that you would address retail competition. The Commission really takes no position on those issues. We are, however, hopeful that comprehensive legislation is not sufficiently slow in developing and passing, that the particular solutions that I have talked about would be delayed inordinately.

Mr. BARTON. Do you feel that in the reliability area, that the agency that you head needs to have the ultimate authority, as opposed to some of these voluntary associations that have sprung up around the country?

Mr. HOECKER. Mr. Chairman, I think the basic system for developing reliability standards and ensuring the security of the system and the adequacy of generation over the years is a fundamentally sound one. That is, the industry has the expertise and certainly the commercial motivation to ensure the reliability of the system by developing appropriate standards.

The question arises as to how the voluntary or self-regulating organizations will be structured: Who will oversee the appropriateness of those governance structures and who will review the standards that are developed to ensure that they have no adverse implications for open access transmission and that they are fairly administered and uniformly enforced?

Our role, I think, would be primarily a reactive one and a light-handed oversight role, not the ultimate authority in the sense perhaps that you mean it. We want to make sure that the industry continues to do the excellent work that it has done in the past, but that it is not defeated in its goal of ensuring reliability by the fact that the market is so much more competitive and dynamic now than it has been historically.

Mr. BARTON. Do you see any benefit in giving the FERC the authority to help set up the system and to set up the ground rules and then sunset the authority over, as you put it, light-handed oversight, so we would put some provision in that gave a national agency like the FERC the ability to go out and interconnect, coordinate, and set up the system, but at a date certain that went away and the systems in place became self-regulating?

Mr. HOECKER. I think to a large extent it would be self-regulating in any event. I think that the development and adoption of standards and the application of those standards to the marketplace will be an ongoing process to reflect how the market changes and how trading patterns challenge the reliability of the system. Under those kinds of conditions, I believe that there may be a continuing role for the Commission in reviewing those standards over time.

I don't believe it is simply a matter of creating a governance for the NERC of the future and then stepping aside. I subscribe to basically what the administration's bill suggests, and that is an ongoing role.

Mr. BARTON. My time has expired. I have got one last question. What is your position or the FERC's position on extending authority to organizations like the Tennessee Valley Authority and the Boneville Power Administration, other PMAs, some of the co-ops and municipals right now that the FERC doesn't have authority over?

Mr. HOECKER. Mr. Chairman, I believe that all transmission in the country should be operated under the same open access rules. To the extent Federal power marketing agencies own, control, and operate transmission—and they don't all—to the extent that municipalities own transmission—and they all do not—I think that they should be subject to the open access requirements of Order No. 888 and the Federal Power Act. That is not to say that our Commission desires to regulate municipal utility operations. We simply want to make sure that the transmission system operates uniformly and efficiently.

Mr. BARTON. The Chair would recognize the gentleman from Ohio, Mr. Sawyer, for 5 minutes.

Mr. SAWYER. Thank you, Mr. Chairman. Mr. Chairman, in today's environment, transmission development is not easy even as it exists. There is a whole question of siting problems and the political and public relations difficulties that accompany all of that. But it seems to me that one of the abiding problems, at least in the current environment, that by comparison to other kinds of investment, the transmission has an inherently more difficult capacity to generate a rate of return on that investment, making capital formation a specific problem that attends to transmission investments.

In the environment that you imagine and that we are moving toward, how do you see the incentive for growth and development not of the first-tier markets but of second-tier markets and beyond, where in fact there may actually be gaps of adequate transmission and capacity today?

Mr. HOECKER. As I travel the country, Congressman, I have heard a great many concerns about the need to expand the transmission system or to site new generation, either to enhance reliability or to improve transmission capability, and I think that as we contemplate the disaggregation, if you will, of the industry and operating transmission on a kind of stand-alone basis, either under a wires company operation or through some sort of independent system operator, we need to provide mechanisms for attracting capital to expand the system as appropriate. There are a number of things that will facilitate that. Certainly, we need good pricing of transmission, pricing that recognizes the value of transmission under conditions of constraint or congestion and encourages the market to fund projects to expand transmission where there could be some commercial advantages in doing that.

We at the Commission may contemplate in the future things like performance-based ratemaking in the context of regional transmission organizations. We are open-minded about how to address this issue at the Commission, but I certainly think your concern is a legitimate one, and we want to ensure that transmission as a stand-alone enterprise remains a viable part of the business and maybe even a growth part of the electric power business.

Mr. SAWYER. I gather from what you have said, both in your answer to prior questions and your opening statement and now, that you are not wedded to any single governance structure but perhaps you would see those evolving to meet the different circumstances in which the need for transmission finds itself in various parts of the country. Am I right in that assumption?

Mr. HOECKER. That is absolutely right. I am very hopeful the Commission will issue a proposal in the next several weeks that will invite comment in part on that very issue. It is my personal wish that that proposal provide for flexibility in terms of how regional organizations are structured in the future.

Mr. SAWYER. Am I not correct that in the Senate in testimony there, you endorsed the idea and suggested it here as well today, that FERC should have the authority to order transmission entities to participate in a specific organization, transmission organization?

Mr. HOECKER. I think a clarification of our ability to do that would be appropriate. Our authority currently, Congressman, is our authority to remedy undue discrimination and anticompetitive effects. We think that gives us the ability to address these kinds of problems regionally, just as it did give us the ability to require open access. But it would be very helpful if Congress were to make it real clear in this regard.

Mr. SAWYER. It is not absence of authority today, but one that may not be sufficiently clear in your view?

Mr. HOECKER. That is right.

Mr. SAWYER. Good timing.

Mr. BARTON. You have one last question?

Mr. SAWYER. No, that is fine, thank you.

Mr. BARTON. The Chair would recognize the gentleman from Kentucky Mr. Whitfield, for 5 minutes.

Mr. WHITFIELD. Thank you, Mr. Chairman.

You mentioned in your testimony that the Secretary of Energy's Reliability Task Force recently observed that as our economy becomes more dependent on computers and other electronic tools, power disruptions pose an ever greater threat to productivity, and even health and safety. And then emphasizing the importance of this issue, you go on and you talk about earlier this month the Commission accepted on an experimental basis some regional reliability standards specifically with the Western Systems Coordinating Council.

Would you elaborate on that a little bit and maybe also just talk specifically about some of the reliability rules that they propose?

Mr. HOECKER. The WSCC proposed four reliability standards for us and I believe intends to submit additional ones in the future. They did so to obtain our approval that these standards were just and reasonable under the Federal Power Act. We did not review the standards for their adequacy from purely a reliability standpoint. We don't really have that authority. It is a matter of trying to ascertain whether their proposals would in any way impact the open access regime that the Commission has promoted.

And what we are finding is that, despite our historic lack of authority in the area of reliability and governance of WSCC or any other regional authority, we are requested by the industry, both the utilities and their customers, to help ensure the fundamental fairness of these standards which have distinct commercial implications if they are misapplied or if they end up denying or limiting access to transmission.

Mr. WHITFIELD. But the Commission has agreed to sort of provide oversight. My understanding, this is voluntary.

Mr. HOECKER. Completely voluntary, yes.

Mr. WHITFIELD. And that you all did formally agree to provide some mediation or arbitration to determine if they violated their agreements?

Mr. HOECKER. That is correct. Fundamentally there is an appeal process within the WSCC, as I understand it. If there is a violation of one of these standards and if the dispute cannot be resolved, we would act as—I suppose you would view it as sort of an appellate court.

The procedures that we envision and that WSCC envisions involve alternative dispute resolution, and we think that that is a capability that we have and have developed at the Commission, and we can play an important role as a forum for dispute resolution, but that is probably as far as this Commission is capable of going under existing law.

Mr. WHITFIELD. This is the only regional reliability council that has made a proposal like this?

Mr. HOECKER. Of this kind, yes.

Mr. WHITFIELD. Mr. Chairman, I yield back the balance of my time.

Mr. BARTON. The Chair would recognize the distinguished member from Michigan, Mr. Dingell, for 5 minutes.

Mr. DINGELL. Mr. Chairman, I thank you very much. Mr. Chairman, welcome to the committee.

Mr. HOECKER. Thank you.

Mr. DINGELL. I noted with some interest that you talked about a number of arguments where the Commission has raised issues relative to getting greater authority over transmission organizations. You have not suggested that you wanted additional authorities over the public power organizations, have you?

Mr. HOECKER. Yes, I have. In my testimony I recommend to the Congress that approximately 33 percent of the transmission systems that is owned by Federal power marketing administrations, by municipal and cooperatively owned utilities, be subject to the Commission's open access rules.

Mr. DINGELL. TBA, Boneville?

Mr. HOECKER. Yes, sir.

Mr. DINGELL. All of them?

Mr. HOECKER. Yes, sir.

Mr. DINGELL. Not now, but at your convenience, would you submit to the committee a list of the real problems in the marketplace that FERC cannot address under your current authority and what those problems might be?

Mr. HOECKER. I would be pleased to do that.

Mr. DINGELL. And the Energy Policy Act of 1992 has been in place a relatively short time, as has FERC Order No. 888. What specific events or items of information cause you to conclude that these are not sufficient to get the job done?

Mr. HOECKER. Well, I should clarify that we believe Order No. 888 and open access are a big success.

Mr. DINGELL. What evidence do you have that these two authorities do not give you sufficient capacity to address the questions with regard to the matters that we are discussing this morning, reliability, your authority over the agencies?

Mr. HOECKER. Well, first of all, reliability is historically something the Commission has never overseen. There is no express authority in the Federal Power Act for the Commission to review reliability standards or in any way to review the organizational governance structure of NERC.

Mr. DINGELL. You want authority to regulate the reliability?

Mr. HOECKER. We want authority to review standards, to oversee the process of applying those standards, and to be a backstop enforcer, enforcement body, if the industry cannot resolve its disputes voluntarily. But fundamentally, the system we contemplate will still be self-regulating, much as the Nasdaq market is regulated by the SEC—very passively.

Mr. DINGELL. NERC specifically raises concerns in their reliability assessment about the impact of EPA's NO_X rule upon reliability. Do you have any concern over this matter?

Mr. HOECKER. Well, we are generally aware of the EPA processes. There is a State implementation process going on now.

Mr. DINGELL. Do you have any concerns about this having impact on reliability? Yes or no?

Mr. HOECKER. I have some concerns.

Mr. HOECKER. Are they serious, or are they trivial?

Mr. HOECKER. I really don't know at this point.

Mr. DINGELL. Have you done anything to inquire as to what the basis for those concerns might be and whether they are serious or not?

Mr. HOECKER. We have not investigated the NO_X standards that are being developed by the EPA. Apparently those are due to be published and implemented later this year.

Mr. DINGELL. Don't you think it would be a good idea that you should do so?

Mr. HOECKER. We definitely keep an eye on those.

Mr. DINGELL. You know they are going to be coming out and the time for you to comment to EPA is now past. How are you going to communicate to EPA these will raise questions to reliability if you have not already done so within the time limits for your comments?

Mr. HOECKER. I would say first and foremost it historically has not been our job to govern the reliability process, that we never focused on the standards that are developed by the industry.

Mr. DINGELL. But this will impact the standards that are being developed by the industry, will it not?

Mr. HOECKER. I don't know that.

Mr. DINGELL. You don't know that. But would you make an inquiry, please, into this? I am going to submit to you a letter and ask you to make a very careful analysis of this matter and report back. I would hope, Mr. Chairman, the record could remain to so we could get to this point.

Now, you talk extensively about reliability in your statement, page 2. You say the reliability may be threatened by difficulties in assigning responsibility for transmission system reliability in a dynamic environment. The Commission is increasingly asked to exercise its existing, but inadequate, statutory authority to ensure compliance with industry standards.

Doesn't that tell you that maybe you ought to be taking a hard look at how this matter is going to impact the reliability of service to different categories of wholesale and retail customers?

Mr. HOECKER. Reliability is a concern for everyone, including our agency.

Mr. DINGELL. If EPA's orders and changes in their requirements impact that, you should have a concern, should you not?

Mr. HOECKER. I think we should all be concerned.

Mr. DINGELL. All right. Now, you ordered nondiscrimination in access to the transmission facilities of public utilities. That did not apply to the publics; it applied only to the private companies. Is that right?

Mr. HOECKER. Yes.

Mr. DINGELL. You have indicated to me it should apply to the publics as well as the privates, but you have no authority to do so.

Mr. HOECKER. Yes, sir, none.

Mr. DINGELL. I noted at page 6 your comments are rather speculative and you don't really have any answers for us. You say, "The remaining impediments to full competition fall largely into two categories. First are the engineering and economic inefficiencies in the current operation and expansion of the transmission grid, inefficiencies that are hindering fully competitive power markets and imposing unnecessary costs on electric consumers." Is that speculation, or is that hard fact?

Mr. BARTON. This will have to be the last question, Mr. Dingell.

Mr. HOECKER. We have seen evidence of these kinds of inefficiencies in the governance of the transmission system. We have seen complaints about the exercise of market power.

Mr. DINGELL. You don't treat a complaint as a fact, do you? You treat it as a complaint. There is a difference.

Mr. HOECKER. We treat it as a complaint, absolutely.

Mr. DINGELL. So the fact you are receiving complaints means you are receiving complaints, not that there is a factual basis.

Mr. HOECKER. We have investigated many of these complaints. We have issued orders in some cases, and the Commission is preparing to investigate some of these concerns generically. I imagine that as we build a record we will have a deeper understanding in the kinds of concerns you express.

Mr. DINGELL. How long do you figure that will take?

Mr. HOECKER. Probably the rest of this year.

Mr. DINGELL. Okay. And in the meantime, you are supporting the administration's proposal?

Mr. HOECKER. I clearly support certain aspects of it that I mentioned this morning.

Mr. DINGELL. Thank you.

Mr. BARTON. We all support certain aspects of it. That is a fair answer. I thank the gentleman from Michigan. We can keep the record open. I notice he had about 10 other pages earmarked. I think there will be more written questions.

Mr. Burr is recognized for 5 minutes.

Mr. BURR. Welcome, Mr. Chairman. Let me ask you, the views you have shared with us, is that the consensus of the entire Commission?

Mr. HOECKER. That is always a difficult question. I feel very confident in saying that our policy goals are to promote competition, not regulation; that we want to examine very seriously the idea of regional grid management; that we believe open access should prevail everywhere; and we are all keenly interested in enhancing the ability of the industry to ensure reliability.

Mr. BURR. You have made some very strong suggestions about an increased regulatory role for FERC, and I guess the question is simple: Do all commissioners believe that that is the way to go?

Mr. HOECKER. I don't think that that is quite what I said. I think that we are asking for is some additional authority in some specific areas that will allow us to promote competition. In the long run, that means less regulation or lighter-handed regulation.

Mr. BURR. Is there anything in the 1992 Energy policy Act that requires RTOs to be constituted as ISOs versus transcos or vice versa?

Mr. HOECKER. As far as I know, the Energy Policy Act doesn't address the issue at all.

Mr. BURR. Could you have a basis for believing a transco cannot comply with the requirements of the Federal Policy Act?

Mr. HOECKER. I have no basis for believing that.

Mr. BURR. Let me ask you, do you think that the Commission has the authority under the Federal Power Act as it now stands to require public utilities to join RTOs?

Mr. HOECKER. I think a strong argument could be made that it does.

Mr. BURR. Do you believe it, or do you believe there is a strong argument?

Mr. HOECKER. I believe it.

Mr. BURR. Would that be the consensus of the Commission?

Mr. HOECKER. I don't know. That is a very tough question to answer.

Mr. BARTON. Will the gentleman suspend? To give you a little time to think about the answer, we are going to continue the hearing during this vote. I have sent several members to vote and hope they will be back. I want all members to know we are not going to suspend the hearing.

Mr. HOECKER. Thank you. I think that some of my colleagues have the same degree of confidence I do. I think some of my colleagues have publicly expressed doubts about that. I believe that the law is not precise, which is why I have said in my testimony this morning that if the Congress believes that regional transmission organizations, whether transcos or independent system operators or independent scheduling administrators or whatever it might be, could enhance reliability, improve regional planning, depancake the rates in the transmission system and so forth, that it should support expressly our authority to help make that happen.

Mr. BURR. Let me ask you specifically about one area and an issue that is on the table, and I certainly will not delve into the decision that FERC has got as long as you dealt with it, the decision by the administrative law judge as it relates to the California RTO and the cut in the ROE of Southern California Edison. I think you are familiar with this situation?

Mr. HOECKER. I am, generally, yes.

Mr. BURR. Combining the loss of the ROE and the judge's denial of administrative and general expenses the company said it will incur for transmission operations, Southern California Edison charges that the ISO membership will effectively cost it $41 million on an annual basis. A Wisconsin Electric Power representative agreed that at 9.68 ROE, if it was allowed to stand, would discourage companies from joining RTOs; and the article goes on to say that, in fact, this case has been pending, I believe, since 1997.

Is that an accurate article?

Mr. HOECKER. I am not sure about how long it has been pending, but the initial decision was just issued and hasn't come to the Commission yet.

Mr. BURR. March 31. I guess my question would be probably twofold. One is the assessment by the gentleman from Wisconsin Electric, is it an accurate statement that if companies can't see these as anything other than a financial drain, which would cause a capital flight, not a capital infusion, into the transmission areas, and they look at extended periods of indecision by FERC on the requests to set rates, what real belief would we have that we could ever move to this in anything other than a forced manner?

Mr. HOECKER. Well, I am sure you appreciate that I can't comment on this, the facts of this case in particular, because it is pending before the Commission. But let me make a couple of observations.

I would emphasize, as I did in my response to Congressman Sawyer, that the Commission's interest is in ensuring that the transmission portion of the industry, and, indeed, the entire industry, remains economically vital; and that typically means healthy rates of return appropriate to the risks and costs associated with providing particular services.

I believe that you would find our Commission in complete agreement that the last thing we want to do is to promote competition through regional transmission organizations in any way that is going to result in a less-than-vibrant transmission system or industry.

Mr. BURR. Would the Chair like to go to the other side?

Mr. BARTON. If you have one more, but I need to let Congressman Hall question before he runs to vote.

Mr. BURR. Let me say that I intend to follow up with the other commissioners on some of the specific questions, since the chairman has left the ability to and certainly thank you and look forward to the next panel.

Mr. BARTON. The Chair recognizes the distinguished ranking member, Mr. Hall, for 5 minutes.

Mr. HALL. Mr. Chairman, I am reading page 9 of your testimony, and you mention that the intrastate transmission within Texas, ERCOT, is beyond our to access authority.

What kind of consultation have you had with the Texas Commission on how ERCOT and their ISO is operating and is working?

Mr. HOECKER. I have talked with Chairman Wood on a number of occasions. He and I share common interests in this area of regional transmission organizations. I know that competition is on the minds of a lot of Texas legislators right now.

We think that what Texas is doing in this area is very progressive, very helpful for Texas; and we applaud what they do.

Mr. HALL. Do you think that the ISO is operating very well there then?

Mr. HOECKER. I think it is, as much as I know about it. Of course, it is not a FERC jurisdictional transmission system, so my understanding is perhaps pretty general. But I believe it is an independent system operator that is providing some increased rationality at the transmission level.

Mr. HALL. Does it appear to you to be viable, both power markets operating in Texas? Have you had a chance to——

Mr. HOECKER. I really don't know. I would suspect very strongly, Congressman, that to the extent the independent system operator in Texas can reduce rate pancaking across ERCOT and can promote better planning and reduce barriers to commercial trades, that that will indeed add to the vibrancy of the wholesale markets there.

Mr. HALL. If you are not satisfied with the information you have, either on a personal basis or through those who work with you, would it be okay if I bombarded you with a lot of good favorable information?

Mr. HOECKER. Absolutely. That would be fine with me.

Mr. HALL. Do you see any need to make a priority out of extending FERC's jurisdiction to ERCOT?

Mr. HOECKER. No.

Mr. HALL. Good. I yield back my time. That saves me some postage. I will go vote.

Mr. BARTON. All right. I am going to continue the hearing until we have the cavalry come to rescue me to go vote. What happens if we pass a bill that does not give FERC or another agency the authority to regulate for transmission reasons the TVA and the power administrations? Or ERCOT in Texas, for that matter.

Mr. HOECKER. Two things happen. No. 1 is that the Commission will continue to promote open access on those transmission systems through the concept of reciprocity under our Order No. 888. Under that process, the Bonneville Power Administration, for example, has filed with us an open access tariff that we find to be acceptable, consistent with our open access regime.

Other power marketing agencies have not so participated in our process. So the consequence of that, second, is that the competitive bulk-power marketplace will have some barriers related to a possible inaccessibility of transmission systems owned by nonjurisdictional entities, and the result of that, to my mind, is some degree of inefficiency.

Mr. BARTON. Well, comment on the open systems and the municipally owned systems. Right now I think, it is safe to say, I would characterize them as not very open. Would you comment on that?

Mr. HOECKER. Well, I don't know if any of those systems provide open access under Order No. 888. I would have to check that, but I don't think that is the case.

To the extent, however, that they—and there may be some that actually have required transmission service from an open access utility—they are obligated by our rule to return the favor.

Mr. BARTON. There are a lot of these opt-in, opt-out provisions. Can you apply in a Federal bill, a municipal power, the authority, for example, to opt out in terms of opening their market, but force them to opt in in terms of transmission across their system?

Mr. HOECKER. It may be the difference between retail and wholesale. Not all municipal or cooperatively owned systems own transmission, and we are focused on opening the transmission systems that they do possess. Whether they would, in addition, be able to opt out of other forms of access at the retail level is something we really don't take a position on.

But—well, we just don't take a position on that.

Mr. BARTON. Okay. You don't want to speculate?

Mr. HOECKER. Not particularly.

Mr. BARTON. This is just our first hearing.

Mr. HOECKER. I will come prepared with more speculations next time.

Mr. BARTON. Let us go to another touchy subject. There are some rumors that certain PMAs use their transmission system rates to actually absorb generation costs. That is one reason that their costs are so low. Does FERC take a positive or a negative view of that? And if you are given authority to set those rates, to regulate those rates, how would you look at generation costs going into transmission?

Mr. HOECKER. Well, Mr. Chairman, I haven't given that a lot of thought, but I think we want to have sources of generation competing in a fair market on the basis of their costs and their efficiencies, and not being subsidized by other functions. I think that that would be the most efficient approach.

I am not familiar with the particular situation you allude to, but transmission needs to be priced separately. Generation needs to compete on the basis of its costs separately.

Mr. BARTON. Okay. Let us switch gears a little bit. Do you believe the FERC should have the authority to order a transmission owner to join a regional transmission organization?

Mr. HOECKER. Well, it certainly would expedite our process, I must say. I think we at this point are focused on encouraging the industry to create regional markets and to form regional transmission organizations in their own economic interest and in the interest of the access of their generation and independent generation to regional markets.

We think the bottom line here is fair competition, and ultimately if we don't have regional organizations—and this is my opinion—we will not have the kind of broad competitive regional markets that will produce the greatest efficiencies, or the greatest savings for consumers.

Mr. BARTON. My final question, as the cavalry is arriving here, does the FERC have a position in terms of whether we should go with the transco organization system or an ISO system?

Mr. HOECKER. Mr. Chairman, we have approved 5 independent system operators already. We have not had proposed to us yet a transco or an independent transmission corporation, and the Commission has taken no position yet on whether one corporate form or another is to be preferred.

Frankly, one of the purposes of our coming initiative will be to explore that very issue, and I at this point see no inherent reason for us to be prescriptive and to say one versus the other should be required.

Mr. LARGENT. [presiding] Mr. Hoecker, I would like to ask you a couple questions, if I could, about—every member of this committee so far, as long as I have been here, has been talking about reliability standards, enforceable reliability standards. Give me 3 or 4 examples of what a reliability standard would be?

Mr. HOECKER. Well, a reliability standard might relate to how transmission is reserved and under what conditions or how a particular transaction might be curtailed or what priorities for uses of the transmission system might be applied in curtailing uses.

If the system becomes overloaded, for example, or congested, and there is a threat to reliability, the transmission-owning utilities through voluntary agreements now would agree to engage in certain practices to curtail loads, particular end-users, to redispatch their generation in a certain way, to try and relieve the constraint, or to get power to particular customer groups or regions that might be deprived of power.

It is an extremely elaborate system. That is sort of a lawyer's answer, not an electrical engineer's answer, obviously; but I think that these standards have both a high degree of technical sophistication, from the standpoint of managing the system, and a lot of commercial implications in terms of who gets to use the system and under what circumstances.

My staff just put in front of me the kinds of criteria that WSCC asked us to take a look at. In our recent order we approved them as being just and reasonable. Things like operating reserves and disturbance control criteria require control areas to maintain specified levels of operating reserves and to be able to recover from a disturbance within 10 minutes. That goes partly to generation adequacy and how that generation is redispatched.

Control performance standards, operating transfer capability criteria. Pretty technical stuff. Frankly, the expertise for developing these standards exists in the industry. It has always existed there, and we would, even under the kinds of proposals that I am suggesting, continue to rely on the industry to develop and apply those standards. We just want to make sure it is done fairly.

Mr. LARGENT. Basically, what you are talking about is rules of the road, pull over, yield, stop, those types of issues in transmission.

Mr. HOECKER. That is a good analogy.

Mr. LARGENT. What about reliability standards in the other aspects of the electric industry, generation, distribution. Does FERC have any authority in those areas?

Mr. HOECKER. Reliability at the retail level, in terms of generation adequacy and the functioning of the distribution system, has historically been largely a State concern, and as I suggested, I think, in my testimony, we want to make sure that even though we have Federal oversight of the development of standards, that the States continue to play this important role.

That relates to everything from requirements to trim trees and transmission line maintenance and certain kinds of response cri-

teria like the ones I have alluded to here, to actually, perhaps, some additional requirements on transmission reliability as well.

I think it is a concern the States have expressed that their historic role in ensuring reliability for the ratepayers in their jurisdictions not be curtailed because of this new Federal oversight regime that we are talking about today.

Mr. LARGENT. All right. But when we talk about reliability, I guess I am thinking of the Mrs. O'Leary who lives in Congressman Markey's district, or everybody's district really. When they think of reliability, they want to make sure when they flip that light on, it comes on. That goes beyond just transmission. It has to do with generation and distribution as well.

So how do you coordinate all of those functions under the administration's bill, for example?

Mr. HOECKER. I am not sure the administration's bill is very express about that. I think the administration's bill is focused on transmission reliability at the bulk-power level in the wholesale marketplace. I think there is a lingering question there about States, but the fact is that the industry and the regional reliability organizations that exist now and who would continue to exist under the administration's legislation would have a coordinating function with appropriate State agencies to ensure that the lights would stay on at Mrs. O'Leary's house.

I think for the most part that can be dealt with at the State level by itself through public service commissions and other agencies responsible for retail reliability.

Mr. LARGENT. Let me ask you one other question. One of the things you have talked about in your testimony is expanding the ability or authority of FERC, basically, to apply Rule 888 to the areas that you cannot currently, the TVA's and Bonnevilles and municipalities, some of the co-ops.

Is there any concern—Mr. Dingell brings this question up all the time in terms of the Tucker Act, the takings act—is there any concern that that might apply in expanding FERC's authority in areas it doesn't currently have, that the Tucker Act may come into play?

Mr. HOECKER. I really don't know how to answer that. I would be pleased to look at that question. I think that our focus is on having uniform, accessible and efficient bulk-power markets on an integrated system that includes transmission not regulated by the Commission, and that those markets are not going to be ultimately very efficient without eliminating that jurisdictional difference.

Mr. LARGENT. Is it your view that moving to a competitive market will improve reliability?

Mr. HOECKER. That is my firm belief. As a matter of fact, we had a similar experience on the natural gas side when we ordered interstate pipeline systems to provide open access on behalf of others, and there were a good many apprehensions about whether that would threaten reliability of the interstate grid; and in fact reliability problems have diminished significantly in a competitive environment.

I think this is not something to be taken lightly, that we can't just assume that reliability happens. It takes a lot of work in which the industry needs to have a key role. But I see no reason why we

cannot create mechanisms to ensure that we can have our competitive cake and reliability too.

Mr. LARGENT. Are you aware of any technological advances that are right on the horizon as we move to a restructure of electricity competitive industry that will improve reliability?

Mr. HOECKER. Well, there is a great deal of talk these days about distributed generation, and as gas turbine technology gets smaller, more efficient, the availability of smaller efficient generation, that may generate power off the grid, or that could be placed in strategic locations on the grid to boost reliability, is probably the main technological innovation. It is one—the gas turbine—is one innovation that is both driving competition and also may be one of the ultimate solutions to maintaining reliability of the system.

There are lots of other things that are talked about, including super-conductive transmission wire and so forth, but I am not sure what the reliability implications of that might be.

Mr. LARGENT. Do the gentleman from Kentucky or Ohio have any other questions?

Well, Mr. Chairman, thank you for being with us here this morning. We appreciate your testimony and your time. We look forward to the committee working with you as we move toward restructuring electricity. Thank you.

The Chair would call forward at this time the second panel.

Mr. SHIMKUS. Mr. Chairman, I have two quick questions.

Mr. BARTON. This is highly unusual, but if you don't mind, Mr. Chairman, we have just a couple quick questions from the gentleman from Illinois.

Mr. SHIMKUS. I am a highly unusual member, so it is fitting that I should break with procedures.

Real quick, in your testimony you state that even though the grid is being used increasingly for regional transactions, the siting of transmissions and generation facilities is, nevertheless, subject to State law.

My question is, how are the regional planning agencies going to site better than the States?

Mr. HOECKER. Well, planning and siting are two different things. I think that if you have regional transmission organizations and you plan for expansion of the transmission system or additional generation in ways that are most efficient, that is to suggest that projects are truly needed and not simply an attempt to pad a utility's rate base, that State siting authorities may be more predisposed to cite those facilities.

I don't suggest that regional transmission organizations necessarily have siting authority, but that proposal has been made.

Mr. SHIMKUS. Thank you. I am going to go rapidly. Some believe one factor in the Midwest price spikes were the Pennsylvania, New Jersey, Maryland pool export rules that cutoff power transfers from PJM to the Midwest. Do you believe that that was one of the factors in the price spikes?

Mr. HOECKER. I don't recall that specifically. I think that there were a number of problems identified in our report. Imports of power from various regions, from Ontario, from the Southeast through Tennessee Valley Authority and from the East were congested, and sometimes power was not available in a timely fashion

and where it could have been. That certainly was a major contributing factor.

Mr. SHIMKUS. And I don't have the report on the price spikes that you all followed up on, but you know that the industry and a lot of the individuals think that there was some export rules that were a factor. Everybody who followed this issue knows there were a lot of factors.

I would ask that we be allowed to ask questions in writing on this issue.

Mr. HOECKER. Absolutely.

Mr. SHIMKUS. And to follow up on this issue. Because the question for us in that experience last year is if those export rules can be attributed to some of the problems with the power spikes, those export rules would, I think, by definition impose an undue burden on interstate commerce which would be something we would have to address.

Mr. HOECKER. Mr. Shimkus, let me suggest that although there are a number of complicated factors behind the price spikes in the Midwest last summer, there have been some very good market responses, that we are guardedly optimistic about this summer; but that if we are thinking long-term, that the kinds of issues you have just raised can be addressed very well through a regional transmission organization and their planning function.

Mr. SHIMKUS. I would agree there has been some market responses, like the planning for new generation facilities. I am at a loss to understand the market responses in transmission and distribution. Do you know of any that have revolved in that area?

Mr. HOECKER. They are long-term. I have talked with the Governor of Wisconsin and other parties in the Midwest, and they are beginning to work cooperatively to try to develop some long-term transmission expansion solutions, which are appropriate in various locales, obviously. But the response's that will solve or at least minimize the chance of that sort of thing happening again——

Mr. SHIMKUS. I guess we will find out this summer, hopefully not.

Mr. HOECKER. [continuing] are pretty complicated.

Mr. SHIMKUS. I would like to thank my colleague, Mr. Largent, for pulling me back. I yield back the balance of my time.

Mr. BARTON. Did the gentleman from Oklahoma ask his questions?

Mr. LARGENT. Yes, I did.

Mr. BARTON. Mr. Whitfield, you had your questions. Mr. Sawyer, you had your questions.

Mr. SAWYER. Thank you.

Mr. BARTON. We are going to let you go have lunch, Mr. Hoecker. We are going to hold the rest of the audience captive in the next panel. Thank you. We will have written questions for the record. Thank you for your attendance. We would like to welcome our next panel. If there are individuals in the room that want to leave, we would encourage you to expedite your egress from the room.

We want to welcome our second panel to our reliability and transmission hearing.

We have from my left, Mr. Fred Schmidt, the chief of the Bureau of Consumer Protection, the office of the Attorney General of the

great State of Nevada; Mr. Paul McCoy, senior vice-president for Commonwealth Edison from Chicago, Illinois. We have Mr. Stanley Szwed, who is the vice president for transmission, First Energy, in Akron, Ohio. We have Ms. Trudy Utter, who is the vice president and general manager for Tenaska Power Services in Arlington, Texas, and either is a constituent or lives near my constituency. We are very glad to have you here. And Mr. Dave Nevius, who is the vice president of the North American Electric Reliability Council from Princeton, New Jersey. Mr. Greg Yurek, the president and CEO of American Superconductor Corporation. We have Mr. Joseph Iannucci, did I get that right——

Mr. IANNUCCI. Close enough.

Mr. BARTON. Distributed Utility Associates in Livermore, California. And last but certainly not lease, Dr. Matthew Cordaro, President and CEO of Nashville Electric Service. We want to welcome all you gentlemen and lady. We are going to put your statements in the record in its entirety. Since we have such a large panel, we are going to ask that you summarize it in 5 minutes. We are going to start with Mr. Schmidt and work our way south and then come back and have questions.

Mr. Schmidt, you are recognized for 5 minutes.

Mr. HALL. Mr. Chairman, I just got here. You didn't ask us all to go back through all those acts of bragging on you before this committee again?

Mr. BARTON. No, we sure didn't. We could put you out on the panel.

Mr. BARTON. Mr. Schmidt, you are recognized for 5 minutes.

STATEMENTS OF FRED SCHMIDT, CHIEF OF BUREAU OF CONSUMER PROTECTION, OFFICE OF ATTORNEY GENERAL, STATE OF NEVADA; PAUL D. MCCOY, SENIOR VICE PRESIDENT, COMMONWEALTH EDISON; STANLEY F. SZWED, VICE PRESIDENT, TRANSMISSION, FIRST ENERGY; TRUDY UTTER, VICE PRESIDENT AND GENERAL MANAGER, TENASKA POWER SERVICES COMPANY; DAVID R. NEVIUS, VICE PRESIDENT, NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL, PRINCETON FORRESTAL VILLAGE; GREGORY J. YUREK, PRESIDENT AND CEO, AMERICAN SUPERCONDUCTOR CORPORATION; JOSEPH IANNUCCI, DISTRIBUTED UTILITY ASSOCIATES; AND MATTHEW CORDARO, PRESIDENT AND CEO, NASHVILLE ELECTRIC SERVICE

Mr. SCHMIDT. Thank you, Mr. Chairman. I am Fred Schmidt, the Consumer Advocate from the State of Nevada. As the chief Deputy Attorney General in my State, I oversee a division that handles utility consumer advocacy as well as antitrust laws and consumer protection laws in my State.

Today, I am here on behalf of the National Association of State Utility Consumer Advocates, or NASUCA. It is a national organization of which I currently serve as president. Its membership encompasses 39 different States and the District of Columbia. The background of the organization is such that each member is empowered by State legislation to represent utility consumers in their individual states. We have members from the States of most of the members of this committee.

It was a little bit difficult for me to leave and get to Washington today for this hearing, but this hearing is very important, and I commend the chairman for holding it. The reason it was difficult is like in many States, my State is in the process of marathon-type hearings on electric restructuring to our retail market in early 2000.

I am in the middle of both Public Utility Commission hearings and legislative hearings for that purpose. But one of the things that my experience in the State of Nevada has taught me is there are certain things that you cannot do at the State level. Although our national organization generally stands for principles of promoting and developing different States' rights issues that we all are involved in, there are certain things we believe, even as a national organization, that can only be done on a Federal level. Your topic today is one of those.

Reliability of the Nation's transmission system is of paramount importance to the consumers that we represent in our organization. First and foremost, as we all agree, the lights must continue to go on regardless of what system of electric competition is developed, either in an individual State or on a national basis.

We that represent the States are most interested in maintaining at least the current level of reliability, if only for the simple reason that each of us will be held responsible if and when lights don't go on.

I hope you will keep this in mind as you work through the solution to the challenge, because markets in many instances do not answer those questions.

For half a century, NERC, or the North American Electric Reliability Council, and its member organizations have played a vital role in promoting and maintaining reliability of the system. However, historically, NERC has been a closed club whose membership has been dominated by private utilities. That exclusive membership relationship will not work in an environment where you allow increasing competition.

To its credit, NERC has recognized the need to permit greater representation in its organization, on its boards of directors, and expanded its membership in the last year to include representation of consumers. In fact, my colleague from Pennsylvania, Sonny Popowsky, who is a consumer advocate, the Attorney General's office, in that State, now sits on the NERC Board and our executive director of our association in Washington is an observer. We also serve on many of their committees.

I am here to tell you today that we support the efforts to date by NERC to expand their representation within their organization, and to recognize that additional changes in that organization, which has historically assumed responsibility for reliability that we have today in the system, but there are three changes that I want to point out to the committee that are necessary as we move to an increasingly competitive environment.

First, developing a national reliability organization that will continue the vital functions now performed by NERC is essential. This must be done in a competitively neutral manner and must recognize the paramount concerns of consumers in the reliability of the electric system.

Second, NERC must be governed by an independent board of directors in order to function in a competitively neutral manner. It cannot be dominated or controlled by any particular independent group or segment.

Third, we believe that FERC should have clarifying authority to review reliability requirements which NERC or any successor organization will impose and ensure that those requirements are adopted and implemented and followed in a manner that benefits consumers.

I will leave the remainder of my remarks in for the record on recommendations, along with two resolutions, Mr. Chairman.

Mr. BARTON. We can give you another minute, if you want to put the recommendations in the record, because I think those are important.

Mr. SCHMIDT. The other recommendations that I wanted to address in my written comments to you this morning relate to this concept of the type of regional organizations that are developed or being developed in different States. They are generally referred to as independent system operators or regional transmission organizations. Several ISOs have recently been approved by FERC. Oddly, I think it is interesting to point out to the committee that none of these ISOs are identical, neither their roles, characteristics, or legal structures.

In fact, if you look at the Nation and how it has developed on a retail competitive basis, the regions of the country, New England and the mid-Atlantic States that have actually aggressively implemented competition to date on a retail basis, are regions that have effective type ISOs or power pools to govern the interrelationships among the utilities that cross State borders, whether it is mid-Atlantic States, PJM. In other States of the country struggling to develop retail electric competition, like my own States and States in the Midwest, the Southeast and the Northwest, there are not these types of organizations.

Mr. BARTON. What are your recommendations?

Mr. SCHMIDT. My recommendation is FERC needs to have authority to develop requirements to join the organizations, and those organizations in different regions of the country need to be independent in nature from the traditional structures in which they exist in order to develop effective competition.

[The prepared statement of Fred Schmidt follows:]

PREPARED STATEMENT OF FRED SCHMIDT, CONSUMER ADVOCATE, STATE OF NEVADA AND PRESIDENT, NATIONAL ASSOCIATION OF STATE UTILITY CONSUMER ADVOCATES

My name is Fred Schmidt and I'm the Consumer Advocate from the State of Nevada. As a Chief Deputy Attorney General for the State of Nevada I oversee a division which advocates for utility consumers and enforces antitrust and consumer protection laws. I am here today testifying on behalf of the National Association of State Utility Consumer Advocates (NASUCA). I currently serve as president of that organization.

NASUCA is an organization of 42 state utility consumer advocate offices from 39 states and the District of Columbia charged by their respective state statutes to represent utility consumers before federal and state utility commissions and before federal and state courts. For the most part, consumer advocates represent residential and small commercial consumers. As such, NASUCA members are intricately involved in electric utility restructuring debates in their states and, through NASUCA, in Washington, D.C. NASUCA greatly appreciates the opportunity to testify today and commends you for holding this hearing.

I. Introduction

To be perfectly honest, it wasn't easy for me to make it here today. In my state of Nevada we are in the midst of marathon legislative hearings on Public Utility Commission regulatory proceedings to enable Nevada to open our retail electricity market to consumer choice by early next year. I mention this for two reasons. First, even without federal action the states are moving forward and I encourage you not to interfere or retrospectively fiddle with their decisions. Second, my experience in Nevada—and I'm certain that my viewpoint is shared by consumer advocates across the nation—makes it abundantly clear that there are certain issues states cannot deal with and need federal intervention. Reliability and transmission issues—along with market power issues—are three of those critical issues that the federal government must deal with to ensure that consumers—small consumers—benefit from electric restructuring.

In fact, NASUCA has called on the federal government to act on these issues. We understand that electrons do not respect state borders and with all the merger activity going on—including mergers with foreign companies—neither do companies. We support action in these and other areas so much that we stood with Secretary Bill Richardson and Congressmen Markey, Burr and Largent, last week at the introduction of the Administration's bill, not so much to endorse all of the specific provisions but to encourage Congress to act on several critical issues.

There are areas, however, where we believe that Congress should not act. I know we are not here today to discuss them but they can be summarized briefly: Congress should not impose a date certain mandate on states and Congress should not create a federal stranded cost mandate or backstop. These are two absolute legislative no-no's that Congress must respect.

Let me now turn to the topic at hand—reliability and transmission.

II. Reliability

The reliability of the nation's electric system is of paramount importance to the consumers represented by the members of NASUCA. First and foremost, the lights must continue to go on when the switches are flipped under any new scheme or "good enough" should be left alone. We representing the states are most interested in maintaining our current reliable system if only because we will be held responsible if and when the lights go out. I hope you will keep this in mind as you work through the solutions to this challenge.

For almost 30 years, the North American Electric Reliability Council (NERC) and its member organizations have played a vital role in promoting and maintaining the reliability of the nation's electric system. However, NERC was historically a closed club whose membership was dominated by private utilities. Such an exclusive membership arrangement will not work in an increasingly competitive environment.

To its credit, NERC has recognized its need to permit greater representation on its Board of Directors and has expanded its membership to include representation by consumers. My colleague Pennsylvania Consumer Advocate Sonny Popowsky now sits on the NERC Board and NASUCA Executive Director Charles Acquard is an Observer. Other NASUCA members serve on various NERC Committees.

NASUCA supports the efforts taken to date by NERC to expand representation within that organization, but recognizes that additional changes will be necessary to preserve reliability in an increasingly competitive environment. These changes include:

- Developing a national reliability organization that will continue the vital functions now performed by NERC. This function must be done in a manner that is competitively neutral and recognizes the paramount concerns of consumers in a reliable electric system.
- Establishing an independent Board of Directors that will govern NERC (or any successor national organization) in a competitively neutral manner that will benefit all consumers and that will not be dominated or controlled by any particular industry participant or segment.
- Clarifying FERC authority to review the reliability requirements imposed by NERC (or any successor national organization) and to ensure that such requirements are adopted and implemented in a manner that benefits all consumers.

A copy of our resolution on this issue is attached.

Legislative language has been developed that is reasonably consistent with these principles. It is my understanding that Dave Nevius from NERC will describe them in detail at today's hearing. NASUCA will support this language with one additional caveat. That is, it is important for Congress to clarify the continuing and vital role of the state in maintaining the reliability, safety, and adequacy of the electric systems within the state borders. As long as the states do not act in a manner that interferes with NERC's or FERC's requirements in interstate commerce, the states

must not be preempted from taking action to ensure that the lights stay on within their borders.

III. Transmission/ISOs

Turning now to the issue of transmission, the reliability of the nation's electric supply depends on a high level of coordination among transmission facilities and generation facilities. Transmission facilities currently exhibit characteristics such as high fixed costs, difficulties in siting, and complex interactions affecting their integrity and available capacity. These characteristics suggest that transmission will require continued regulation for the foreseeable future.

These characteristics allow transmission operation to materially affect the development, existence and continued efficiency of a competitive market for delivered electric power and the services it provides. Simply stated, open, fair, and non-discriminatory transmission access is critical to developing and maintaining a competitive electric market. Without it, transmission owners will game the system and thwart competition.

To encourage open access, Congress and several states are actively considering or implementing legislation which would affect the reliability, price, availability and competitive neutrality of the transmission grid by introducing competition between and among electric generators. Much of this legislation calls for the creation of new institutional arrangements known generally as "Independent System Operators." In fact, a variety of ISOs have recently been approved by FERC. Oddly, none of these ISOs are identical in their roles, characteristics or legal structures.

NASUCA believes that all ISOs, as well as any other entities charged with or assuming operations control of a regional portion of the transmission grid, must meet the following requirements:

- All ISOs or related regional transmission organizations should be truly independent from the financial interests of individual generation and transmission owners, marketers and customers. These organizations should have plenary authority over the operation of the interconnected transmission system, including the loading and unloading of lines for reliability purposes.
- This independence may be influenced by provisions affecting governance and scope of ISO authority, but can only be ensured by appropriate regulatory oversight over practices, tariffs, rules requirements and procedures employed or enacted by the ISO.
- Such regulatory oversight should encourage and facilitate effective dispute resolution, but must maintain basic due process protections, including the right of appeal for all parties affected by any practice, tariff, rule, requirement or procedure employed or required by the ISO or related entity. Such oversight and due process should also include the ability to address issues related to the independence of the ISO or related entity.
- Regulatory oversight must be coordinated and balanced to protect federal and state interests.
- ISOs must be required by statute or regulatory oversight to meet strict standards of economical operation and investment, minimization of prices to consumers, open and comparable access, competitive neutrality and public accountability.
- The cost of the ISO and other related entities must be just and reasonable, and shared by all users in an equitable, non-discriminatory and competitively neutral manner.
- There must be a clearly defined and substantial role for consumer advocates and other stakeholders in the governance and/or oversight regarding the ISO or related entity.
- Any powers or authority delegated to the ISO to prevent, identify and mitigate the exercise of market power must not preempt the application of antitrust law to address illegal anticompetitive acts carried out by transmission owners or other market participants.
- All ISOs and related entities must enforce compliance with reliability rules and protocols promulgated by the North American Reliability Council or any duly authorized successor organization by all members, customers, users, and owners of transmission.

A copy of our resolution on this matter is attached.

IV. Conclusion

Crafting a new regulatory scheme that mixes competition in generation and other electric utility services with continued regulation of transmission and distribution services is a formidable challenge that requires cooperation and coordination between federal and state governments. States have and will continue to move forward to develop retail competition plans that best meet the needs of their residents.

However, its clear that they cannot do it alone. They need the federal government to resolve issues that cross state borders.

Two of the most important issues that the federal government must consider are the subject of this hearing today. NASUCA encourages this Committee and Congress to move forward on reliability and transmission issues consistent with the principles I have just outlined. Failure to do so may harm consumers. After all, why restructure the electric industry if consumers don't reap the benefit of our efforts?

Again, I thank you for this opportunity to testify today on behalf of NASUCA, and I look forward to your questions.

Mr. BARTON. Thank you.

Now I would like to hear from Mr. Paul McCoy, who is the vice president for Commonwealth Edison in Illinois. We will put your statement in the record in its entirety and recognize you for 5 minutes.

STATEMENT OF PAUL D. MCCOY

Mr. MCCOY. I appreciate the opportunity to appear before this panel this morning. It is fair to say that fully competitive markets are unlikely to emerge in the power sector unless we get the transmission governance structure question right.

At Commonwealth Edison we have come to the conclusion that the structure most likely to stand the test of time is the following: the evolution of independently owned for-profit transmission companies, or ITCs, divested from the vertical integrated utilities from which they came, which operate—and this is the important piece—operate under the policy and regulatory oversight of regional transmission organizations, or RTOs. These RTOs can clearly be the existing ISOs with their charters modified.

We view these ITCs as the institution of choice to manage systems more efficiently and effectively and to expand it where necessary, to implement economic pricing, and congestion management and to rationalize and consolidate the numerous generation control areas that currently exist.

On the other hand, ITCs are unlikely to be created as quickly as people would like through the necessary step of divestiture unless regulators can ensure rates of return and tariff structures compatible with competitive business practices.

We view regional transmission organizations as the inheritors of the policymaking functions currently scattered among the existing ISOs and the NERC reliability councils. What we are saying very simply is we see from our model the consolidation of these two entities into a single RTO oversight structure for the Nation.

We don't see the RTOs as having actual operational responsibility, but instead ensuring that those who operate the system under their oversight do so competitively in a nondiscriminatory fashion and with no degradation in electric reliability.

The RTOs needs to have a geographic scope far greater than reflected in current oversight structures, like the current ISOs. Even the Midwest ISO, which is the largest ISO filed so far, would be much more effective if its geographic scope were further increased. To ensure that this occurs and that the RTOs assume the current NERC functions and the expanded ones that have been discussed around the country, we support legislation that empowers a self-regulating reliability organization to impose reliability standards,

enforce those standards, all under the regulatory backstop and oversight of the FERC.

We believe, furthermore, that markets in power need to be created from regions like the central part of the United States, where they don't really exist at all. As in the case of RTOs, markets for power need to have broader geographic boundaries than they currently do in order to comprise broader markets and greater opportunity to foster market power liquidity, price discovery and management of financial risk.

In summary, we believe the opportunity exists to reevaluate the first phase of U.S. power sector restructuring, especially at the wholesale level, learn from that experience we have had so far, and create the public and private institutions that maintain the historic separation of operational and regulatory function.

Mr. Chairman, that concludes my remarks.

[The prepared statement of Paul D. McCoy follows:]

PREPARED STATEMENT OF PAUL D. MCCOY, SENIOR VICE PRESIDENT, COMMONWEALTH EDISON COMPANY

Good Morning. I appreciate the opportunity to appear before the members of this Subcommittee. It has been the historical duty of the members of this panel to give legislative form to national energy policy. Today's debate can hopefully contribute substantive recommendations to the very complex issue of restructuring the U.S. transmission system to serve competitive markets for power.

Reliability, transmission and competitive markets can be said to represent the foundation of power sector reform. They are at the core of the concerns we have in the Mid-west, where we continue to debate and refine the structure and governance of the institutions that will best serve the consumers as well as the private and public utilities of the region. I would note, at the outset, that our electric sector history and operational traditions are different from those of the East, which long ago found a consensus to manage its power systems in tight pools that centrally dispatch electricity. Hence the caution you will detect in my remarks as to generalized, Federal policy solutions to the issues that we are collectively addressing, and must resolve.

Retail competition has been slow in coming to our region. Today, as a matter of fact, Illinois is the only Mid-western State to have actually enacted a restructuring law. By the terms of that law, some of our customers will begin to exercise choice in electricity suppliers in October 1999. All of our customers will have that choice in the year 2002. To accommodate this very fundamental change in our region's power sector, and to create robust markets for power, we are required to address and resolve structural and managerial issues on a timetable more pressing than that of our neighbors, but with consequences for those beyond our borders.

At the forefront of our present deliberations is the requirement to ensure non-discriminatory access to the transmission system for competitors serving both wholesale and retail customers. This is fundamentally a structural matter. It goes to the core of how responsibilities should be divided between an Independent System Operator (ISO) and the owners of the grid. On this issue, we believe that in the end the system that will be sustainable will be the one that separates operational and merchant functions from those of policy and regulation. It is our view that owners of the wires are likely to be the best operators of the grid, and, that successor organizations to the present ISOs are likely to be the necessary regional arbiters of the public interest.

The public interest should be so interpreted as to encourage, through unequivocal economic signals, the divestiture of transmission assets from presently integrated utilities. But, it should be recognized that divestiture of critical assets is one of the most fateful steps that a vertically integrated utility can take. To do so, the utility must have ironclad assurances that its willingness to virtually eliminate public policy concerns about the exercise of market power, will create for its spun-off transmission company a reasonable opportunity to earn something better than traditional rates of return.

In sum, we believe that the grid should be owned and operated by independent, for-profit transmission companies (ITCs). The regulation and oversight of ITCs should be assigned to Regional Transmission Organizations (RTOs). The RTOs would combine functions currently scattered among multiple ISOs and among re-

gional reliability councils that, as presently drawn, represent institutions of sub optimal size and scope, although they are the best structures that have been constructed to date. The system resulting from this structural separation of duties would, in our view, reconfigure the mandates that are most appropriate to each of the players in the marketplace.

We believe that divested ITC's will encourage the participation, under common rules, of transmission systems that are not currently under FERC jurisdiction. Public power and cooperative entities have expressed concerns about potential incompatibilities between their governance and participation in a transmission market made up principally of for-profit transmission companies. The ITCs herein proposed, operating under the public policy oversight of RTOs should go a long way in alleviating the residual concerns of public/non-profit market participants, perhaps to the extent of avoiding the need to consider FERC jurisdiction.

We would summarize the division of labor between the above-named institutions as follows:

ITC	RTO
Owner of the wires	Arbitrator of Conflicts
Transmission System Operator	Dispatch Policy Maker
Manager of Congestion	Assignor of Transmission Rights
Implementor of Constraint Resolution	Director of Constraint Resolution
Manager of System Expansion	Regional Planner
Security Coordinator	Security Overseer
Power Exchange Operator/Coordinator	Market Monitor

Structural reform of the transmission system will have cascading consequence. Among these will be at least the following:

1. Significant consolidation of existing control area [1] offices and staff of the broadly-defined Mid-west, that are now responsible for ensuring the flow of power. This rationalization of the system will minimize procedural differences among systems, facilitate the participation of new competitors, and increase the operational and economic efficiency of transmission services.
2. Replacement of pro forma tariffs, filed under FERC Order 888, with tariffs that more accurately reflect the cost of energy and transmission [2]. Market-driven locational marginal price regimes, along with economic means of managing congestion, would replace tariff rates.
3. Replacement of current network and point to point transmission service, with service based on point to point transactions only. This system would increase the ability to price service equally among all market participants, reduce gaming potential, and eliminate the appearance of discriminatory behavior on the part of transmission owners.
4. Creation of exchanges for spot forward and futures trading of power. A competitive power sector is unlikely to emerge from the present restructuring process unless it also contains highly liquid and robust power exchanges. These exchanges are urgently needed in regions such as the Mid-west which has none. In addition, regions that have such exchanges as institutional aggregates of the ISO, might also benefit from the creation of second-generation exchanges that operate independently of the ISO, and accommodate trade beyond current ISO borders. Markets for power, like RTOs and NERCs, may need to outgrow traditional physical and structural boundaries in order to secure for consumers economic benefits greater than achievable in presently constituted regions.
5. Development of more effective/more timely processes to build transmission lines. Price-sensitive power markets will provide reliable signals for the economic expansion of the transmission system, initially for the purpose of alleviating line-specific constraints. It will be in the public interest to consider and efficiently approve investments that reduce system costs and consumer prices. The interstate natural gas pipeline system has already demonstrated the clear and present benefits of regulator—encouraged new construction. Similar approaches will prove essential to the optimal performance of the transmission system. It

[1] The reliability council region of MAIN has 13 control areas, ECAR has 15, MAPP has 16. An optimal system for the geographic region represented by MAIN/MAPP/ECAR could be operated by no more than a dozen (or less) control areas.

[2] Pro forma tariffs have essentially been replaced by market pricing regimes in the Mid-Atlantic region (PJM), in New England (NEPOOL), in New York, and in California. They remain in effect in most of the rest of the U.S.

would be well, in our view, if Congress could clarify Federal-State jurisdictions, in this area, to achieve objectives important to both.

In conclusion, we see the need for further Federal attention to the structure and governance of the transmission system. Given the advantage of permitting further experimentation than has been possible so far, we would, at present, support expansion and clarification of flexible FERC authority. Specific to reliability, we support legislation that empowers the FERC to enforce the reliability standards that are to be delegated to RTOs, through the national oversight organization, the North American Electric Reliability Organization.

We recognize that further legislation could become necessary in the future, in order to codify consensus on optimal transmission management models. For now, what seems to us essential, is movement away from the existing market fragmentation, and from tariffs that are incompatible with competition in the retail markets for electricity.

Mr. BARTON. Thank you. We would now like to hear from Mr. Szwed, who is also a vice president. He is Vice President of Transmission at First Energy, Akron, Ohio. I understand you have a little different idea from Mr. McCoy. 5 minutes.

STATEMENT OF STANLEY F. SZWED

Mr. SZWED. Thank you very much for this opportunity to testify. I am Stan Szwed, vice president of transmission for First Energy Corporation. First Energy is the largest electric utility in Ohio, serving over 2.3 million customers in Ohio and Western Pennsylvania. We and our customers, suppliers, and employees are constituents of at least six members of the full Commerce Committee, including Representative Tom Sawyer of Akron, where First Energy is headquartered.

I am here on behalf of my company and seven other major transmission providers who have endorsed my testimony here today. They include Allegheny Energy, Consumers Energy, Duke Energy, Entergy Corporation, Northern States Power, Public Service Electric and Gas, and Southern Company. Together, these companies form or account for more than 96,000 miles of transmission lines. If you were to put all that wire together, it would wrap the Earth about four times.

Mr. Chairman, let me say that we share your commitment to competition and less intrusive regulation. There are differences of opinion even amongst ourselves about the best means to accomplish these goals, but we do agree on one essential point, government should not mandate market structure. I think we heard here today that clearly transmission is the backbone of the electric power system, not only for maintaining reliable service but being that necessary component to create robust competitive power markets. In considering potential legislation, we urge your support for the following 5 principles: one, to allow for a market-driven business-oriented resolution to transmission issues; two, the voluntary development of transmission institutions, practices, and investment necessary to support changing electric markets; three, the continued ability of the market to determine the structure of regional transmission organizations; four, encouragement for expansion of transmission investment; and, five, uniform rules for all owners of transmission.

Transmission customers, producers, traders and suppliers and ultimately the public will benefit if transmission systems are given the chance to run as incentive-driven business enterprises and suc-

ceed on the basis of the value that they bring to the marketplace. It bears noting that the investors on which transmission providers must rely for billions of dollars in scarce capital are an indispensable part of the marketplace that must be satisfied.

The value proposition for transmission investment, the incentive for entering, remaining or expanding in the transmission business, has also changed. There is a need to attract new investment and introduce new technology. Transmission systems must improve and grow to be able to keep pace with the thousands upon thousands of new transactions that will take place every day with broader electric competition.

As a rough indicator of that, I have a chart to my left that describes in a very rough way, the increase in transactions that has taken place since 1994. This is significant as the trends, in my mind, are going to continue as we move toward more fuller competition. What this means is we need to continue to provide for investment, investment in physical facilities, investment in people, to operate these systems, and investment in appropriate procedures to maintain integrity of the system.

A concern I have is that the future structure of the transmission business could become more of a regulatory question than a business question. The result could be that the attention, priority, and focus of transmission business leaders will be diverted on regulatory initiatives, rather than sharply focused on improving their service to customers.

Again, myself and the companies that have endorsed my testimony are here to help and offer constructive comments. The companies endorsing this testimony are proudly all over the map on what they think is the best organization option for transmission business. Some, such as Public Service Electric and Gas, are already members of ISOs, and Allegheny Energy has indicated they are willing to join an ISO. Others, including Entergy, Northern States and Consumers, are pursuing other RTO options that are more efficient for their respective areas and businesses. We at First Energy are currently seeking regulatory approval to separate our transmission assets from our baselines of business, setting up a subsidiary for future divestiture into a larger regional independent transmission company.

The companies endorsing this testimony want the flexibility to do what makes the most sense for each, now and in the future.

In conclusion, I want to emphasize that incentive-driven transmission entities with appropriate government oversight, not prescriptive regulation, will better accommodate the future market. Again, I would like to thank you, Mr. Chairman. We welcome the opportunity to work with you to encourage greater competition in electric markets.

[The prepared statement of Stanley F. Szwed follows:]

PREPARED STATEMENT OF STANLEY F. SZWED, VICE PRESIDENT-TRANSMISSION, FIRSTENERGY CORP.

Mr. Chairman: Thank you very much for the opportunity to testify before the Subcommittee today.

I am Stan Szwed, Vice President of Transmission for FirstEnergy Corp. I am here on behalf of my company and other transmission enterprises whose names appear on the list appended to my testimony. FirstEnergy is the largest electric utility in

Ohio. We serve 2.3 million customers in Ohio and western Pennsylvania, and by one measure are the twelfth largest investor-owned utility in the country. We have annual revenues of approximately $5.5 billion and approximately $1.2 billion invested in transmission assets. We and our customers, suppliers and employees are constituents of at least five of the Members on this Committee, including Representative Sawyer of Akron, which is where FirstEnergy is headquartered.

On behalf of these companies, let me say we are here to be constructive. Mr. Chairman, we know that you and Chairman Bliley want competition in the electric industry, and we have some ideas we think will be helpful. We share your commitment to competition and especially to less intrusive regulation. There are differences of opinion, even among ourselves, about the best means to accomplish those goals. But we do agree on an essential point: *government should not mandate market structure.*

Because transmission systems are the backbone of electric systems and the key to vigorous markets in electricity, transmission regulation must leave room for transmission owners to attract necessary investment, acquire or redeploy assets efficiently, and improve transmission infrastructure now and into the future. If transmission owners are not able to attract investment to improve transmission infrastructure, then the very backbone of the restructured industry will not be strong enough to support your vision of market competition. Unfortunately, we have not yet seen any legislative proposal that will encourage or permit reform of transmission regulation along these lines. In fact, some proposals on the table would be counterproductive.

I commend you for devoting this hearing to transmission and reliability issues. From my perspective, it has been surprising that transmission issues have not been the subject of more discussion at this stage of the restructuring debate in Congress. Because transmission service is a critical element both in the development of broad and robust markets for power and in reliable electric supply, ensuring the proper resolution of the debate about transmission regulation is important. Many assume that there will be competition in generation services, and some can even envision the day when generation sales are fully deregulated. Ironically, however, conventional wisdom, when it considers transmission and reliability at all, assumes only that regulation *must* increase. This impulse, in my judgment, should be checked because it is likely to be counterproductive. The best way to improve transmission service and with it reliability, is to let market participants devise and implement new arrangements for providing service, new investment, new methods, and new technology.

The companies endorsing my testimony own many of the largest electric transmission systems in the Eastern Interconnection. The Eastern Interconnection is a technological marvel, a "grid" comprised of interconnected electric systems stretching roughly from the Atlantic Ocean west to the Rockies and from the Gulf of Mexico north to Hudson Bay. One of three in North America, this Interconnection grew over the years almost completely as a result of voluntary effort, and the majority of facilities comprising the interconnection are privately-owned. Let me emphasize: this happened largely without the government. The future of these vital interconnected systems is very much in the balance, and this hearing is part of an important historical record. I am honored to contribute to that record and, as I mentioned, grateful to you and your colleagues for the opportunity.

My colleagues in the transmission business and I know transmission networks are the racetrack on which competition in electricity is and will be run. We have a vital self-interest in assuring that the rules of the track encourage or at least permit fair and more vigorous racing. We also share a strong conviction that the public interest requires nothing less.

Transmission customers, electricity producers, traders and suppliers—and ultimately the public—will benefit if transmission systems are encouraged to run as incentive-driven business enterprises and to succeed on the basis of the value that they bring to the marketplace. It bears noting that the investors on which transmission providers must rely for billions of dollars in scarce capital are an indispensable part of the marketplace that must be satisfied.

Principles and Overview

To capture the efficiencies and benefits of competitive electric markets and supporting transmission systems, we implore you to allow for and promote market solutions. Your decisions in a federal electricity bill will significantly influence the structure and treatment of electric transmission assets, the level of new investment, and the scope and quality of transmission service for the future. Thus, we urge that policy development adhere to the following principles:

1. A market-driven and business-oriented resolution to transmission issues;

2. The voluntary development of transmission institutions, practices, and investment necessary to support changing electric markets;
3. The continued ability and flexibility of the market to determine the structure of Regional Transmission Organizations;
4. Encouragement for expansion of transmission investment; and
5. Uniform rules for all owners of transmission.

If we do not continue to improve our transmission systems and reform the regulation of those systems, the nation will not have a competitive marketplace as vigorous as the one you envision. Transmission systems must improve and grow to be able to keep pace with the thousands upon thousands of new transactions that will take place every day with broader electric competition. It is also important to remove obstacles to restructuring the transmission business. One notable obstacle is the Public Utility Holding Company Act, which should be repealed.

In your letter of invitation to appear today you asked a number of good questions. In answer to those questions, we have developed the following overview.

- Transmission providers are successfully meeting the challenging opportunities associated with increased competition in wholesale power markets. There has been tremendous change and progress since the Federal Energy Regulatory Commission ("FERC" or "the Commission") issued and implemented its Orders 888 and 889.
- The marketplace should take precedence over regulation in determining the structure and scope of the transmission business in the future. In a competitive marketplace, all transmission providers, such as the Tennessee Valley Authority and the Bonneville Power Administration as well as investor-owned companies, should be subject to the same legal and regulatory requirements.
- The industry is developing the commercial infrastructure necessary to accommodate even greater competition. Initiatives are underway with the North American Electric Reliability Council ("NERC") to balance evolution into the future competitive industry with the commitment to continue to provide reliable service. This progress should not be pre-empted by those seeking to mandate RTOs.
- Regional Transmission Organizations ("RTOs") are operating and, more important, are continuing to evolve. Therefore, RTO structures should have the flexibility to adapt in a timely manner as the market changes and as the industry changes. To deny this flexibility could be to damage or impair the progress of the RTOs already underway.
- The pace of change is accelerating. Industry and the markets, instead of regulation, should have the first opportunity to design the institutions and practices that will be needed to accommodate the changes and further competition.
- The "value proposition" for transmission investment—or the incentive for entering, remaining, or expanding in the transmission business—also has changed. There is a need to attract new investment and to introduce new technology, such as the new Flexible Alternating Current Transmission Systems ("FACTS") devices.
- Only a business orientation for transmission business units and RTOs will enable those institutions to attract the investment they need. RTOs that have a market-driven, business focus coupled with profit incentives are best positioned to make the appropriate investment in the transmission business.
- Consequently, if Congress legislates on the subject of the structure of transmission business units or RTOs, it should make clear its preference for market solutions over regulatory solutions.

Development of Transmission Networks

We are at the doorstep of a new stage of development of the transmission system. During the first stage about 100 years ago, at the birth of electric service, there were small plants near densely-populated areas, and the power didn't have to go very far. From today's perspective, this was really a pre-transmission period. In the second stage, as technology developed early in this century, power companies could start building big generating plants and sending the power to their customers across longer distances over transmission lines. But these lines were set up to handle a vertically-integrated company's own customers, not customers beyond the immediate territory.

In the third stage, from the post-World War II period until recent years, as the country became more reliant on electricity and we needed greater reliability, companies started to interconnect their transmission lines to handle emergencies and provide power to one another in times of shortages.

We are in the waning days of the fourth stage now. Today the transmission system, although designed for another purpose, is being relied upon to provide power to an increasing number of customers, not just for emergencies and for reliability,

but as a standard commercial practice. Congress planted the seed for this fourth stage by enacting the Energy Policy Act of 1992 and providing explicit authority to the Commission to order, after affording an opportunity for an evidentiary hearing, that transmission lines be opened for wholesale transactions. The Commission's Orders 888 and 889 required wholesale transmission on a generic basis.

Transmission transactions have increased significantly over the past five years. Transmission systems are being asked to do much more today than they were just a few years ago. Handling the increase in transactions is a challenging technical task. Transmission providers must respond rapidly to problems, and that often requires ready capital for improvements.

The fifth stage will bring choice to every electric customer. Twenty states already have committed themselves to retail competition, and several more appear to be poised to move in that direction this year.

From the standpoint of someone who is selling transmission services, that opportunity is music to my ears. It is a terrific business opportunity. There is no question that we will have to invest in more transmission capacity, not only to ensure reliability, but also to have the kind of markets that can and should emerge. As would any prudent business manager, we will invest wisely, not building more capacity than needed, but building enough to serve our customers' needs well.

Now let's turn to the policy choices you have in front of you at this juncture, and I will tell you where we stand in contrast to some of the other ideas that have been advanced. You may well face a choice between mandatory transmission entities and voluntary ones; between a transmission system that is responsive to the demands of the market or one that is born from a rigid, government-imposed model.

It is beyond question that the transmission system will need to grow, which means that you must cultivate the conditions for growth. Transmission is most likely to grow properly if: you allow it to operate as an incentive-driven business; you let business and the market determine growth; you let the market figure out what size makes sense for a particular regional transmission entity, and whose transmission systems become part of the entity; and you prevent the government from mandating new transmission structures.

Some legislative proposals would grant the Commission new authority to order RTO membership without necessarily requiring the Commission to exercise that new authority. Many ask what harm there could be in giving the Commission an additional tool to ensure the "right" industry structure result. In fact, the question whether the Commission should stretch the limits of its current authority is being debated now. It is a credit to the Commission that the Commissioners are carefully weighing their options. Anyone who has followed the public statements of the Commissioners in the past several months knows how seriously they are looking at the options.

There appears to be an appropriate reluctance on the part of the Commissioners to mandate a particular result. To a greater or lesser degree, the Commissioners have addressed the need for the industry to take the lead in RTO formation. There has also been some helpful commentary from economists, Wall Street analysts, numerous state regulators, and others to the effect that a market orientation for the new transmission entities will get the best results in terms of improving service, maximizing throughput, introducing new technology, and expanding the networks. One economist, Dr. Tom Lenard of the Progress and Freedom Foundation, in urging the Commission not to mandate RTOs, observed:

> The Commission should provide a framework in which transmission market institutions have an opportunity to evolve efficiently. This has not been possible under the pervasive regulatory framework that has existed for 60 years. It will also not be possible if all utilities are now forced to adopt the ISO or, for that matter, any other single institutional structure.[1]

Yet, the question remains: what is the harm in providing the Commission additional regulatory authority? The likely harm is that the future structure of the transmission business could become a regulatory question rather than a business question. The result could be that the attention, priority, and focus of transmission business leaders will be diverted on regulatory initiatives rather than sharply focused on improving their service to customers. If you seek to move away from regulation and toward competition in the electric industry, you should seek to avoid this countervailing, inconsistent focus on still greater regulation for the transmission business.

---

[1] Thomas M. Lenard, "Getting the Transcos Right," *The Electricity Journal*, November 1998, p. 52.

Industry Initiatives: Developing Efficient Alternatives

The companies endorsing this testimony are proudly all over the map on what they think is the best organizational option for the transmission business. We have a responsibility to determine for our customers and our shareholders what will work in our own situations, and in each company's case that determination may be something different. For example, at FirstEnergy, we intend, assuming regulatory approval, to separate our transmission assets from the rest of the company to form a separate transmission subsidiary. This subsidiary is just an intermediate step en route to what we hope will be a large, independent regional transmission entity ("transco") regulated by the FERC. We want to form an RTO capable of being an independent transco right from the start. We are working with several other utilities in the East and Midwest under the rubric of the "Transmission Alliance."

The Transmission Alliance companies have come together and hope soon to seek approval from the Commission of a structure for a broad RTO that would maximize operational efficiencies and throughput while minimizing costs and providing excellent reliability. We will be motivated by a desire to provide outstanding customer service and to seek a balance between customers, shareholders, employees, and regulators. As an entity that both owns and manages its assets, we will be able to raise the capital and operating funds we need to maintain, operate, and expand the transmission system. We will be flexible to expand as dictated by the market, and will have market incentives to add value and services for the benefit of customers. The investment community has made it clear to us that since the idea of a stand-alone company in the electric transmission business is untested, we will have to win approval for transmission rates or "prices" that will enable us to earn an appropriate compensatory return. I want to emphasize the amount of time and the intensity of effort required from scores of people to design new transmission institutions and to win necessary regulatory approvals. These efforts are not undertaken lightly, and they are most serious.

I want to emphasize that in appearing before you today with the endorsement of several companies, I am not advocating transcos exclusively and I am not advocating a mandate for transcos or divestiture. Other companies, such as Public Service Electric & Gas are already members of ISOs; others, such as Allegheny Energy, have indicated their willingness to join an ISO. Several other companies are pursuing other RTO options. Entergy Corporation, for example, asked the Commission to declare that its transco concept is consistent with the Commission's governing rules on independence and governance. Still other transmission providers, such as Southern Company and Duke Energy, which already are serving broad geographic areas at low single-system rates, are persuaded that the millions of dollars and thousands of employee hours invested in "functional unbundling" in compliance with Orders 888 and 889 deserve more than two years in operation before being judged as inadequate or before policymakers draw any firm conclusions as to the effectiveness and efficiency of the wholesale marketplace. As these companies point out, the volume of transactions has increased several fold and the reported customer satisfaction is generally high. Also, while the volume has steadily increased the reliability remains very high, which should be a hallmark of the new transmission structure.

There are different levels of electric industry restructuring taking place across the country. While the goals may be the same, the pace of change and the nature of the requirements may vary. The companies endorsing this testimony want the flexibility to do what makes the most sense for each, now and in the future. By affording the Companies this opportunity, you will be doing what makes the most sense for reliability, customers, and competition.

Conclusion

We know there are people arguing that for customers to have options on where to buy their power, you have to let the government reorganize the nation's transmission ownership and/or control. The theory is that, unless the government or a proxy for the government wrests control of transmission from self-interested companies and forces them into new entities devised by the regulators, claims of discrimination will persist; customer choice will not come to pass; transmission investment and expansion will wither; and reliability will suffer.

We reject that bleak portrait of capitalism, and our experience in a marketplace that has already been serving merchant transactions for many years proves that it is wrong. Incentive-driven transmission entities with appropriate government oversight can accommodate the future market. Your new marketplace will do better without a new regulatory mandate.

Again, I would like to thank you for the opportunity to present our views here today. At this critical juncture in the development of America's transmission net-

works, with major legislation and regulatory initiatives pending, we welcome the opportunity to work with you to encourage greater competition in electric markets and to forge the necessary supporting positive changes in transmission regulation.

Mr. BARTON. Thank you. Before I introduce our next panel, the Chair wishes to make an announcement that I should have made earlier. We have established a working group on this issue that Congressman Chip Pickering of Mississippi is going to chair. It is bipartisan. We are going to meet informally. If there are groups in the audience that wish to appear before that, if you will get with the committee staff, we will arrange it. Since we are going to have a number of hearings on these issues in the next month and a half, we want to give as wide an opportunity for members to be educated and as wide a possibility of forum. We are going to have a parallel track of our formal hearings and then have these informal brown bag lunches and sessions where members can come from both sides of the aisle, and we will have a specific topic for each session so that members can have an opportunity to have a little bit more give and take in a little bit more informal environment. Congressman Pickering is going to chair that and we are very hopeful that all members of the subcommittee will take advantage of that opportunity.

We will now hear from Ms. Trudy Utter, the vice president and general manager of Tenaska Power Services Company down in Arlington, Texas. My understanding is that she has even another idea on how to do this.

Ms. UTTER. Of course I do.

Mr. BARTON. This is probably the best idea, since it is from Texas.

Ms. UTTER. I think that is exactly right, Mr. Chairman. I appreciate your remarks, and I appreciate the warm welcome from Mr. Hall and from yourself. Both of you are neighbors of mine, so I appreciate that warm welcome. I have to confess, though, I am originally from Tennessee; but I am going to go ahead and say this since Mr. Bryant is not here: I wasn't born in Texas, but I got there as fast as I could.

Mr. BARTON. We appreciate that.

STATEMENT OF TRUDY UTTER

Ms. UTTER. Thank you for the warm welcome. I am vice president of Tenaska. My company is an independent power plant developer and a power marketer. My company exists strictly because the Congress of the United States decided that the power market in the United States needed competition. We are not affiliated with any regulated utility. As an independent power developer, we have built 750 megawatts of cogeneration and independent power in the United States and another 1,500 megawatts under development or under construction.

As a power marketer, we are an extensive user of the physical transmission system. As an example, we do all of the buying and selling of electric power for the Public Utilities Board of Brownsville, Texas, a 200-megawatt municipal utility in the southernmost part of the continental United States.

I have provided written comments and answers to your specific questions. I wanted to talk just briefly about some of the things

that are most important to us as a wholesale competitor in this business.

We believe competition works and markets work. And no one cares more about reliability than we do. Reliability for us is not just keeping the lights on, but our economic future and existence depend on the reliability of the electric network.

We believe that FERC and Order No. 888, as well as the Energy Policy Act of 1992, took us way down the road in this marathon that we are running to try to get to a deregulated or a competitive wholesale part. However, as I understand—and Lord knows you can tell by looking at me I don't run marathons—but I heard at the end of the Boston Marathon, there is a hill called Heartbreak Hill. I feel like that is where we are in terms of getting to a fully competitive electric wholesale market or retail market.

There are big barriers between where we are today and the end of the race, and there are a number of us standing at the bottom of the hill right now just essentially running in place. Some of those barriers are a preference for native load of incumbent transmission owning utilities. As a power marketer, that has been a great concern for us.

As a developer of power plant projects, we consistently have trouble interconnecting with existing transmission companies and have trouble with predictable and reasonable transmission rates for long-term service. We believe that the answer to these issues can be solved through regional and independent transmission companies whether those are RTOs, ISOs, ITCs. We aren't as concerned about what the structure is as long as they are regional and independent.

We have had a significant experience with the Texas ISO, as Mr. Hall mentioned earlier, and our experience has been extremely positive. That is a system where we do have both independent and regional representation on the transmission system, and it has worked extremely well.

We believe that you have to have the right tradeoff between a region that is big enough to create efficiency but small enough to maintain sufficient engineering and technical detail to ensure that you have optimization of a system.

We believe that Federal action needs to be taken to clarify FERC's role in this matter and that we want to make sure that FERC has the authority to maintain a fair, competitive, and reliable market. We think this needs to be done quickly because if it is not done quickly, those of us who are standing at the bottom of Heartbreak Hill are going to run out of water or air, one or the other. And so we want to make sure that at the end of this race that the people that are still standing are the creative, entrepreneurial companies that are bringing competition to this business and that we don't just find ourselves with a deregulated, but not a competitive, market. Thank you for your time and I look forward to your questions.

[The prepared statement of Truddy Utter follows:]

PREPARED STATEMENT OF TRUDY UTTER, VICE PRESIDENT AND GENERAL MANAGER, TENASKA POWER SERVICES COMPANY

Good morning, Mr. Chairman and members of the Subcommittee. I thank you for your kind invitation to speak to you today. My name is Trudy Utter and I am vice

president and general manager of Tenaska Power Services Co., a FERC-licensed power marketing company which is an affiliate of Tenaska, Inc. Tenaska Power Services specializes in trading physical power and is one of the largest non-utility users of transmission in the Eastern US and Texas. In addition to being involved with natural gas and electricity marketing, Tenaska Inc. is a developer of independent power projects with three U.S. plants in operation for a total of approximately 750 MW and an 830 MW gas-fired plant in Texas that is currently being constructed. Tenaska serves on the Board and Executive Committee of the National Electric Reliability Council (NERC), on the boards of four regional electric reliability councils and two regional transmission associations.

Tenaska is also a board member company of the Electric Power Supply Association (EPSA), a trade association that represents competitive power suppliers, both marketers and developers of competitive power projects. While I am here today representing Tenaska, my statement reflects the consensus views held by the EPSA membership.

Before I address directly the questions posed to me in your letter of invitation, let me make two general points:

1. There is a need for federal legislation. While we believe that significant progress has been made under FERC's Order 888, many issues remain to be resolved. The wholesale power market is expanding, new generation is starting to be built and the promise of technical innovation, lower prices and better services is becoming reality. Nevertheless, many issues related to competition and transmission structure and reliability cannot be dealt with piecemeal by the states, nor fully resolved within FERC's existing legal authorities.

2. Prompt action is critical. In order to maintain reliability and ensure a healthy wholesale market, we need competitive forces to take hold fully. Without a coherent, robust market framework, entrepreneurs will not make the investments needed to build new power plants or transact for necessary supplies.

With the emergence of competitive markets in states and regions around the country, the picture becomes more and more clear. In Texas, for example, where competitive markets are starting to emerge (even though more has to be done), almost 9,000 MW of new plants have been proposed in a region with a peak demand of 52,000 MW. In many other areas of the United States, state regulatory commissions are predicting and planning for physical shortages. If you build a competitive framework, entrepreneurs and capital will come.

The Committee has posed six questions. Let's consider these in order:

1) Is there a need to provide for enforcement of mandatory reliability standards?

Yes. The reliability of the system is at least as important in a competitive framework as it has been historically. We can no longer rely on good will or the good faith efforts of market participants to protect reliability, since the operation of the electrical system will have a direct impact on the financial health of possible competitors and all customers. A lack of system reliability will have a financial impact on marketers, generators and consumers, and it should have a financial impact on the transmission operators as well. Tenaska and EPSA endorse the stakeholder-developed legislative proposal for a new North American Electric Reliability Organization (NAERO). Legislation is needed to enable the start-up of this replacement to NERC.

2) Should FERC jurisdiction be extended over non-jurisdictional transmission systems?

Yes, although this is less critical today due to the high voluntary participation of non-jurisdictional transmission owners within the framework of Order 888. Because electricity moves at the speed of light, the transmission system operates as a physical unit, with little respect for political or corporate boundaries. If the market is to work well, on a truly non-discriminatory basis, the regulatory framework should reflect the physical one. An interconnected utility cannot physically "opt out" of the transmission network. However, a utility, acting on its own, can disrupt commerce on that network. If we allow arbitrary and discriminatory curtailment and line loading relief policies or local price distortions for access and service, we can create a regional (if not national) nightmare for market participants. While not urgent today, federal legislation would be helpful.

3) Should all transmission systems be governed by the same set of rules?

While greater uniformity and consistency is necessary, there is room for some variation. As mentioned earlier, we endorse the legislation to create NAERO, which encourages uniformity on a national or interconnection-wide basis, but allows for variances to deal with extreme or unique local circumstances. Increased consistency across utility service territory and regions will clearly promote system reliability.

Consistent rules will also promote broader market opportunities and the liquidity necessary to dampen price volatility.

For many of the same reasons outlined in the answer to question two, consistent regional or national policies can help prevent discriminatory activity. The NAERO proposal should be adopted. FERC should be encouraged to streamline, coordinate and encourage efficient transmission operation on a regional or national basis. Federal legislation is needed.

4) Are steps needed beyond Order 888 to eliminate the ability of transmission owners to discriminate against their competitors?

Yes. While Order 888 provides an important framework for reducing the possibility of discrimination, it has not and will not by itself prevent discrimination. Market power, both vertical and horizontal, is real and truly significant. If the purpose of competitive restructuring is to reduce cost and improve services, then there must be ease of entry into the market for all participants and the guarantee of quick justice in those instances where market power is abused.

We remain concerned that true comparability—which would treat the transmission owners' "native load" the same as any other customer—has yet to be achieved. We need full comparability in transmission rates, terms and conditions of service. All users of the transmission system should take service (scheduling, reserving and paying for service) under the same tariff. In addition, non-discriminatory rates are of little concern to a prospective power plant developer who is denied interconnection or who is overcharged for this service.

FERC has endorsed the functional separation of vertically integrated electric utilities. While we do not endorse mandatory divestiture of utility assets as a general policy, the voluntary divestiture of generation assets in many states has helped remedy a number of issues, including the valuation of stranded costs and concerns about vertical market power. It may be appropriate to give FERC the authority to order partial asset divestiture as a response to the illicit exercising of market power.

As a competitive market grows, we hope that the role of the Commission in the marketplace will diminish. In the meantime, however, it is critical for all market participants to have confidence that the Commission is capable of identifying discriminatory activity and has the tools to respond appropriately. The Commission recognizes the need to protect consumers against the abuse of market power and they should be encouraged to do so. While we urge the Committee to avoid being too prescriptive, legislation is needed.

5) Is there a need for regional transmission organizations (RTOs) and, if so, how should they be structured?

Yes, there is a critical need for RTOs. These organizations are not a panacea, but will provide a partial remedy to many of the issues already raised. A large RTO can offer market consistency over a broad geographic area and serve as a one-stop shop for transmission customers. In general, RTOs should be as large as possible, recognizing the need to reflect some regional differences or technical constraints.

Tenaska has had significant experience with the ERCOT ISO in Texas. This system has functioned extremely successfully as a one-stop shop, with a fairly simple structure and at low cost to the market. This RTO is appreciated by the many market participants who depend on it, and it is hard to imagine the Texas competitive power market functioning very well without this kind of organization.

In structure, RTOs must be truly independent, and this independence must extend throughout the organization, such as to the committees where facts are gathered and positions formulated. An RTO cannot be subject to control by a dominant stakeholder. While we believe that bigger is generally better, we also believe that market forces and operational requirements should influence the appropriate RTO size—form should follow function.

One issue that must be addressed within the RTO is the question of mistakes made by the RTO which have financial impact on market participants. Decisions made by the RTO will have direct impact on the market and can, if incorrect, inadvertently undermine an innocent company. As these transmission organizations develop, it will be critical to respond quickly to claims of financial injury and to provide a speedy and appropriate remedy.

We believe that FERC currently has the authority to order the creation of RTOs and we encourage them to do so actively. Federal legislation would be helpful, however, to ensure that this policy is clearly stated.

6) Is there a need to improve the process used for transmission siting?

Yes. As is obvious, we believe that the transmission grid is a national, not local, asset. Final decisions on siting must fall to a governmental entity capable of balancing the needs of multiple political jurisdictions, such as is the case with construc-

tion of natural gas pipelines. We encourage Congress to adopt legislation which vests FERC with primary jurisdiction over major new transmission siting and planning decisions, perhaps subject to a requirement that FERC involve regional or state siting authorities. As part of the planning process, the Commission should take into account the fact that transmission and generation assets can often act as substitutes for each other. Siting new generation in some instances will be a more cost-effective remedy to transmission congestion than additional transmission facilities. Legislation is needed to streamline and structure the siting process.

Conclusion

Members of the Subcommittee, I have appreciated the opportunity to appear before you today and address these very important questions. Once again, I encourage you to act deliberately and with speed to protect the growth and development of competitive power markets in the United States. Competition is already bringing substantial benefits to all consumers of electric power. Congressional action can help ensure that the benefits from competition of lower costs, better services and improved technology continue to flow to the American consumer.

Mr. BARTON. Thank you. We now want to hear from our fourth vice president in a row, Mr. Dave Nevius, who is the vice president for North American Electric Reliability Council, which is a group that has taken on a larger role as competition has evolved. Your statement is in the record in its entirety and we recognize you to summarize it in 5 minutes.

STATEMENT OF DAVID R. NEVIUS

Mr. NEVIUS. Thank you, Mr. Chairman. My written testimony as well as the remarks I will make here today are going to focus exclusively on reliability, not on the structure of regional transmission systems or markets. The interstate high voltage transmission system, which is the backbone of the Nation's electricity infrastructure, is extremely critical to public health, safety, welfare, and national security, as well as enabling robust competition in electricity markets in the United States and throughout North America.

As wholesale and retail electricity markets become more competitive, these interstate transmission systems is being used in new and different ways that promote competition. As Mr. Szwed said, the number and magnitude of electricity transactions that are using the system are increasing dramatically, and new types of electricity suppliers, like Trudy's organization, are using the transmission system to offer innovative electricity products and services. These and other changes are being brought about by competition and electricity restructuring are unique and challenging but the reliability of the transmission system need not be compromised provided appropriate steps are taken.

As others have mentioned, for over 30 years NERC and its member regional reliability costs have worked cooperatively and effectively to revive the essential reliability standards for electric utilities to make sure that the interconnected electric grids remained reliable and that the lights stayed on. This voluntary system for setting and encouraging compliance with industry reliability standards is simply not sustainable in the increasingly competitive electricity industry that we have today and that we see evolving before us.

NERC's current voluntary arrangements need to become mandatory and applied fairly to all participants in the electric industry. An independent blue ribbon panel formed by NERC in addition to

a Department of Energy task force that was chaired by one of your former colleagues, Phil Sharp, independently concluded that a single independent self-regulating organization is the best way to develop and enforce compliance with the highly technical rules of the road needed to keep the interstate transmission system operating reliably as it accommodates the demands of competitive markets. Both of these groups, the NERC blue ribbon panel and Phil Sharp's task force, concluded that Federal legislation was needed to grant the necessary statutory authority to the FERC to approve and oversee such an independent self-regulating reliability organization in much the same way that the Securities and Exchange Commission oversees the stock exchanges and the national association of securities dealers.

In effect, the role of the independent self-regulating organization drawing on the vast technical expertise that exists in the industry will be to set and enforce compliance with reliable standards. On the other side, the Commission's role, as Mr. Hoecker alluded to earlier, would be to ensure that the process of developing and enforcing these rules is fair and open and does not unnecessarily intrude on the developing competitive markets.

The standards developed and enforced by the self-regulating reliability organization would apply to all owners, operators, and users of the interstate high voltage transmission system. That includes the power marketing administrations, TVA, municipals, co-ops, and even the systems in ERCOT. Working with a wide variety of public and private sectors stakeholders, NERC has developed an industry consensus legislative proposal. To establish such an independent self-regulating organization, the principal provisions of this proposal are, one, to establish a single independent self-regulating reliability organization modeled after the national association of securities dealers; two, to accredit this self-regulating organization by the FERC; three, to provide for the authority of this organization to set and enforce compliance with reliability standards throughout North America with oversight in the U.S. by FERC recognizing the comparable and coordinated oversight will be needed from the governments of Canada and Mexico; and, last, a requirement for the organization to delegate certain implementations and enforcement authorities to affiliated regional reliability entities with special deference to regional entities organized on an interconnection-wide basis such as the Western Systems Coordinating Council and the Electric Reliability Council of Texas. This language is supported by a broad coalition of industry organizations and stakeholders, including the American Public Power Association, the Canadian Electricity Association, Edison Electric Institute, the Electric Power Supply Association, the Electricity Consumers Resource Council, Enron Corp., and the National Rural Electric Cooperative Association.

In addition, the groups that are supporting this consensus language are working with the States to address some concerns regarding the States' role in the context of the proposed independent self-regulatory organization. They are working to reach agreement on some clarifying language that can be added to the NERC consensus proposal. NERC urges the subcommittee's support of the consensus language that will ensure the continued reliability of the

Nation's interstate electric system as we move forward with competition.

Thank you very much, and I look forward to answering your questions.

[The prepared statement of David R. Nevius follows:]

PREPARED STATEMENT OF DAVID R. NEVIUS, VICE PRESIDENT, NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL

About NERC

The North American Electric Reliability Council, or "NERC," is a not-for-profit industry group formed after the Northeast blackout in 1965 to promote the reliability of the high voltage electric transmission system. NERC works with all segments of the electric industry as well as customers to develop standards and encourage compliance for the reliable operation of the electric grid system throughout North America. NERC comprises ten regional reliability councils that account for virtually all the electricity supplied in the United States, Canada, and a portion of Baja California Norte, Mexico. NERC's mission is to promote the reliability and adequacy of bulk electric supply by the electric systems of North America—that is "to keep the lights on."

Summary

The interstate high-voltage transmission system—the backbone of the nation's electricity infrastructure—is critical to public health, safety, welfare, and national security, and enables robust competition in electricity markets in the United States and throughout North America.

As wholesale and retail electricity markets become more competitive, the transmission system is being used in new ways that promote competition. The number and magnitude of electricity transactions using the system are increasing dramatically, and new types of electricity suppliers are using the transmission system to offer innovative electricity products and services. Although the issues surrounding these and other changes being brought about by competition and electricity restructuring are unique, the reliability of the transmission system need not be compromised, provided appropriate steps are taken.

The existing voluntary system for setting and encouraging compliance with industry reliability standards for these transmission systems has worked well for nearly 30 years, but is not sustainable in today's increasingly competitive electricity industry. The rules regarding reliability must be made mandatory and enforceable, and those rules must apply fairly to all entities that own, operate, and use the transmission system, regardless of who owns those entities or whether they are currently regulated by the Federal Energy Regulatory Commission.

The mechanism for making the rules mandatory and enforceable within the United States is legislation that would provide for an independent self-regulatory organization, under government oversight, to develop the reliability rules and enforce compliance with these rules. We expect analogous government oversight will be developed in Canada and Mexico.

Working with a wide variety of public and private sector stakeholders, NERC has developed an industry consensus legislative proposal to establish such an independent self-regulatory organization. A copy of the consensus reliability language is attached to my testimony.

The NERC proposal follows the model of the Securities Exchange Commission (SEC) in its oversight of securities industry self-regulatory organizations (the stock exchanges and the National Association of Securities Dealers).

The principal provisions of the NERC consensus legislative proposal are:

- Establishment of a single, independent, self-regulating electric reliability organization (SRRO), modeled after the National Association of Securities Dealers (NASD);
- Accreditation of this SRRO by the Federal Energy Regulatory Commission (FERC);
- Authority for the SRRO to set and enforce compliance with reliability standards throughout North America, with oversight in the U.S. by FERC, as the SEC oversees NASD; and
- Requirement for the SRRO to delegate certain implementation and enforcement authorities to affiliated regional reliability entities, with deference to regional entities organized on an Interconnection-wide basis.

This language is supported by a broad coalition of industry organizations and stakeholders, including American Public Power Association (APPA), Canadian Elec-

tricity Association (CEA), Edison Electric Institute (EEI), Electric Power Supply Association (EPSA), Electricity Consumers Resource Council (ELCON), Enron Corp., and the National Rural Electric Cooperative Association (NRECA).

In addition, the groups supporting the NERC consensus language are working with the states to address some state concerns regarding their role in the context of the proposed independent self-regulatory reliability organization, and are working to reach agreement on specific language to be added to the consensus proposal.

Precursors to Change

For three decades, NERC and its member Regional Reliability Councils have worked cooperatively and effectively to provide the essential reliability standards for electric utilities to make sure the lights stayed on. The introduction of wholesale and retail competition into the electric industry and its consequent restructuring are recasting these long established arrangements and requiring a "new model" to assure a reliable supply of electricity to North America's homes and businesses. NERC's current voluntary arrangements need to become mandatory and applied fairly to all participants in the electric industry.

Efforts began in 1992, following passage of the Energy Policy Act, to transform NERC from a voluntary industry organization that used "peer pressure" to encourage compliance, which worked in a regulated utility context, into a mandatory compliance organization that is needed for a competitive electricity industry.

The Need for Federal Legislation

Both NERC and the U.S. Department of Energy support the need for federal reliability legislation. As part of its efforts to stay "ahead of the curve" during this period of dramatic change in the electric industry, NERC asked a "blue ribbon" panel of experts to recommend the best ways to set, oversee, and implement reliability policies and standards in a competitive and restructured industry. The panel recommended, among other things, that NERC develop specific federal legislation to create an industry self-regulating reliability organization with responsibility and sufficient authority to set and enforce compliance with reliability standards. DOE's own Electric System Reliability Task Force to the Secretary of Energy Advisory Board, chaired by former Congressman Phil Sharp, independently concluded that federal legislation was needed to grant more explicit statutory authority to the Federal Energy Regulatory Commission to approve and oversee a single, international, self-regulating reliability organization.

For the last year, NERC has worked aggressively to develop and implement a number of specific action plans, including preparation of draft reliability legislation, that will transform NERC from a voluntary system of reliability management to one that is mandatory with the backing and support of governments. Reaching consensus on legislative language that everyone could support was a difficult but crucial step in the continuing transformation of NERC. The overwhelmingly favorable vote of NERC's Board, comprising a broad and diverse cross section of electric market participants, represents a strong and unified commitment to this specific legislative language.

What would this legislation do?

This legislative language is designed to "keep the lights on" as the Nation reaps the benefits of competitive electricity markets. It creates an independent self-regulatory reliability organization that will set and enforce rules for running the interstate, high-voltage electric transmission system.

This self-regulatory organization, with oversight in the U.S. by FERC, would operate in much the same way that the securities industry regulates itself through the stock exchanges and NASD with oversight by the Securities and Exchange Commission.

The organization would apply the reliability rules equally to all that own, operate, or use transmission facilities, whether they are investor-owned utilities, municipalities, co-ops, the Federal government through the power marketing administrations, independent power producers, power marketers, or end-use customers.

What the legislation does NOT do

- It does NOT interfere with the States" traditional regulation of the reliability of local distribution of electricity and service to retail customers;
- It does NOT interfere with the States" traditional regulation over the siting and certification of transmission lines and generating plants; and
- It does NOT interfere with the States" traditional regulation of the generating reserve margins for their local utilities.

Why legislate now?

Competition is growing rapidly in the interstate electricity market, and new electricity suppliers are making significant new uses of the interstate transmission system. Historically, the transmission system was designed to move power from a utility's generators to its own load centers. Interconnections between utilities were established for emergency situations, to share installed generation reserves, and to take advantage, from time to time, of their neighbors" lower cost generation.

Now the interstate transmission system is being called on to move vast amounts of electricity from one region of the country to another (and between the U.S. and Canada and Mexico.) Also, the number of participants in the marketplace has greatly expanded, and the number of transactions on the system each day has increased several fold.

How was reliability maintained in the past?

Historically, utilities worked cooperatively to maintain the reliability of the interstate transmission system. The rules for running the system were not mandatory, and the only enforcement mechanism was one of "peer pressure." Nevertheless, it worked quite well.

With the coming of competition, utilities that once cooperated with each other are now competitors. And there are more of them as well as many different types of electricity suppliers.

FERC has mandated that the public utilities subject to its jurisdiction file open access tariffs. Parts of these tariffs overlap with the reliability rules NERC has established for maintaining the integrity of the grid and keeping the lights on. Because there is no current enforcement mechanism for the reliability rules, complaints are increasingly being taken to FERC concerning the reliability rules. Without an independent self-regulatory organization, decisions about maintaining the reliability of the grid will increasingly be made by FERC instead of by industry experts in this technically complex area.

Why this form of legislation?

It is important for FERC to be given an oversight role, because that is the mechanism by which the enforcement authority (which is inherently a governmental function) can be delegated to the independent self-regulatory organization. Absent the government oversight, the independent organization would not be in a position to enforce its rules because of the antitrust laws. And absent legislation, certain owners and operators of transmission (municipalities, co-ops, the power marketing administrations, the Tennessee Valley Authority and utilities in ERCOT) would not be brought within the mandatory reliability requirements of the proposal. With this legislation, those with the technical expertise will be able to set and enforce the technical standards needed to ensure reliability of the interstate high-voltage transmission system. FERC, in a backstop or oversight role, will ensure fairness, due process, and overall compatibility with the public interest.

Governance of the New Independent Self-Regulatory Organization

One of the key questions that the Electric Reliability Panel and NERC wrestled with was how the new organization (the North American Electric Reliability Organization or "NAERO") should be governed. In July 1998, the Board approved a plan to transition to a board made up solely of nine independent directors. That plan included adding nine new "independent" members to the existing 37-member board and having them serve as part of an expanded board until legislation was enacted.

What has NERC Done to Prepare for the Transition to a New Self-Regulatory Structure?

NERC has been working actively over the last year on a number of initiatives that will allow it to be transformed into this independent SRRO:

- Restated Mission and Expanded Membership
- Opened process for developing and approving standards
- Added 9 independent directors to Board (to take over after legislation is enacted)
- Broadened representation on committees
- Established Market Interface Committee to consider impact of reliability standards on competitive market
- Developed Compliance Enforcement Program Pilot

In Summary

NERC urges the Subcommittee's support for this consensus legislative proposal to ensure the continued reliability of the nation's interstate electricity system because:

- A new electric reliability oversight system is needed to ensure continued reliability of the interstate high-voltage transmission system while supporting robust competition in electricity markets;
- An independent, industry self-regulating system, modeled after the National Association of Securities Dealers, is preferred over direct federal regulation;
- The governing board of the new organization will be made up solely of independent members; and
- U.S. legislation is needed for the creation and empowerment of "NAERO."

Thank you for the opportunity to appear and I look forward to your questions.

Mr. STEARNS. [presiding] Thank you. Mr. Greg Yurek for your opening statement.

STATEMENT OF GREGORY J. YUREK

Mr. YUREK. Thank you, Mr. Chairman. My name is Greg Yurek, chairman and CEO of American Superconductor Corporation, a leader in developing commercial applications for superconductor technology for the electric power industry.

Thank you for this opportunity to offer a technologist's perspective on how the Congress can advance our national interests in electric system reliability. The debate over whether competition will improve or degrade the reliability of the power grid is misplaced. It does not address a number of other factors that have put us on a collision course.

During the current long economic expansion, we have seen not just load growth but a major load shift back to our cities. The areas where new facilities are most needed are also those which are most difficult to get siting rights for because of the cost of environmental and community pressures.

The regulatory uncertainty associated with restructuring and the prospect of distributed generation have made planning almost impossible. The bottom line is that investments in the grid have been deferred for years. We must take this debate beyond issues of institutional reform structuring governance.

Fundamentally, the reliability problem is physical. Our power grids are capacity constrained and subject to congestion, and no change in Federal laws can alter the natural laws that cause this reality. If competition is to yield low-cost reliable power for American consumers, we must aim to do better than merely manage congestion and price it effectively. We must overcome congestion through investment in new technologies and physical facilities. The key to success in the competitive transformations of both the telecommunications and natural gas industries lay an expanding network capacity. The case of electricity is no different.

Strengthening power grids with conventional technologies will be problematic at best. I believe that superconductors offer one of the most promising approaches to meet this challenge. Breakthrough discoveries in the mid-1980's in the field of high temperature superconductivity, or HTS, have made possible an extremely high capacity new form of wire. This HTS wire can play a similar role for electric power grids as optical fibers have played in communications. Already HTS wire is capable of carrying more than a hundred times as much power as conventional wires. Wires of this form that we are manufacturing and are available today take up as much electricity as this large copper conductor. The change is here. It is available today. This enables some truly revolutionary

electric utility applications such as high capacity transmission cables.

These applications are not in the remote future. A year from now Detroit Edison will employ the first superconducting cables in a live utility grid at one of its urban substations. In this demonstration project, three HTS cables containing a few hundred pounds of superconducting wire will be inserted into existing conduits in the station. They will replace the capacity of nine conventional cables containing 18,000 pounds of copper wire that carry 100 million watts of power, 100 million watts of power now carried through these new wires.

This urban retrofit project will show how HTS cable could multiply the capacity of utility grids without costly and disruptive excavation. As production volume grows and costs fall, I believe the same wire and cable technology will spread to suburban installations and eventually regional transmission facilities. The technology is here today. It is being deployed very soon.

Already today, superconductors are found in a commercially proven product known as "superconducting magnetic energy storage," or SMES. A SMES power quality system uses electricity stored in a superconductor coil to protect large industrial customers from voltage sags and brief outages. A new application of this same technology called "distributed SMES" involves placing several of these devices on a weak grid to provide stabilization during brief but critical transient events. This offers a powerful and cost-effective new way to improve reliability.

Like most technologists, I am an optimist. I believe that creative minds in a free market will respond to competitive opportunities with a whole array of new technologies. The stresses on the grid tell us that we do not have the luxury of time. Congress can use technology-neutral incentives to encourage new investment to strengthen the grid in much the way that section 706 of the Telecommunications Act calls for deployment of advanced telecommunications capability.

I have three brief recommendations. First, setting power quality standards would unleash powerful market forces and establish a real market environment for many promising technologies to address what is become a very expensive problem. More and more our Nation's power requirements are driven by sensitive silicon chips, so a clean power signal is more important than ever.

Second, we can speed the deployment of promising new technologies like HTS cable while respecting local environmental concerns by putting in place a streamlined Federalized procedure for siting new interstate transmission lines that fall below a certain threshold of environmental impact.

And third, the testing of new technologies in real world environments must be accelerated to speed their commercialization. For this reason, there may be a place for tax or other incentives to support multiple demonstrations.

Thank you for this opportunity to testify and present these recommendations, and I would be pleased to respond to any questions.

[The prepared statement of Gregory J. Yurek follows:]

PREPARED STATEMENT OF GREGORY J. YUREK, PRESIDENT AND CEO, AMERICAN SUPERCONDUCTOR CORPORATION

Introduction

Good morning. My name is Gregory Yurek and I am President and CEO of American Superconductor Corporation. American Superconductor participates in a competitive worldwide industry focused on developing commercial uses for high-temperature superconductors (HTS) discovered in the mid-1980s. We are a leading developer and manufacturer of high-capacity HTS wire for electric power industry applications. I would like to congratulate the Committee for conducting this timely hearing on the critical reliability challenges facing our nation's power grid. Let me also thank you for offering me the opportunity to present a perspective on the role that new technologies can play to address these concerns.

Across the country, competition in wholesale and retail electricity markets is intensifying. As this occurs, utilities are undergoing the most far-reaching changes in structure and governance in the industry's history. The purpose of these structural reforms is to make the electric system more efficient and responsive to consumers. But restructuring has prompted concern that, if these reforms are not thought through carefully, they could undermine the reliability of electric service that Americans have come to expect. It is not useful, however, to focus on the impact of one factor, the advent of competition, on electric system reliability. Rather, the threat to reliability arises from a complex set of challenges utilities face at many levels.

The Threat to Reliability: Planning and Operational Challenges Facing Utilities

Electric industry restructuring is taking place against a backdrop of strong and sustained national economic growth. This cycle of expansion has brought not just rapid load growth but shifting load patterns; much of the new electricity demand is concentrated in fast-growing urban areas. These are precisely the locations where social and environmental pressures make siting major new electric generation and transmission facilities most difficult. Important grid investments to cope with load growth have been deferred for years because of a climate of regulatory uncertainty. The prospect of new types of small-scale generation, which may eventually compete against grid-supplied power, has further complicated long-range planning.

Other difficult operational issues loom. Power quality is increasingly important; our shift to a high-technology manufacturing base has made customer requirements for a clean power signal much more exacting than in the past. Even the possibility of new mandates arising from global environmental treaty obligations could put a premium on energy efficiency, forcing further changes in utility strategy. Each of these challenges poses complex problems. Utilities must grapple with all of them simultaneously, all while facing pressure to hold the line or even reduce rates to consumers.

Electric Transmission: The Importance of Capacity

Reforms in industry structure and governance will be necessary but not sufficient to address these challenges. The most powerful legislative body cannot rewrite the physical laws that explain the fundamental problem of inadequate grid capacity. In order for these competitive reforms to produce benefits for American consumers in the form of reliable, low-cost power, it will be necessary to do more than find efficient ways to apportion the costs of grid congestion. Instead, it will be necessary to solve the problem of congestion. I believe this obstacle can be overcome through the deployment of new technologies to expand the power grid's fundamental capacity to handle new and unplanned power flows.

The idea that transmission capacity is the key enabler of competition becomes clear when we consider its role in other network industries. The revolution in telecommunications would have been impossible without the vast increase in "bandwidth" or capacity brought on by fiber optic cable, as well as digital technologies that allowed more intensive use of the radio spectrum. The renaissance of the interstate gas market since the open access reforms of the 1980s required substantial investment in a robust and flexible, interconnected network of interstate pipelines. We simply cannot expect to foster broader regional electricity markets in the 21st century if we continue to rely on electricity transmission pathways and technologies built to accommodate local traffic patterns of the mid-20th century.

Superconductivity: An Overview

This testimony presents an overview of superconductors, and introduces a family of emerging technologies that hold special promise to strengthen power grids by revolutionizing the electric industry's most basic building block: wire itself. Superconductivity is a basic property of materials that causes them, when cooled, to lose all resistance to the flow of electrons and to carry far more electricity than copper

or aluminum conductors. The ability to achieve this state of electrical losslessness makes it possible for superconducting wire to carry electricity with very high efficiency, and to store electricity indefinitely. This, in turn, opens the possibility of designing a new generation of electric system components that will be far more compact, powerful and efficient than their conventional counterparts.

Superconductivity is not a new phenomenon. Low-temperature metallic superconductors were discovered in 1911. However, the cost of cooling these materials to near absolute zero using liquid helium made it impractical to consider their use in electric power grids. In 1986 and 1987, however, researchers discovered a new family of revolutionary, ceramics-based superconductors that operated at much higher temperatures. These so-called high-temperature superconductors or HTS materials can be cooled with inexpensive and environmentally benign liquid nitrogen. These discoveries have made it economically feasible to use superconductors to build high-capacity cables, extremely compact and powerful motors, and efficient and environmentally benign transformers that will protect utility grids from the propagation of dangerous fault currents.

American Superconductor's core product is a new type of HTS wire that will be at the heart of each of these applications. We are currently manufacturing 250 kilometers per year of HTS wire that carries approximately 100 times more current than a conventional copper wire of the same cross-section. We work with leading electrical equipment manufacturers through strategic alliances to develop electric industry applications for this wire, and are continuing to make progress in both wire performance, cost reduction and applications development. To facilitate our path to commercialization, we recently committed to double our wire production over the next twelve months on the way to a much larger scale-up in the near future.

Early in the history of the HTS industry, the federal government recognized the tremendous opportunity these materials offered to strengthen electric power grids and improve reliability while shrinking the environmental footprint of the power sector. The government also recognized the need to ensure a strong American position in what has become a hotly competitive global industry. The Department of Energy has played a key role in fostering commercial applications for HTS through its Superconductivity Partnership Initiative program. In the comparatively short span of a decade tremendous strides have been made, and the fruits of this industry-government collaboration are now imminent, as the first commercial-scale demonstrations of HTS motors and cables are scheduled to take place over the next 9-18 months.

In the following sections, this testimony describes a project involving one of these applications, HTS cable, in somewhat more detail. It also describes the application of low-temperature superconductors in energy storage coils used in combination with HTS power leads. This application has an established commercial record in industrial power quality applications, and will soon be employed to enhance transmission reliability.

Superconducting Cable

The most visible customer demonstration of HTS technology to date will occur in a substation of the Detroit Edison Company one year from now. In this project, Pirelli Cables and Systems N.A. of Columbia, SC will build and install a three-phase, 24-kilovolt, 2400-ampere AC cable system in the Frisbie Station, a 1930s-era facility located in the inner city of Detroit. The neighborhood surrounding Frisbie is slated to undergo a series of revitalization projects over the next few years, including new hotels, casinos and two professional sports stadiums. The Pirelli cables will use HTS wire supplied by American Superconductor and cooling systems supplied by Lotepro Corporation. Working with Detroit Edison personnel, Pirelli will remove nine 400 foot copper cables, containing over 18,000 pounds of copper, that currently run through a conduit bank underneath the station. In their place, three high-capacity HTS cables containing an estimated 250 pounds of superconductor wire will be installed in the existing conduit bank, providing equivalent capacity but leaving six additional conduits available for future expansion or alternative uses.

The Frisbie project will illustrate an "urban retrofit" concept originated by EPRI (formerly known as the Electric Power Research Institute). Under this concept, it is envisioned that urban utilities could replace conventional copper cables with high-capacity HTS cables in much the same way that telecommunications companies have replaced copper with fiber-optic cables over the past decade, literally multiplying the capacity of their existing infrastructure. This strategy is expected to be particularly useful for utilities serving older, densely-settled areas where underground construction is especially complicated, as it would enable utilities to avoid the costs, delays and environmental intrusions associated with excavation in city

streets. These factors often dominate the total cost of a cable installation. Furthermore, the use of high-capacity HTS cables may eliminate the need to upgrade system voltages, enabling utilities to avoid the high costs associated with replacing and re-rating transformers.

In the future, HTS cable could be applied more broadly as further improvements in performance and reductions in cost take place. Deployment of HTS cable is likely to begin in high-value situations such as congested urban centers, spreading later to suburban areas where community pressure mandates the underground placement of transmission lines, and eventually to longer, regional transmission facilities. An attribute peculiar to superconductors allows them to carry twice the capacity, with zero electrical loss, in a DC mode of operation as compared to AC. Because HTS cables will be able to carry much larger currents at lower voltages, superconductivity may facilitate the concept of point-to-point DC electricity "pipelines." Indeed, older, abandoned gas and oil pipelines might serve as ideal conduits for projecting large amounts of electricity directly into congested urban pockets using superconductors.

Superconducting Magnetic Energy Storage

I would now like to turn to an application for superconductors that is a proven commercial technology. One of the most intriguing attributes of superconductors is their ability to store electricity indefinitely, without degradation. A Superconducting Magnetic Energy Storage (SMES) system stores a powerful current in a supercooled electromagnet. This current flows around a coil of wire endlessly with no electrical loss. It can be instantly reinjected into an electrical circuit, for example, to boost voltage in the event of a line disturbance. Commercially available SMES systems sold by American Superconductor store nearly 3 megajoules (megawatt-seconds) of energy, and have amassed a track record of over 30 unit-years of successful operation in a variety of industrial customer settings. Packaged in a trailer for mobility, these devices employ conventional low-temperature helium-cooled magnets. Recent installations also incorporate HTS current leads to carry power in and out of the magnet, an advance that has sharply improved the efficiency and cut the cost of the system.

To date, these systems have been used to provide power quality protection to large industrial customers and other large users of electricity with processes that are highly sensitive to voltage disturbances. The need for such a solution has intensified over the past decade as conventional manufacturing technology has been supplanted by modern, microprocessor-controlled equipment. The trend toward high technology in manufacturing has resulted in higher industrial productivity and improved process control. However, because of the low tolerance of microprocessor chips for voltage deviations, it has also made many large manufacturers more susceptible to disruptions in their operations resulting from even very brief voltage disturbances. The cost of such disruptions to U.S. industry, in terms of lost productivity, idled labor, damaged equipment, cleanup and other costs, has been estimated at more than $10 billion per year. While many industrial backup power systems are premised on the need to protect against a long-term blackout, the fact is that most voltage disturbances on the North American grid are very short-term in nature—usually less than 0.5 seconds, and almost always less than two seconds. SMES technology, making use of the highest-density form of power storage in existence, represents a new kind of power quality solution to enable large industrial customers to maintain continuous operations.

Distributed SMES: Using Superconductors to Solve Network Problems

Recognizing the building concern about electric system reliability, we have developed several promising new applications based on proven SMES technology to address the growing need to maintain and improve utility-level grid stability in the face of changes being brought on by utility deregulation and competition. We anticipate the first commercial sales of these new superconductor applications in the near future.

To understand the important role that superconducting storage can play, it is important to recognize that the transmission capacity of many utility grids is limited, not by total steady-state flow capacity (which is subject to thermal limitations), but rather by their ability to handle very short, so-called "transient" events. Sudden changes in flow patterns—caused by transmission facility outages, as well as sudden shifts in loads and power plant operations—can pose the risk of voltage instability, causing component failures and the threat of cascading outages. To minimize this risk, accepted utility practice calls for actions to avoid exposure to contingencies that can result in voltage instability. Such actions, which can include generating plant redispatch or forgoing the sale of transmission service, can impose a substan-

tial economic penalty. New technologies to relieve these voltage stability limitations could increase the Available Transfer Capability (ATC) on a given system. In this way, these new technologies could postpone the need for new investments in transmission facilities, and offer utilities and their customers a powerful and economical way to leverage the benefits of competition among power generators.

The key to this new application for SMES technology involves the strategic placement of multiple units at critical locations on a grid, in a configuration known as "Distributed SMES" or "D-SMES." During transient events that might otherwise cause voltage instability, each individual unit responds by injecting large amounts of real and reactive power, instantaneously, at its particular location. These distributed, instantaneous injections of real and reactive power offset the increased system losses and the corresponding low voltage caused by the altered flow path. By providing a critical boost to the system both during the fault and following clearing of the fault, they allow the transmission grid to avoid a voltage instability situation. The combination of attributes represented by D-SMES—large quantities of real and reactive power, instantaneously available at many distributed locations—is unique, and enables a solution to the problem of grid stabilization that is both faster, more accurate and less expensive than conventional alternatives.

Legislative Recommendations

While I believe that advances in superconductivity are of fundamental importance, I do not come before the Committee to advocate specific legislation to promote any particular technology. These superconducting technologies are far from the only ones being developed to address the challenge of grid reliability; advances in power electronics, metering and communications, and other areas also offer the promise of improved electric system performance. Distributed generation, as well, can be counted on to make a significant contribution to alleviating demands on the grid. However, it would be an error to assume that distributed generation by itself will solve the problems of system-level reliability. Regardless of the future growth of distributed generation, our urbanized society will require a robust grid to ensure universal access to reliable and economical power, based on diverse energy sources, with acceptable local and regional impacts on the environment.

The best way to strengthen and ensure the reliability of the grid is not to prescribe particular technology paths, but to remove commercialization obstacles to the technologies competing to meet this need. Technology-neutral legislation aimed at promoting reinvestment in the grid can harness market forces, allowing the market to select the mix of winning technologies and strategies. Accordingly, I ask the Committee to consider the following legislative recommendations:

1. *Initiation of power quality standards.* Traditionally viewed as distinct issues, the problems of grid-level reliability and distribution-level power quality are converging. This has resulted from the "siliconization" of energy loads and the transition to competitive retail market frameworks. Clear, equitable and enforceable power quality standards, appropriate to local needs and conditions, will cure what could be considered a form of market failure. They will create a market-based framework for new services and investment in technology solutions to improve the quality of grid power.

In the absence of clear standards, power quality problems lead to finger-pointing between utilities, customers and equipment manufacturers, but no satisfactory solutions. Utilities should not be burdened with unreasonable standards where most of their customers can tolerate existing levels of system power quality. Existing power quality conditioning equipment such as SMES, flywheels, UPS systems and distributed generation make it economically feasible to offer differentiated levels of power quality to different customers.

Clear and unambiguous power quality standards would have the effect of defining and explicitly limiting utilities' service obligations. For those customers who have more demanding power quality requirements than are prescribed, the standard will remove ambiguity and place on the customer the obligation to obtain the services or technology solution to protect its electric load. In turn, standards would foster a market environment in which providers of these services and technologies compete to provide them at least cost to end users. Bringing market discipline to bear on the problem of power quality would ensure that the total cost of utility system upgrades, customer expenditures and power quality-related economic losses is minimized.

2. *Incentives for low-environmental-impact transmission.* One of the most difficult and intractable obstacles to expanding the electric power grid over the past ten to fifteen years has been the political and social infeasibility of siting new overhead transmission lines. Such projects have provoked community opposition because of concerns among landowners about the property value, visual and health and safety

impacts of new construction. While American consumers generally support competition and choice to power markets, we have become more insistent on maintaining and improving the quality of our environment, and it is likely that proposals to build major new lines to serve regional, as opposed to local, needs will continue to encounter stiff community opposition.

New technology solutions such as HTS cable could make an enormous difference in meeting the challenge of expanding transmission. HTS cables will be compact and thermally independent, allowing them to be placed in unobtrusive underground pipes and obviating the need for large rights-of-way. Advanced cable designs will provide shielding from the effects of EMF. It is of great significance that, while electric transmision line construction has slowed drastically, over the last twenty years, some 500,000 miles of fiber optic cable has been laid in the United States without arousing public opposition, largely because it has been installed in compact, unobtrusive underground rights of way.

Accordingly, the Congress should consider legislative mechanisms to facilitate the siting of new transmission facilities with favorable environmental impacts. For example, the Congress could establish a streamlined, federal siting process for new electric transmission lines carrying power in interstate commerce, where the environmental impacts of the project fall below a specified threshhold. To attract financial investment in such facilities, the Congress could also consider exempting these projects from conventional forms of rate regulation.

3. *Incentives for additional demonstration projects illustrating advanced technologies.* Actual demonstration projects, such as the HTS cable project in Detroit, will play a crucial role in establishing the reliability of new technologies for use in electric utility systems. However, utilities cannot be expected to embrace a new technology on the strength of a single demonstration in a single operating mode. Multiple trials will be required in different operating modes and voltage levels, accumulating to many operating years of experience. Ultimate customers—the utility companies, competitive power generators or manufacturers who will incorporate HTS equipment into their operations—must develop familiarity with the technology and see how it will impact the operation of their systems. Only through field trials such as the Detroit Edison cable project will the operational benefits of these new systems, as well as the demands imposed by them, be fully understood.

Successful commercialization of these new technologies will yield a tremendous payoff to the nation in the form of improved electric system reliability and a commercial leadership position for America. Therefore, it is appropriate for the Congress to consider tax or other financial incentives to encourage the deployment of a range of new technologies that enhance grid reliability.

Conclusion

As this hearing evidences, there is tremendous concern about the potential for competition and market forces to undermine the reliability of the electric system. In fact, the marketplace response to electric industry restructuring suggests equally that there is tremendous potential to enhance electric system reliability with a range of new technologies offered by new players. Among these, I happen to believe that superconductivity is of fundamental importance. The development cycles for silicon chips and optical fibers have shown that innovations based on new materials, while they can take longer to achieve their impact in the form of commercially available products, can have the most pervasive economic and social effects in the long run. We expect superconductor-based technology to follow a course similar to these other innovations as the 21st century unfolds.

For some time, electric industry restructuring initiatives have focused predominately on extracting the benefits of competition in the generating sector. The wires segment of the business has been perceived as being somehow less susceptible to innovation. Increasingly, however, as price spikes recur and occasional outages expose the weaknesses of traditional technology, the electric industry is recognizing the need to expand its ability to deal with broader and more variable power flows. If the promise of a truly continental power market is to be realized, an "electricity superhighway" featuring high-capacity, environmentally unobtrusive transmission cables and other ancillary equipment will be required. Not unlike optical fiber, superconductor-based technologies may be the key enabler to allow this forecasted revolution to occur.

Thank you for the opportunity to present this testimony.

Mr. STEARNS. Thank you. Mr. Joseph Iannucci.

STATEMENT OF JOSEPH IANNUCCI

Mr. IANNUCCI. I am Joe Iannucci from California. I am the principal of Distributed Utility Associates, a small consulting firm specializing in distributed generation. We have clients around the world, small and large utilities, technology development companies, research organizations, various regulatory agencies. And occasionally I am introduced as the father of distributed generation. I am not so sure about that, but perhaps if there were a paternity suit, I might be convicted. I am not sure.

I have been asked to take you outside of the box and show you my world of distributed resources, small generation and storage, integrated seamlessly into the utility system of the future. In fact, the SMES unit mentioned just before would be an example of one of those units.

Let me define a distributed utility for you. It is really very simple. It is just the existing utility system with little bits of generation in storage out in the distribution system. And I will explain why they are in the distribution system in a moment.

But this very simple definition belies the fact that it has very profound implications. And we will come back to those implications. It is not a technology play. I don't need any new technologies. I would be very happy to have my friend's superconducting magnetic energy storage system, but I could just as easily use reciprocating engines, small gas turbines, anything that is small, clean enough and able to be sited in the distribution step.

It is really a value proposition. It is a new way of looking at the utility of the future and trying to make the most of what we have. It is putting things exactly where they should be placed for good reasons, either to take up peaks or take advantage of combined heat and power applications. There are many reasons. And it is based not on building larger and larger power plants—we have wonderful large power plants and large transmission systems—but rather based on the economies of mass production. It is a completely different way of looking at the utility business. It is from the outside in rather than from the inside out.

Perhaps an analogy to the computer industry would be helpful in explaining why this might have some profound implication. What makes more sense a large mainframe computer or a thousand little PCs? That is kind of a silly question. They each have their uses. If you need to do some massive calculations, you really want to have a mainframe computer. They are wonderful, fast dollars per computation. The speed is incredibly fast, and it is the way you should be doing massive computations. However, if you are looking for maybe a little bit more flexibility, more modular investment, ways to tailor the computations to exactly what needs to be done, these seem to have taken over this market. Yes, there are still mainframes. This is the analogy I would like to draw to distributed resources. I love the central station power systems. I love the transmission systems. It gives us very low bulk power cost, but I believe it should be supplemented with distributed resources, distributed generation and storage. Much the same way the PCs have revolutionized our computer industry, small distributed resources may do the same thing to our utility business.

Let me explain now what distributed generation and storage has to do with your topic today, reliability and transmission. First of all, let us look at the investments that utilities have made historically and recently in generation, transmission, and distribution. Where has this money gone? Sure, there has been a lot of money put into generation. There has been some money been put into transmission. But the largest single investment is in distribution.

What does that mean for distributed resources? That means that if you put a distributed resource into the distribution system, you have the possibility of getting three benefits for the price of one. First of all, of course, you can use that as a central station asset. You get a signal from the central station asking you to put that power plant on. You can do that. You can also reduce the transmission line loadings, maybe get more congestion reductions, maybe improved reliability of the transmission system, and also you can help yourself in the distribution side. You can save investments in the wires. Only if you put it in the distribution system, can you get all three of those benefits. The benefits flow uphill, not downhill.

So what would you do from the transmission point of view? You could put in more distributed resources and perhaps avoid a little bit more transmission investments.

And this is true anywhere. This isn't just specific to California where I live; but in the utilities that I work with around the world, South Africa, for instance, we see the very same problems, the very same issues where putting things in at the distribution level help the most. Reliability the same way. Most of our reliability problems come from the distribution side, not from generation or transmission. And finally, there is also a competitive force for distributed resources. Customers can use distributed resources themselves to solve their own power quality problems, to manage their own bills, to make all of their energy, and it can also serve as a ceiling for rates in a competitive environment.

If I can just give a few suggestions, specific suggestions as to what might be done. I would really like this committee to consider the role and potential importance of distributed power in the electric utility restructuring legislation that you will be seeing this year. I know it is an unusual request to look from the outside in, but the customers are out there waiting for you to represent them and to make sure the distributed resources have a fair place at the table in this legislation.

I also would like emission rules that are written primarily from the standpoint of large power plants to be reconsidered with regard to small power plants. We can take advantage of the increased efficiencies of distributed power putting it in the distribution system, and we can also encourage States to allow full and open-market competition, work with the IEEE in developing their interconnection standards and work toward a DOE line item on distributed utility to really figure out some of these problems.

[The prepared statement of Joseph Iannucci follows:]

PREPARED STATEMENT OF JOSEPH IANNUCCI, PRINCIPAL, DISTRIBUTED UTILITY ASSOCIATES

Mr. Chairman and members of the Technology and Energy and Power Subcommittee, I am Joseph Iannucci the principal of Distributed Utility Associates, a

consulting firm specializing in distributed power. Our clients include many utilities and technology vendors, national research organizations and regulatory agencies.

Thank you for the opportunity to testify today on reliability and transmission and my views on why distributed power may be critically important to these two issues. In the interest of time, I will summarize my remarks and respectfully request that the full text of the testimony be submitted for the record.

I have come before this subcommittee to share a Distributed Utility vision of the future for the national electric supply and delivery system. Small electric generation sources in the utility delivery system should be considered as an alternative to traditional transmission and distribution investments, to improve customer service and reliability. It is my opinion that the opportunities which the Distributed Utility concept affords must be included in the electric utility industry restructuring debate and that new policies may be required to fairly evaluate distributed power.

The Distributed Utility concept is the beneficial inclusion of small (from kilowatts up to ten megawatts in capacity) generation and storage installations into the electric distribution system. These units may be owned and operated by utilities or by customers, but generally can increase reliability, reduce costs, increase efficiency and reduce emissions. By coordinating the operation of these distributed power units and the central power plants, we can reduce utility expenditures and increase value to customers. I have attached a brief vision paper on a Distributed Utility future which details this concept.

Perhaps an analogy to the distributed utility concept from the computer world would help. Which is more valuable, a main frame computer or a thousand desktop PCs? The answer of course depends on the task at hand. If massive calculations are involved the mainframe wins hands-down; but if personal convenience, modular investments, flexibility and reliability are desired, the multiple desktop units are hard to beat. Distributed resources pose the same challenge to utilities that personal computers presented to the computer industry over a decade ago.

Small computers aren't less expensive than mainframes (per computing unit), but they do allow more of us to use our own computers and be more productive. Similarly, by using small power sources precisely where and when needed, both customers and utilities can potentially reduce their costs. Utilities can use distributed generation to make electricity while simultaneously avoiding or deferring costly transmission and distribution equipment upgrades. Customers benefit from more reliable service, reduced bills and the possibility of meeting their combined heat and power needs.

Completing the computing analogy, large and small power plants can complement each other. The utility of the future could be mostly large power plants remote from the consumers, supplemented by small local power supplied for distribution system reinforcement, added reliability, and additional customer services.

Over the last few years, there has been tremendous progress in the small modular power technologies. Small generation, modular storage units, and targeted demand management (here collectively called distributed resources) have caught the attention of the utility industry. Small gas turbines, improved reciprocating engines, fuel cells, photovoltaics, wind turbines, batteries, and composite flywheels have started down the path to commercialization. Even commonplace standby generators at customer sites are receiving a second look as cost effective sources of power. Just as important are the recent advances in the facilitating technologies needed to make the small generation units integrate seamlessly into utility systems. Smart controllers, flexible dispatch algorithms, improved interconnection techniques, expanded use of sensors and communications will each in their own way contribute to the accelerated inclusion of distributed resources into our electric delivery systems.

Packaged with the existing grid, distributed power can create more reliable electric service and meet increasing customer demands for high quality uninterruptible power, so supermarkets and other facilities can continue operating during severe weather and other unforeseen circumstances.

Technology advances, environmental concerns, deregulation, and increased customer choice all seem to be pointing toward a future where small generation sources could become an important part of the utility of the future.

But for all of the promise and potential, distributed power has yet to find its way into substantially common practice. Several barriers remain before the concept will become widespread. Today's rules were drafted with yesterday's technologies and monopoly utility system in mind.

Advocates of distributed power see the major impediments to be:

- Reliability is currently defined from the utilities' standpoint rather than from the customers' view
- Lack of uniform and consistent utility interconnection rules and requirements

- Emissions policies developed for large central power plants, not taking into account credits for combined heat and power or transmission and distribution inefficiency
- Equitable standby and exit fees and business mechanisms for evaluating and sharing (between utilities and customers) the "wires" benefits and responsibilities of distributed generation.

It is time to shape federal regulations and policies to include the likelihood of widespread distributed power. The best Federal role at this point is to help adjust yesterday's rules for today's competitive marketplace and distributed technologies. While many of these issues are at the state level, the Federal government can help provide consistency on a number of points:

1. Consider the role and potential importance of distributed power in electric utility industry restructuring legislation; distributed generation may be an important market power issue since it sets a logical ceiling for rates; exit charges, standby fees, and stranded cost recovery should be designed to neither unfairly penalize customers wishing to use distributed resources, nor leave utilities with unrecoverable investments already made on their behalf.
2. Support emissions rules which encourage efficient use of fossil fuels, for instance by rewarding net emission reductions from combined heat and power and reduced line losses
3. Encourage states to allow full and open market competition in distributed resources, including both customer and utility ownership and operation
4. Support IEEE in developing and establishing safe, equitable and effective electrical interconnection rules
5. Work toward a DOE line item for Distributed Utility research, development and demonstration; an annual budget of $10,000,000 could do much to explore the full value of the concept, and accelerate the distributed resources market.
6. Encourage, and support if needed, field tests of substantial distributed power grid penetration to allow seamless integration of distributed generation and storage assets
7. Consider using a reliability definition which represents the customers' point of view, not the grid's
8. Consider holding more extensive hearings on distributed generation to better evaluate its potential importance

THE DISTRIBUTED UTILITY VISION

Joseph Iannucci, Distributed Utility Associates, April 22, 1999

The vision of a distributed utility future incorporates distributed resources to optimize customer needs, large power plants, and delivery of our electricity. This approach would take advantage of the locational differences in the cost of delivering service, use of local fuels, and customer energy efficiency opportunities. Many distributed generation and storage technologies are capable of playing a major role: fuel cells, reciprocating engines, small and micro-turbines, modular storage and renewables of all types. Natural gas is likely to be the leading fuel due to its low cost, wide availability and minimal emissions.

Distributed power systems can and will be put in by customers (or by Energy Service Companies for customers), and by utilities for a wide range of site-specific reasons and benefits. While utilities have much to gain by taking the lead in implementing distributed generation and storage, customers are even more motivated (since their rates include substantial utility imposed electricity delivery costs) and less encumbered by regulation and other institutional barriers.

Distributed power will change the way electric power systems will be designed and operated. In the traditional utility system electric power is generated in/purchased from large central stations. Power flows via multiple transmission lines to the distribution network and then to the load. In contrast, the distributed utility concept supplements the large power plants with many small resources located throughout the entire distribution system serving customer loads.

Distributed power economics are driven more by their value, not merely by producing power at the lowest cost per kilowatt-hour. Electric utility generation planning and operation in the past sought to minimize the cost of electricity production, with minimal attention to the substantial costs of delivery and little regard to the additional benefits which on-site generation and storage can provide customers. When the entire investment in generation plus wires, plus customer benefits are included, the best solution for all involved may not be the one with the lowest cost per kWh, but rather the one which minimizes *all* costs, including wires upgrades. A prime example would be dispatch of a customer's existing standby generators; the

energy costs of those units are very high, yet their occasional use a few hours per year is frequently the lowest cost way for a utility to provide incremental supply.

The ultimate vision of a distributed power future would include significant levels (for instance 5 to 30% of total capacity) of distributed generation, 5 to 10% of distributed storage, and 15 to 20 % combined heat and power; these distributed units would follow the local load swings as much as possible, leaving the baseload demand for central plants to satisfy. The remainder of the energy is made by clean, efficient, central station plants operating near their optimal design points. The central and distributed portions are designed to be complementary to each other in terms of dispatchability and reliability and are operated in a coordinated manner via contractual arrangements between all parties. The flexibility and portability of distributed power technologies will supplement the low energy costs and stable operational characteristics of our central power plants.

The markets for distributed power will be significant domestically and for export markets especially to areas with weak infrastructures.

If 25% of all load *growth* in the US were distributed power, costing an average of 500$/kW, about $7 billion of hardware would be installed annually; in addition there would be fuel supply contracts, ongoing hardware maintenance service contracts, additional customer services, and increased research, development and demonstration efforts each year; distributed power could easily be a *$10 billion per year* business in the US alone.

If only 1% of all *existing* industrial and commercial loads were to convert annually to distributed power at similar capital costs, this would be a *$2 billion per year* market. Technologies are also being developed to address residential markets.

On a global basis the need for reliable modular power is much greater than in the US; some estimates for economically viable markets outside of the US are as high as 75 GW per year. If exports by US firms are one fourth of this market, this would represent another *$10 billion per year*.

Each of these markets could be accelerated by decreasing reliability of central supply, accelerated deregulation, lower cost distributed power technologies, concerns for global warming, etc.

The joint optimization and coordinated operation of the generation and delivery of energy benefits its many stakeholders; first and foremost it will provide lower energy costs to consumers. Performance based regulation will reward wires utilities with increased utilization of their transmission and distribution assets. This asset utilization can be translated into lower costs to consumers and higher profits to shareholders. When performance based ratemaking is applied to the local distribution companies it creates a real incentive for economic investment in infrastructure, and allows the distributed power option to be added to the tools of the distribution planner. A broad range of Energy Service Companies will have significant presence in the distributed generation and storage market including forward thinking gas companies wanting to diversify and sell more gas. Society benefits from the more efficient delivery and use of energy.

Many of the major Energy Service Companies players are the unregulated side of utilities. Much of the distributed power opportunities will be catalyzed by the Energy Service Companies through customers rather than by the regulated utilities. However, with appropriate regulation in place utilities will have a revenue generating mechanism to take advantage of the significant opportunities of asset utilization obtainable with distributed generation and storage technologies.

The key to siting distributed power is location, location, location. This means taking advantage of the added local value of distributed generation and storage, for example deferring transmission and distribution investments while relieving local and systemwide demand peaks at the least cost. The concept also includes use of local fuels (including renewables), providing remote power, pursuing combined heat and power opportunities, and site-specific reliability and power quality improvements.

The vision of the distributed utility includes many stakeholders, technologies, and fuels because they each have their place either economically or environmentally. Energy Service Companies and electric delivery companies, gas companies and technologies vendors should all participate because the system can not be optimized by any of them singularly. They each need information or services from the others. The distributed fossil technologies and renewables communities can be natural allies in jointly working towards simplifying interconnection rules, changing utility standard practices, net metering, minimizing standby charges, avoiding transition charges, etc.

Mr. STEARNS. Thank you. Dr. Matthew Cordaro.

STATEMENT OF MATTHEW CORDARO

Mr. CORDARO. Thank you. Good afternoon. I really appreciate this opportunity to address you. I am president and chief executive officer of Nashville Electric Service, the tenth largest public system in the country, and I am here this morning on behalf of the large Public Power Council, which is an association of 21 of the largest State and locally owned retail and wholesale electric power systems in the U.S. LPPC members as a whole own and operate over 44,000 megawatts of generation, or about 11 percent of the Nation's capacity and own and operate in excess of 24,000 circuit miles of transmission lines.

The LPPC, since its inception, have focused on transmission policy as a critical mission for its members. We were the first group of transmission owning utilities to support open transmission access in debates preceding the passage of the Energy Policy Act of 1992, and we led the way in developing and promoting regional transmission entities as a mechanism to manage and operate the transmission system in an open access environment.

We believe that as competition unfolds, any transmission model must meet the needs of our customers, provide a reliable and cost effective delivery system, and provide for open access to facilitate wholesale competition. If we are going to create a transmission model that will achieve those goals, we must adhere to a few basic guidelines as we move through the legislative and regulatory process.

First, any proposal for the future of the system must have as its foundation ensuring that there will continue to be a high degree of reliability of the power grid. We support the development of an independent self-regulating entity which will have the ability to set and enforce mandatory reliable standards and we favor the adoption by Congress of the consensus proposal on reliability.

The transmission system must provide open access to competitive generation in order to facilitate cost-effective customer access to a competitive energy supply, although this must be accomplished in a manner that does not increase transmission costs to existing customers. The transmission system must include full and fair participation by publicly owned electric systems. LPPC member systems have a number of characteristics that distinguish them from their private counterparts. These include State or local charter limitations, IRS private use restrictions among others.

In particular, the private-use provisions of the Internal Revenue Code must be changed to allow public systems that own transmission to fully participate in ISOs, transcos, or whatever entities emerge. Absent such statutory action, there will be significant gaps in these entities in many areas of the country.

The transmission system must provide for open and nondiscriminatory access and transparency and independence in operation of the system. Given recent concerns, this should become a high priority.

Transmission owners should be provided full-cost recovery but not windfall profits. Transmission rates have historically been cost based. Any transmission proposal must continue to encompass this basic concept and avoid the potential for windfall incentives as a result of asset churning or market base pricing.

Transmission policy should provide for and encourage regional solutions, not nationally imposed mandates. The Federal Government FERC and State governments should all work to provide the tools and environment for the appropriate regional solutions to emerge, which capture the uniqueness of the physical, political, and economic circumstances of any region.

Now to say a little bit about jurisdictional issues. Addressing the question of whether every transmission owner needs to be regulated in precisely the same manner, we believe the answer is no, and let me explain why. Public owners of transmission are not currently subject to full rate regulation under the Federal Power Act. However, most of us are subject to the open-access provisions of the Energy Policy Act of 1992. In fact, the majority of our members have adopted open-access tariffs and voluntarily submitted such tariffs to FERC.

The goal of the Energy Policy Act in FERC Order No. 888 is to ensure that transmission owners provide access to their systems on the same basis as they provide it to themselves, the principle of comparability. I am not aware of any incidence where an LPPC member has been charged with an unfair or discriminatory denial of access to its transmission system.

If additional Federal regulation of State and locally owned transmission is thought to be necessary, we recommend that Congress use the approach adopted by FERC in the Santee Cooper case. As such, public systems should file open-access tariffs with FERC, and FERC should review such tariffs to ensure that they meet the same standards of open access and comparability applicable to all.

As owners of significant transmission assets, we are ready to work with your committee and the Congress to develop the necessary legislation to ensure reliable and vibrant transmission network operated in accordance with the principles I describe today.

I thank you for the opportunity to participate in today's hearing. I would be happy to answer any questions that you may have.

[The prepared statement of Matthew Cordaro follows:]

PREPARED STATEMENT OF MATTHEW CORDARO, PRESIDENT AND CEO, NASHVILLE ELECTRIC SERVICE ON BEHALF OF THE LARGE PUBLIC POWER COUNCIL

Good morning. My name is Matthew Cordaro, and I am the President and Chief Executive Officer of the Nashville Electric Service. I am here this morning on behalf of the Large Public Power Council ("LPPC"). I am pleased to have this opportunity to comment on a matter of critical importance to our customers, the future of the transmission system as we move into a competitive environment.

Introduction

The Large Public Power Council (the "LPPC") is an association of 21 of the largest governmentally owned retail and wholesale electric power systems in the country. LPPC members directly serve approximately 6,000,000 retail customers and own and operate over 44,000 megawatts of generation, or about 11% of the nation's capacity. In addition, we own and operate in excess of 24,000 circuit miles of transmission lines. Our members are located throughout the country, including my own state of Tennessee as well as California, New York, Texas, Washington, Florida, Georgia, Nebraska, and South Carolina.

The LPPC has since its inception focused on transmission policy as a critical issue for its members. The LPPC was the first group of transmission owning utilities which expressed support for open transmission access in the debates preceding the Energy Policy Act of 1992. At the same time, we led the way in developing and promoting regional transmission entities as a mechanism to manage and operate the transmission system in an open access environment.

The LPPC believes that any model for the operation and management of the nation's transmission system must permit us to:

- meet the needs of our customers;
- provide a reliable and cost-effective delivery system; and
- provide for open access to facilitate wholesale competition.

In considering these three basic goals, the LPPC has developed criteria which need to guide us through the legislative and regulatory process as competition in the industry unfolds.

- **Transmission policy must ensure the continued high degree of reliability of the power grid.** The continued reliability of the interconnected grid is of paramount importance. Any proposal for the future of the system must place this principle at its foundation. We support the development of an independent, self-regulating entity which will have the ability to set and enforce mandatory reliability standards. Through our broader trade association, the American Public Power Association we have participated in the process which has developed the consensus reliability proposal, and we favor its adoption by Congress.
- **The transmission system must facilitate cost effective customer access to a competitive energy supply.** The LPPC has historically supported the principle of open access transmission, since it benefits customers. The LPPC supports a competitive generation market and believes open access is necessary to facilitate such competition. This is, however, not necessarily the same as supporting an ubiquitous, liquid generation market with a robust transmission system, which may increase transmission costs to existing customers without benefiting them through lower power costs.
- **The transmission system should include full and fair participation by publicly owned electric systems.** LPPC member systems have a number of key legal characteristics that distinguish them from their private counterparts: state or local charter limitations, IRS private use restrictions, prohibition from participating in stock owning entities, and various local oversight bodies. It is imperative that any participation of publicly owned systems. In particular, Mr. Chairman the private use provisions of the Internal Revenue Code must be changed to allow public systems to participate fully in ISOs, transcos or whatever entity emerges. Absent such statutory action, there will be significant gaps in these entities in many areas of the country.
- **The transmission system must provide for open and non-discriminatory access, and transparency of operation of the system.** FERC's current policies on ISO formation are designed to accomplish two primary objectives: the elimination of discrimination in transmission use and the promotion of more economic wholesale transactions through the elimination of pancaking of rates. Orders 888 and 889 address discrimination in transmission use but do not require unbundling. The FERC must currently rely on transmission users to initiate and prosecute expensive challenges to incumbent transmission owners in order to monitor problems. Given the recent concerns over potential misuse of the transmission system, the independence and transparency of the transmission system operations and the need to separate generation interests should become a higher priority.
- **Transmission Policy must provide transmission owners with full cost recovery while avoiding windfall profits.** Transmission rates have historically been regulated and cost based. Any transmission proposal must continue to encompass these concepts, which become even more important in an environment that must deal economically with congestion and the expansion of the system. Any proposal that allows for or encourages potential "windfall" incentives based on concepts such as market pricing should be discouraged.
- **Transmission policy should provide for and encourage regional solutions, not nationally imposed mandates.** The LPPC opposes any nationally mandated solution to transmission system issues which does not accommodate local and regional differences and solutions. The federal government, FERC, and state governments should all work to provide the tools and environment for the appropriate regional solutions to emerge which capture the uniqueness of the physical, political, and economic circumstances of any given region.

Jurisdictional Issues

LPPC members own and operate the bulk of the transmission that is owned by state and locally owned public power systems in this country. While the Federal Power Act exempts public power from the economic regulation provided for in Part II for profit making entities, most of us are subject to the open access provisions of the Energy Policy Act of 1992 (EPACT). In fact, the majority of our members have gone beyond that and have adopted open access tariffs and voluntarily submitted

such tariffs to FERC. Such filings assure that the access provided for in our tariffs meets the standards of comparability and reciprocity that FERC requires.

I am not aware of any instance where an LPPC member has been charged with an unfair or discriminatory denial of access to its transmission system. Notwithstanding that, some have said that our non profit systems need to be subject to the same type of economic regulation by FERC as profit making transmission owners. This is both unnecessary and unwise. It calls for an added layer of regulation where none is needed, and it fails to recognize the fundamental difference between a non-profit government owned entity whose rates are set by elected officials and a profit making entity whose rates are set by private individuals.

If additional federal regulation of state and locally owned transmission is thought to be necessary, we strongly recommend codification of the approach used by FERC in the Santee Cooper case and with other public power open access filings. FERC should have the authority to review public power open access tariffs for the purpose of assuring they meet the test of open access and comparability, but should not require such public entities to require the same FERC approval process for transmission rates to which profit making entities are subject.

Conclusion

The members of the Large Public Power Council and the millions of customers we serve strongly believe that the purpose of restructuring and deregulation of the electric utility industry must be to benefit customers. This includes maintaining a high degree of reliability of the interconnected grid, and optimal use and operation of the transmission grid.

As owners of significant transmission assets, we are ready to work with your Committee and the Congress to develop the necessary legislation to ensure a reliable and vibrant transmission network, operated in accordance with the principles I've described today.

I thank you for the opportunity to participate in today's hearing, and I'd be happy to answer any questions you may have.

Mr. STEARNS. Thank you, Dr. Cordaro. Let me start with you since you just finished. Correct me if I am wrong. You had indicated that you don't need FERC to regulate in your area; is that correct?

Mr. CORDARO. Yes, not at variance with what the existing situation is today. In essence, we have been voluntarily cooperating with FERC in enacting transmission tariffs which are comparable to the tariffs which they do have direct jurisdiction over. And we recommend a continuation of that process.

Mr. STEARNS. Do you want Congress to act to open the TBA transmission systems so you have access to other wholesale power suppliers?

Mr. CORDARO. Yes.

Mr. STEARNS. Mr. Nevius, do you believe the proposed reliability legislation represents a dramatic expansion of FERC's authority?

Mr. NEVIUS. No.

Mr. STEARNS. I am asking questions that are easy to answer for you folks here.

Mr. McCoy, some favor creation of transcos rather than ISOs. However, there are different kinds of transmission owners: Federal agencies, State agencies, municipal utilities, rural electric cooperatives, and IOUs. Can transcos be formed with these different kinds of owners? Do you know of examples of entities with that kind of mixed ownership? How long would it take to form a transco with mixed ownership?

Mr. MCCOY. Our belief is you can form a transco with mixed ownership. It would take some financial and business engineering, perhaps the formation of a limited liability company, for the obvious reason that public authorities can't divest assets, in effect. But there are structures that can combine investor-owned assets and

public power assets under a single governance structure operated as a coherent unit.

Nothing, obviously, has been filed along those lines; but I am aware of discussions that have involved utilities, IOUs in the upper Midwest and at least one large public power entity toward that end.

Mr. STEARNS. How could the Federal Government own a part of a private company?

Mr. MCCOY. I am not a tax expert or an expert in financial engineering. I am not aware that the Federal Government can own a part of a private company. But you can set up a limited liability company——

Mr. STEARNS. If you take Bonneville, how could they join a transco?

Mr. MCCOY. They can join a transco by pledging their assets to be managed by a transco in turn for having a say in the management of the limited-liability company.

Mr. STEARNS. Mr. Szwed, your testimony suggests that FERC should be granted more authority over everyone but yourself. You say FERC should have more authority over TVA, BPA, PMAs, State and municipal utilities and cooperatives; but you say FERC should have no authority to require you to join ISOs.

Mr. SZWED. In response to that, first of all, the first part of that in asking that all of the various transmission providers and owners, I think it is important from our perspective that all of those groups be placed and play, if you will, under the same rules. And that is not quite the case today. Step one.

In response to the second part of the question, we really believe that as these regional transmission organizations are forming, that it is important for the market to work toward shaping these things and to create them in a way that is responsive to the market. And I don't think there is one cookie cutter approach as yet as all of these are evolving. We have several ISOs in operation. We have various transmission entities, be they independent transmission companies or regional transmission organizations that are on the drawing board coming to FERC for review and approval and so forth, that it isn't at this point in time a one type of construct or one approach that would be appropriate, given the nature of the industry and competitive markets continuing to evolve.

Mr. STEARNS. My time has expired. The ranking member, Mr. Hall.

Mr. HALL. Mr. Chairman, thank you. Mr. Szwed, you might have told him what that woman sent a note to her teacher for a young boy starting the first grade said; he is a sensitive boy and for her never to try to govern him in any way. If he did anything wrong to slap the boy next to him. He said that would frighten him. Is that what his testimony said?

I will pick up on some of your other testimony, Mr. Szwed. You stated on page 2 the best way to improve transmission service and with that reliability is to let market participants devise and implement new arrangements for providing service, new investment, new methods and new methodology. Is there a government role; and if so, what is it or should the government just stand by?

Mr. SZWED. I think, first of all, in terms of our belief and certainly from First Energy's point of view, we believe in an independent transmission company concept, a business orientation toward transmission. And we see that as being important because that is a vehicle whereby investment and people and infrastructure can best be obtained. And those independent transmission companies, in my mind, would continue to be regulated by FERC. So from the standpoint of the role of the regulatory authorities, those types of entities would, in fact, still be under FERC jurisdiction.

Mr. HALL. What would the participants be doing now differently than they are doing now that might improve transmission service or legislation?

Mr. SZWED. Clearly in today's industry, there are a number of activities that are under way to work toward ensuring reliability. We have heard from Mr. Nevius about the activities of NERC, and myself, and many of my colleagues have been actively involved in ensuring that there are standardized practices and rules with respect to reliability, a lot of that going on to set the rules of the road. The second thing is there are, and have been, as we have seen in the development of RTOs and some of the ISOs that are in operation, that there are entities that have been put in place, many of them coming about from the restructured power pools and so forth. But you also have a lot of entities that are working toward pursuing regional organizations on a voluntary basis, and my feeling is that will continue.

Mr. HALL. In your testimony on page 6—I am reading from it—FERC has endorsed the functional separation of vertically integrated electric utilities. While you don't endorse mandatory divestiture of utility assets as a general policy, you say the voluntary divestiture of generation assets in many States has helped remedy a number of issues, and you show some, including the valuation of stranded costs which is a biggie here and concerns about the vertical market power.

You say it may be appropriate to give FERC the authority to order partial asset divestiture as a response to the illicit exercising of market power. Where do you draw the line there?

Ms. UTTER. It is a tough question, Mr. Hall. I think the biggest problem we have today is a number of parties have one foot in and one foot out of the regulated environment. And the suggestion that we have is that the limited amount of divestiture should be used only when there is a proven event of market power abuse. I would suggest today that a very large percent of the number of utilities in the U.S. are not abusing their market power and even the ones who are are doing it not because they are evil but because they just, frankly, have an economic incentive to do so; and where they are abusing that economic incentive, we believe that a limited level of divestiture ordering should be allowed for FERC to have the authority to prevent these kind of abuses. Again, as I said earlier in my remarks, if we don't have these kinds of problems out of the way now, long term we are not going to have a competitive market.

Mr. HALL. Do you think everybody can get together on what that standard ought to be where we can translate it into some type of legislative form?

Ms. UTTER. It is awfully tough to legislate it. It is kind of like the old saying I will know it when I see it. It is a situation of where there are proven abuses; and I think that should be a high standard frankly. I think there should be a high standard; but where you have utilities that do things like denying transmission service in favor of their own native load requirements in violation of FERC rules, those are the kinds of things where there should be a clear ability for FERC to penalize them through a divestiture or order a divestiture as a way to prevent their market power or expansion of their market power. Again, I believe that authority should be very limited, but it has to be effective.

Mr. HALL. Thank you.

Mr. STEARNS. I thank the gentleman. The gentleman from Oklahoma, Mr. Largent.

Mr. LARGENT. Thank you, Mr. Chairman. Mr. Szwed, I was looking at your testimony and listening to your remarks this morning. And you had five points that you made, and you began with allowing market-driven solutions, continue to allow market to determine certain aspects and then the last one you said was uniform rules of transmission. It almost seems like those are opposed to one another. You are asking for market-driven solutions but uniform rules. The only way you get to uniform rules is with Federal regulation, is it not?

Mr. SZWED. That was point number 5 in my testimony, in my remarks, uniform rules for all owners of transmission. And that, in our mind, is putting all of the players under the same jurisdictional base where today that isn't necessarily the case. There are different transmission providers like we have discussed here that aren't subject to cost regulation today and that type of thing. And in order to ensure an evenness, if you will, across all of that, that it would be important for the various public power authorities to perhaps be part of the same kind of considerations that we as all of the other investor owners are today.

Mr. LARGENT. But that is not really a market-driven solution then, is it, if we are having uniform rules?

Mr. SZWED. I am looking at it from the standpoint of where we are starting on this point. As we move and restructure into what the transmission businesses of the future are going to be in terms of regionalization, moving away from individual companies, smaller companies but more to a regional expansion of the grid today, we see the development of independent system operators. We see the development of regional transmission organizations and it is in those categories that I really think that we don't have necessarily the final end-state answer of how the ultimate structure of the business ought to be and what size it ought to be and that type of thing. And I believe that those types of entities need to evolve and to evolve based on the marketplace.

Mr. LARGENT. In your testimony, you also talked about expanding geographically the territory of a regional transmission organization, and yet at this very time your company is involved in basically splitting the State of Ohio in half. Can you explain how that works? We are trying to get to that era. Can't we all just get along? And then in Ohio we have this situation where this very State of Ohio has been split in two, one side by your company.

Mr. SZWED. I think that is an interesting question. I don't see the issue of Ohio being split in half or there being a problem in Ohio. I see there being an opportunity to have a number of utilities in the State of Ohio that are participating in an organization which we have called the Transmission Alliance. You also have entities in Ohio that are participating in another organization called the Midwest ISO. And in the context of allowing voluntary organizations to form that may have similarities but also may have differences in philosophy on structure or governance structure or how to move to an end state, I kind of view that as more of an opportunity to help shape what the ultimate or end state of this business for transmission might be. I think the ideas of both groups have merit, but I don't view it as a problem or as a negative. I view it as a means to how we are propelling the transition and the restructuring of the transmission.

Mr. LARGENT. What we are dealing with is transmission, and if we are going to draw the lines of these RTOs based an ideological preferences as opposed to just natural geography, doesn't that create a whole new set of problems?

Mr. SZWED. I am not sure that just looking at any one State that a one-State ISO or anything like that is a natural geography. The geography might actually be based on the markets which might span several States or parts of several States for which that transmission entity or that marketplace would be best served.

So I don't think it is appropriate to necessarily say that a State boundary is the end all in terms of where the line should be drawn. I think as time goes on markets will develop, markets will evolve, and the appropriate structures for transmission, I believe, will follow along with that.

Mr. LARGENT. How does the State of Ohio concur with your opinion on that?

Mr. SZWED. I think you would have to ask them.

Mr. LARGENT. What is your impression?

Mr. SZWED. I think there have been issues raised by various folks in the State of Ohio; and as I said, I don't see this as a problem. I see it as an opportunity to craft, hopefully, the right kind of business structure for transmission in the future.

Mr. LARGENT. Mr. Chairman, if I could ask one additional question of Mr. McCoy.

Mr. STEARNS. Go ahead.

Mr. LARGENT. Mr. McCoy, in forming transcos, how do you see that evolving when you have got different type of transmission owners? In other words, you have got IOUs that own transmission. You have municipalities. You have some co-ops. You know, then you have got the Federal Government that owns transmission lines. How do you see them coming together and forming a transco in that kind of alliance? Doesn't that create some peculiar problems?

Mr. MCCOY. It does create peculiar problems. As I mentioned earlier, it will take some business engineering, but there are some business models, especially through the use of limited liability companies, leveraged partnerships where obviously a public entity with assets in the public realm can't sell those assets, offer to merge them with private assets, but they can contribute the assets to the

management pool under which a limited liability company manages and in so doing they have a say in how that company is run. Perhaps not as great a say as someone who has contributed the actual assets, but certainly a say. There are workable models, I believe, if people sit down and put their heads to it.

Mr. LARGENT. Thank you, Mr. Chairman.

Mr. STEARNS. The gentleman from Ohio, Mr. Sawyer.

Mr. SAWYER. Thank you, Mr. Chairman. Let me just do a couple of follow-ups on what Mr. Largent was asking about. Mr. Szwed, Mr. McCoy has been asked twice the question about mixed ownership. The ownership structure that you envision is a little bit different. How do you respond with regard to the same kind of problems in the structure you propose?

Mr. SZWED. We have a group of utilities called the Transmission Alliance that has, in fact, been trying to deal with that very structure, where there are utilities that perhaps are interested in divesting their assets and beginnings of the formation of an independent transmission company and there are others who perhaps would just like to see the operations of their systems be handed over to an independent entity. We have devised a structure with that group of utilities to provide for that kind of a structure and an opportunity for those who choose not to divest on day one an opportunity to divest down the road.

The second thing is if it isn't a divestiture, perhaps another way from a financial standpoint to allow for a public authority or another entity to be part of that might be a consideration of transferring control of operation of assets, but it could be through some financial lease arrangement as well where the assets are leased to that transmission company entity and put under their control. I agree with Mr. McCoy. There are financial vehicles and ways to accommodate those kind of things as we move down the road.

Mr. SAWYER. Is it fair to say then when you talk about the financial structure or an end state for all of this, you may not be talking about a singularity; you may be talking about a variety of different approaches that work depending—would work better or less well depending on the circumstances and the nature of the markets they seek to serve?

Mr. SZWED. I don't think any of us know exactly what that end state is going to be, but I do think there are some fundamentals necessary to continue to make transmission in whatever structure that is viable and that is appropriateness in terms of pricing and so forth and the right kind of signals to investors to attract necessary capital for future investment as well as people and other aspects of infrastructure to make it a viable business and to continue to provide for reliability and the robustness of our power markets, particularly as we move into more and more competition.

Mr. SAWYER. You mentioned in the same breath the ability to attract capital and the critical question of reliability. And perhaps Mr. Nevius can join in in this or others. But I am particularly interested in what your sense of the needs of the transmission system are, what in terms of size and cost and then your sense of the ability of different structures to attract interest, Wall Street interest, investor interest, at a time when the margin may be substantially less than other components of this industry or other kinds of

investments in general. It seems to me that has critical implications both for governance structures and for reliability. Could you comment on that?

Mr. SZWED. Different systems obviously have different needs. I know from our system, from our own First Energy system standpoint, we, every year continue to put our significant capital dollars into various equipment to replace aging equipment or to provide for enhanced reliability and customer service.

Mr. SAWYER. But you do that with an obligation to serve. You do that in an environment where you have an obligation to serve. We are talking about a very different kind of environment.

Mr. SZWED. In terms of an independent transmission company, there is no question that there is going to be competition for investors' dollars. So from the standpoint of attracting investment, competitive returns need to be there, the right kind of pricing to provide an opportunity to earn. Rational returns that would attract investment is important and something that needs to be considered as we continue this dialog on transmission.

Mr. SAWYER. Mr. McCoy? Mr. Nevius?

Mr. NEVIUS. From the standpoint of reliability, regardless of the structure, competition, the financing of these regional organizations, what we are looking to do is see that there is a common set of rules by which they are operated, the rules of the road which Mr. Largent referred to earlier, and that those be enforced evenhandedly, fairly, no matter who is participating in that regional transmission organization. If the transmission system for whatever reason is not capable of handling all of the commercial trade that would like to take place, then the rules will specify who gets to use or how much trade can be accommodated safely, but it won't jeopardize the reliability of the grid. This is where you need to make a distinction between the adequacy of the transmission system, are there enough wires, whether they be superconducting or more traditional wires, and how those existing wires are used within their safe operating limits which is the security of the grid.

Mr. YUREK. If I could put perhaps another angle on this, the question about how does private sector get involved. Think of Corning Glass who started investing in the development of optical fibers in 1967, built up plants in North Carolina by the end of the 1970's, no customers. And then the deregulation of the telecommunications industry happened in the early 1980's. 1982 a new company called MCI showed up at Corning Glassworks in North Carolina and said can we order a hundred thousand kilometers of optical fiber. And the rest is history. So you had a convergence of new technologies, new environment.

I am not a policy expert so I can't tell you what policies work best or not but that is a good place to look in terms of new technology. In terms of reliability, many different technologies, one I mentioned already superconducting magnetic energy storage.

We are going to be putting our SMES units on large scale transmission grids throughout the United States and by just injecting some real and reactive power in a distributed fashion through a transmission grid, you bring up two things. One is the increase in reliability instantly. Another one is increase in transfer capability of those grids. So whether it is superconductor technology or other

technologies—and I think there are many different ways to play this—let us give it a chance and that convergence of new technologies and a deregulated open environment has to win. It has won before. It can win again.

Mr. SAWYER. Mr. Chairman, thank you for your flexibility. I am just wondering if there is anyone else who would have comment on that question of physical needs and the ability to attract capital to meet that.

Mr. MCCOY. I will make a brief comment, Mr. Sawyer. I think what Mr. Nevius said is critically important. In a capital intensive industry like the transmission business, I think airlines are in the same boat. What's happening now in ComEd isn't exactly this position. We make the necessary investments in the transmission assets that our obligation to serve requirements dictate.

But we are not making speculative investments because the rules, quite frankly, are unknown. I think there would be more willingness to make outfront investments like Mr. Yurek described in fiber optics if, indeed, the rules were very well codified, standardized, and backed up by law.

Mr. SAWYER. Thank you. Those are all helpful responses. I appreciate that.

Mr. STEARNS. Thank you. The gentleman from Florida, Mr. Bilirakis.

Mr. BILIRAKIS. Thank you, Mr. Chairman. I have a couple of generic questions; but before I go into those, I just wanted to hitchhike on Mr. Sawyer's question. Regarding the exciting technology having a profound impact on the transmission of power, are there Federal barriers that prevent the widespread use of new transmission and distribution technologies? And if there are, maybe very briefly, because I do want to get into some of the other things, if there are, can you share them with us.

Mr. YUREK. Again, I am not a policy expert so it is hard for me to identify what those barriers might be, but generally speaking in that regulated environment that we are dealing with here, where's the MCI of power? How does the MCI of power come into being? In this regulated environment, it doesn't. So if there is an ability to buy power from one region and take it through a direct current electricity pipeline to another region and make money in that process, that can come into existence if we peel away some of the regulations that exist today. So I would reverse it, I think, a little bit from——

Mr. BILIRAKIS. Regulations that exist today could be barriers, and constraints. Can you share with the committee in writing some of those particular problems? We have got to know the adverse effects, if you will, of our past and present.

Mr. YUREK. We will do that.

Mr. BILIRAKIS. Thank you. How many of you believe that Congress should pass in some form electricity deregulation? All of you? From the eyes of transmission, from the eyes of reliability, you still feel that we should do it?

Ms. UTTER. Yes.

Mr. BILIRAKIS. Do all of you feel that way? Show of hands.

Mr. MCCOY. I'm not sure what the question is.

Mr. BILIRAKIS. Deregulation. Electricity restructuring. Well, I guess it is a yes or no at this point.

Mr. SCHMIDT. The answer, I think, Congressman, is not whether it is yes or no for deregulation, but for different components of it. I think it is important to look at the comprehensive issue, but I don't think Congress needs to act to deregulate the industry. That is occurring throughout the country on a State basis.

Mr. BILIRAKIS. Well, do the rest of you who put up your hands disagree with that statement? Yes, sir?

Mr. MCCOY. I would agree with that statement.

Ms. UTTER. I disagree somewhat. I disagree from the extent that the States doing this piecemeal is the wrong way to do it if you are trying to approach this business as we are from a national market perspective. And so we believe that some parts of the business as was expressed earlier absolutely need to stay regulated and don't need to be deregulated. But there are some additional steps that need to be taken.

As I said earlier, I believe FERC is capable of doing that; but I think their authority needs to be clarified and in some limited cases expanded to further deregulate, but we believe that because generation is still somewhat regulated and somewhat deregulated, we are not developing as fast as we could be to a competitive market because liquidity isn't being created. There isn't production being put into a liquid commodity market right now because the vast majority of it is still under regulation.

Mr. BILIRAKIS. Would we be holding this hearing on reliability and particularly as it involves transmission if we were not, you know, really concerned these days with deregulation, with electricity restructuring? In other words, if we weren't—if we weren't even concerned with electricity restructuring and deregulation, are there still adequate reliability problems out there? Does existing statutory authority exist to ensure continued reliability of the transmission system, et cetera, for the panel?

Mr. NEVIUS. My answer would be yes because of what is happening on the system.

Mr. BILIRAKIS. Yes, that we still would need this kind of hearing, but not yes that existing——

Mr. NEVIUS. Yes, that we need this hearing and we need to be addressing the question of legislation to give FERC authority to accredit and oversee a self-regulating reliability organization. As I mentioned in my remarks earlier, what we have been doing for 30 years on a voluntary peer pressure basis is not sustainable.

Mr. BILIRAKIS. So existing statutory authority is inadequate to ensure.

Mr. NEVIUS. Yes.

Mr. BILIRAKIS. Regardless of whether we were talking about deregulation or not.

Mr. NEVIUS. Yes.

Mr. BILIRAKIS. Mr. Iannucci, do you agree with that?

Mr. IANNUCCI. Not quite. Since most of the reliability problems really come from the distribution side, I think we could solve 100 percent of the transmission reliability problems and still have 90 percent of the problem. So whatever we can do to make it easier to put in distributed resources if they truly can help, the reliability

at the customer level from the customers perspective, which I think is what we should be doing, whatever we can do there to help to get regulations into place that will allow easier interconnection, more equitable standby fees, exit charges, things like that will help the reliability from the customer's standpoint.

Mr. BILIRAKIS. I am not the chairman, nor am I sitting-in chairman today, but I think it is very important that we hear varying perspectives. Forgive me Mr. Chairman, if I have taken advantage here, but our State of Florida, is very limited in terms of transmission capability and so much of the answer might be distribution, local distribution. And so if you could, in writing, share your ideas, Mr. Iannucci and the rest of you in that regard, it would be very, very helpful. Thank you very much.

Mr. IANNUCCI. I would be happy to.

Mr. STEARNS. I thank the gentleman. The gentleman from Massachusetts, Mr. Markey, is recognized.

Mr. MARKEY. Thank you. Mr. Yurek, if I may, because I am so proud that you are headquartered up in Massachusetts, you have been developing superconductive wires that, as you noted in your testimony, are capable of carrying 100 times as much power as conventional copper wire.

To what extent could a transmission owner alleviate constraints in its transmission system by replacing its old copper wires with your new superconducting wires?

Mr. YUREK. Well, the use of these wires in a cable for transmission purposes means that you can increase the power capacity of existing rights-of-way by at least three to five times, so that you have the ability now to transfer a lot more power through that given right-of-way. Getting siting rights for new rights-of-way takes a long time and maybe you will never get them.

So here is a capability to increase power capacity of existing corridors, and, quite frankly, those corridors might not be the existing transmission lines. They might be gas pipelines through which one can pass a large quantity of power to relieve congestion. So if you have that open environment, now you have the opportunity to bring this technology to bear.

Mr. MARKEY. If you could hold up the two wires that you have here, can you give us a comparison of the amount of power lost over a conventional copper transmission, your blue wire that you have there, distribution wire, compared to your new superconducting wire? What is the difference in terms of how much energy is lost just going out of the wires as it is being transmitted?

Mr. YUREK. Well, for the transmission distribution system altogether, about 8 percent of all the electricity that comes from the generator is lost to resistance.

Mr. MARKEY. Through the wires.

Mr. YUREK. Through the wires, the transformers, and other parts of the transmission and distribution system. We can reduce that almost to nothing with the superconducting wires because they have no resistance. If we use direct current, that is absolutely zero resistance. With alternating current that is typically used, there is some loss, but we are very, very low in those losses. So we have an extra benefit in terms of energy savings.

Mr. MARKEY. So in the future, if we had those new wires that were laid by the utilities, it would reduce by 8 percent, to begin with, the number of new generating facilities that had to be constructed from whatever the given number of new megawatts that had to be constructed in our country. We would know that there was 8 percent less loss over the wires; is that correct?

Mr. YUREK. If you go to the full-scaled implementation, that would be the case, of course. But somewhere in between. You are still talking about very large numbers, and the Department of Energy has documented those numbers. So there is certainly the tremendous potential for energy savings.

Mr. MARKEY. Now, in your prepared statements, you urge Congress to employ technology-neutral incentives to encourage new investment in the grid, such as power quality standards, streamline procedures for low environmental impact transmission technologies, and incentives for multiple demonstrations of new technologies to speed their commercial acceptance.

Can you walk through each of these proposals and explain to us what exactly you would recommend that Congress include in our legislation?

Mr. YUREK. In terms of power quality standards, we know that in the U.S. alone, the Department of Energy, Electric Power Research Institute numbers, put the losses due to industrial downtime because of glitches in the delivered power, at tens of billions of dollars per year. So there are huge losses there. There are no power quality standards that are in existence. I think we ought to take a look at that and put those standards in place.

You can pay higher prices for your electricity and get premium power. If you are not interested in that, you can pay a lower rate. But a clean power signal is the key here.

The siting of interstate transmission lines, again, I think in the open environment, where we can create an MCI of power, whatever regulations or legislation would be required to do that, I think we ought to be looking at that pretty carefully.

Then new technologies, whether is distributed generation or distributed SMES in other technologies, fuel cells, we need to give them a chance. If there is an environment that promotes that, let us get those demonstrations under way.

Mr. MARKEY. Mr. Chairman, could I say that back in 1981-82 on this committee, when we were debating breaking up AT&T, while they had won many Nobel Prizes for basic research, they really weren't that good in applied. The truth of the matter is that once AT&T was broken up and Sprint had their commercials, you remember with the pin dropping, because they had a fiber optic network, at that point AT&T had yet to purchase their first square foot of fiber optic wire, because they were a monopoly. They didn't have to change. They didn't have to adapt. They didn't have to include the new technologies.

Once we broke them up, though, and there was real competition, they had to move because Sprint and MCI and others were moving ahead. Much the same things are possible here. The more competitive the environment, the more paranoia you build into the older companies, the more they are forced to adopt the new wires and technologies that make the whole system more efficient.

That would be my one hope out of all of this, that we could create the understanding of the analogy between ultimately, you know, telephone, cable, and electricity, the three wires. It is a tale of three wires going into homes. They are the best of wires and the worst of wires, you know.

What we have to do is ensure that we construct the dynamic by which we upgrade these wires to the maximum efficiency for consumers. I thank you for having the hearing and yield back the balance of my time.

Mr. SAWYER. Mr. Chairman, it is a far, far better thing we do today than we have ever done before.

Mr. STEARNS. I think we have exhausted our questions. We want to thank very much the panel. We know how busy you are. We appreciate hearing from experts.

The subcommittee is adjourned.

[Whereupon, at 1:04 p.m., the subcommittee was adjourned.]

[The following was received for the record:]

FEDERAL ENERGY REGULATORY COMMISSION
OFFICE OF THE CHAIRMAN
June 11, 1999

The Honorable JOHN D. DINGELL
Ranking Member
Committee on Commerce
U.S. House of Representatives
Washington, D.C. 20515-6115

DEAR CONGRESSMAN DINGELL: Thank you for your letter of May 18, 1999, regarding my testimony at the April 22, 1999, Subcommittee on Energy and Power hearing on reliability and transmission in competitive electricity markets.

Enclosed are my responses to the questions you submitted.

I hope this information is helpful. If I can be of further assistance in this or any other Commission matter, please let me know.

Sincerely,

JAMES J. HOECKER
Chairman

Enclosure

RESPONSES TO QUESTIONS FROM CONGRESSMAN JOHN DINGELL

Question No. 1: Your testimony for the April 22, 1999 hearing on reliability and transmission issues states that "despite the successes of Order No. 888 in fostering competition, not all potential market problems have been addressed."

The first category of impediments you identify are "engineering and economic inefficiencies inherent in current operation and expansion of the grid, inefficiencies that are hindering fully competitive power markets and imposing unnecessary costs on electric consumers."

Please provide specific examples of these engineering and economic inefficiencies, and describe their effects on electricity markets.

Answer: About three weeks after I testified before your subcommittee, the commission unanimously approved the Notice of Proposed Rulemaking (NOPR) on Regional Transmission organizations (RTOs). The NOPR (copy attached) was motivated, in part, by a growing commission concern that the continued existence of certain major "engineering and economic inefficiencies" could hinder FERC's ability to promote reliable grid operations and competitive bulk power markets throughout the country. These. inefficiencies include: developments that threaten reliability under emerging competitive conditions in the bulk power market; inaccurate determinations of available transmission capability (ATC); inefficient management of transmission congestion; inefficient or inadequate planning and expansion of new transmission facilities; and pancaking of transmission access charges. Order No. 888 does not purport to address these issues in any direct way. I will discuss each of these sources of inefficiency in turn.

Reliability. As the industry moves to competitive power markets, we are seeing the entry of many new market participants, dramatic increases in unbundled power sales and shifts in electrical flows. As a result, the nation's bulk power system is

being stressed in ways that have never been experienced before. Such stresses have always existed to some extent, but in the past they could be more readily accommodated through voluntary *ad hoc* agreements because there were fewer industry participants and they generally did not compete against each other in any significant way.

At present, the industry's ability to maintain reliable grid operation is affected, and often impeded, by two factors. One is the existence of many separate commercial entities that use the grid and directly or indirectly affect its operation or expansion. These entities frequently have differing interests in how reliability standards are developed and administered. Unfortunately, there is no single institution with authority to ensure mandatory compliance with reliability standards. The second factor is an increasing "reluctance on the part of market participants to share operational real-time and operational planning data with TPs [transmission providers]." [1] This is not surprising because information that is needed for reliability purposes will often have commercial significance.

The industry is working hard to grapple with these emerging reliability issues and, as I stated in my testimony, the commission is supporting these efforts despite a lack of clear legal responsibilities in this area. In the past year we have dealt with the Western System Security Council's proposal for contractual enforcement of reliability rules (*see Western Systems Security Council,* 87 FERC ¶61,060 (1999)), NERC's tagging requirements for keeping track of information about transactions (*see Coalition Against Private Tariffs and Western Resources, Inc.,* 83 FERC ¶61,015 (1998), *order on reh'g,* 84 FERC ¶61,059 (1998)), and NERC's efforts to develop fair and efficient methods for relieving overloaded transmission facilities in the Eastern Interconnection (*see North American Electric Reliability Council,* 85 FERC ¶61,353 (1998), *order on reh'g,* 87 FERC ¶61,161 (1999)). However, each of these cases illustrates the need for a better scheme for the private development of reliability requirements and the limitations on the Commission's jurisdiction with respect to reliability issues. To the extent institutions that ensure reliability do not change to keep up with developments in the increasingly competitive electric industry, I fear that reliability or competition will be compromised.

Available Transmission Capability. A second source of inefficiency in grid operation involves the calculation of available transmission capability (ATC). A transmission provider needs to be able to tell potential customers how much of the commodity it can carry, and potential customers must be able to rely upon that information. However, there are three factors hindering accurate ATC calculations. One is the lack of the necessary information. ATC is calculated by individual system operators, but the transfer capability on each utility system is affected by transactions on neighboring integrated systems. Transmission providers may post ATC numbers on OASIS only to find that transmission capability that they assumed would be available actually does not exist because of scheduling decisions taken by other transmission providers elsewhere on the grid. It is almost impossible for an individual transmission owner to calculate reliable ATC numbers when it operates only one part of a larger interconnected grid. A second factor that complicates ATC calculation is the amount of transfer capability that a transmission provider can legitimately reserve to back up generation capacity in its service territory. This is referred to as Capacity Benefit Margin (CBM). The Commission recently decided a case where it found that a transmission provider improperly denied a request for transmission service on the grounds that its CBM requirement eliminated ATC, i.e. the ability to provide transmission service at a certain level, on its system. (*See El Paso Electric Company,* 87 FERC ¶61,202 (1999)). The third factor is discrimination. Since the issuance of Order No. 888, we have received numerous formal and informal complaints from non-affiliated transmission customers who allege that transmission providers discriminate in favor of their own merchant operations when calculating and posting ATC numbers. These are described more fully in the answer to Question No. 5. I believe that the development of the competitive market and the delivery of associated consumer benefits will be slowed until more efficient and accurate methods are in place for determining ATC.

Congestion management. The way transmission congestion is managed is a third source of inefficient grid operation. With the exception of the three operational ISOs, curtailment decisions in the Eastern Interconnection are made primarily through transmission loading relief (TLR) procedures. The TLR procedures are a set of administrative (i.e., non-market) protocols designed to relieve congestion on overloaded transmission facilities. The combination of shifting flow patterns and TLR protocols has led to a dramatic increase in the number of required curtailments. For example, NERC has reported that its TLR procedures were invoked 329 times between July

[1] NERC, Reliability Assessment 1998-2007, p. 39.

1997 and October 1998 on the Eastern Interconnection.[2] Curtailments understandably generate commercial disputes and may be inefficient.

Effective congestion management depends on operating the system with the needs of broad regional markets in mind. The lack of regional approaches consequently causes inefficiency. It is difficult for one transmission owner to identify and implement redispatch options when the physical limitations and cost effective options for relief exist on other transmission systems that are beyond their reach.[3] Additionally, with multiple and independent operators of the grid, individual users and owners have unclear and conflicting rights to the grid. This makes it difficult to establish congestion markets which, like any other markets, cannot develop in the absence of clear and enforceable rights.

I believe that current TLR procedures are cumbersome, inefficient, and disruptive to bulk power markets because they rely exclusively on physical measures of flows with no attempt to assess the relative costs of different congestion management options. Moreover, when (as is often the case) TLR actions are taken by a transmission provider that has an affiliated power market participant, the suspicion is that the action is motivated by competitive rather than reliability concerns. For these reasons, while we have encouraged NERC to move beyond TLR, we also recognize that there are limits to NERC's ability to replace the non-market TLR procedures with a more efficient, market-based approach to congestion management in the absence of viable regional organizations.

Transmission planning and expansion. The existing process for transmission planning and expansion is a fourth source of grid inefficiencies. While the factors involved in transmission planning have historically made grid expansion difficult, the level of uncertainty about where and how much to expand facilities has increased with the increasing number and complexity of unbundled transactions and the shifts in generation dispatch patterns. Uncertainty has also increased because generation developers are reluctant to disclose their plans for future capacity additions and utilities are reluctant to speculate on whom or where their suppliers might be. This all makes modeling of potential transactions and flows for transmission analysis virtually impossible.[4]

One troubling consequence of this uncertainty has been a noticeable decline in planned transmission investments. NERC recently reported that the level of planned transmission additions is significantly lower than five years ago despite an overall increase in load growth and unbundled transmission service.[5] While this could simply reflect better utilization of the existing grid or the fact that new generation is locating closer to load, I am concerned that it may also reflect an incompatibility of existing planning institutions with the new market realities and that the existing approach to transmission pricing may not sufficiently encourage the investments needed to improve the reliability and efficiency of the grid. Inadequate investment also could be a major impediment to the development of regional bulk power markets.

Pancaked transmission rates. The pancaking of transmission access charges is a fifth (and major) source of inefficiency in grid operation. Transmission customers have generally paid an access charge to each transmission provider along the contract path of a transaction, resulting in multiple transmission charges across several transmission systems. This raises the cost of power transactions and makes it difficult to create region-wide power markets. As a result, the geographic scope of power markets is restricted and market concentration is unnecessarily high. I believe that competition and economic efficiency would be clearly enhanced if all buyers and sellers of power were able to access each other over the geographically wide transmission systems that exist today but which are balkanized by current rate structures. This would require eliminating the current system of additive transmission access charges and replacing it with a single access charge that gives transmission customers access to the entire regional grid.

Question No. 2: The testimony also states that "Changes in trade patterns and industry structure have made it more difficult to maintain reliable grid operations, manage transmission congestion, and plan for expansion of transmission facilities." Please describe these changes and the resulting difficulties, and give examples.

Answer: The U.S. electricity industry has recently experienced major structural changes. For example, since August 1997, approximately 50,000 MW of generating

---

[2] North American Electricity Reliability Council, Interim Market Interface Committee, Minutes of Jan. 12 and 13, 1999 meeting, Exhibit D.

[3] Commonwealth Edison, *Interim Report on Non-Firm Redispatch*, Docket No. ER98-2279, December 17, 1998, at 4, 10.

[4] NERC, "Reliability Assessment, 1998-2007," September 1998, at 39.

[5] *Id.* at 7.

capacity have been sold (or are under contract to be sold) by utilities, and an additional 30,000 MW is currently for sale. This represents about 10 percent of U.S. generating capacity. These divestitures are typically part of state ordered retail competition programs. As retail competition spreads to more states, I expect to see more of these plant divestitures.

Almost all the major developments in the industry are traceable directly or indirectly to technological advances in natural gas turbine technology and to new generation of plants that are being developed and operated by firms other than traditional utilities. It is competition among all sources of generation that the Commission wishes to facilitate through its bulk power policies. Such developments reflect the strategic decisions of some companies to functionally disaggregate their operations, to concentrate their activities in one area of the business, or to reallocate resources to new enterprises such as energy services.

Order No. 888 and the associated restructuring have helped to spur a dramatic growth in the volume of trading in the wholesale electricity market. In the first quarter of 1995, there were 8 power marketers (either independent or affiliated with traditional utilities) with total quarterly sales of 1.8 million MWH. By 1998, there were 491 power marketers. By the second quarter of 1998, 108 active trading power marketers had total quarterly sales of 513 million MWH.

Entry of new participants and dramatic increases in the volume of unbundled power flows has lead to significant shifts in the pattern of flows on the Nation's high voltage grid. In its 1998 summer assessment of bulk power reliability, NERC observed that:

> Throughout the Regions, parallel path flows from increased electricity transfers are stressing the transmission systems. These flows are at magnitudes and in directions not anticipated at the time the systems were designed . . . The transmission system will be required to operate under unprecedented, and sometimes unstudied, conditions.[6]

These changes have exacerbated the operational and economic inefficiencies already described in response to Question 1. Reliability is more challenging in the face of unstudied new conditions, congestion management is more difficult as the transmission grid is used in new and increased ways, ATC is more difficult to calculate due to increased demand and varying regional flows, and planning is made more difficult.

Question No. 3: Your testimony also states "Without further reform, traditional pricing and traditional transmission practices will likely hinder the further development of competitive and efficient bulk power markets." You cite as examples "the 'pancaking' of transmission access charges from one system to the next, the absence of clear and tradeable transmission property rights, and the virtual absence of a secondary market in transmission service."

Please explain these problems and their effects on the electric markets, and how you believe these problems can best be remedied.

Answer: As discussed in response to Question 1, transmission customers have generally paid an access charge to each transmission provider along the contract path of a power trade, resulting in multiple transmission charges across several transmission systems. This makes it difficult to create region-wide power markets in which new competitors can enter in hopes of serving customers at lower cost. As a result of such economic barriers to entry, the geographic scope of power markets is restricted and market concentration is unnecessarily high. I believe that competition is clearly enhanced if all transmission customers are able to access larger numbers of generators over a wide geographic region. This requires eliminating the current system of additive transmission charges and replacing it with a single access charge that gives transmission customers access to the entire regional grid. To date, non-pancaked transmission access charges have been a feature of all five ISOs that the Commission has approved. In the NOPR, the Commission proposed that all RTOs offer a single, non-pancaked access charge.

A secondary market for transmission capacity is also important. The resale of rights to use essential facilities has promoted greater efficiency and higher utilization in other industries such as railroads, gas pipelines and telecommunications. Secondary markets help reduce the risk of market participation by providing a vehicle for reselling transmission rights, for example when capacity is not needed or power transactions go sour. Secondary markets also provide a means of helping to ensure that scarce capacity is allocated to its highest valued uses. Secondary markets, however, require well-defined tradeable property rights to a regional grid.

---

[6] NERC, "1998 Summer Assessment: Reliability of Bulk Electricity Supply in North America," May 1998, at 2-3.

These do not exist in the current regime of network and point-to-point transmission service on utility specific transmission facilities.

Question No. 4: For questions one (1) through three (3), please explain the extent to which the Commission has attempted to address these problems under its current statutory authority. Please specifically address the extent to which the Commission can use its authority under section 211 of the Energy Policy Act of 1992 (EPACT) and Order 888 to address these concerns. If you believe the Commission needs additional statutory authority, please explain what now authority is needed and how it would improve the commission's ability to address these problems.

Answer: The Commission has taken several actions to improve the engineering and economic efficiency of the transmission grid. In 1993, the Commission issued a policy statement encouraging the formation of regional transmission groups (RTGs), which were defined as a voluntary organizations of transmission owners, users, and other entities interested in coordinating transmission planning (and expansion), operation and use on a regional and inter-regional basis. (Policy Statement Regarding Regional Transmission Groups, FERC Stats. & Regs. ¶30,976 (1993)) The commission summarized the benefits of such entities as enabling the market for electric power to operate in a more competitive and thus more efficient manner; providing coordinated regional planning of the transmission system to assure that system capabilities are adequate to meet system demands; decreasing the delays that are inherent in the regulatory process, resulting in a more market-responsive industry; and resolving technical transmission issues (*e.g.,* loop flow). The Commission has approved five RTG proposals, although their limited role may now be overtaken by industry and regulatory developments.

In 1994, the Commission issued a transmission pricing policy statement which encouraged RTGs to address transmission pricing and offered to provide more latitude to RTGs than to individual utilities for innovative pricing proposals, and which recognized that issues such as loop flow required a regional approach. (Inquiry Concerning the Commission's Pricing Policy for Transmission Services Provided by Public Utilities Under the Federal Power Act, 59 F.R. 55031 (November 3, 1994), FERC Stats. & Regs., Regulations Preambles ¶31,005) Then, two years later in Order No. 888, the commission encouraged the industry to consider the formation of independent system operators (ISOs), and gave specific guidance on characteristics and functions in the form of 11 principles. The Commission has issued orders approving or conditionally approving five ISOs.

Most recently, the Commission has issued its RTO NOPR. In this NOPR, the Commission proposes to encourage all transmission providers to participate in independent regional transmission institutions. I believe that such institutions can facilitate improved reliability, more accurate determinations of ATC, more efficient congestion management, more efficient planning and expansion decisions, and a reduction in pancaking of transmission access charges.

In acting on the ISO proposals that have been filed, the Commission has used its basic authorities under sections 205 and 206 of the Federal Power Act (FPA) to address some of the problems discussed, e.g., congestion management and rate pancaking. However, it is the existence of the regional institution itself, *i.e.,* the structural change in the industry through the formation of an ISO or other type of RTO, that permits the identified problems to be addressed most effectively, and thus far formation of these institutions has been voluntary. As I stated in previous testimony, it would be helpful for the Congress to clarify the Commission's authority under sections 205 and 206 of the FPA to order public utilities to participate in an RTO. As I further testified, Congress should also give the commission authority to regulate the transmission facilities of non-public utilities (e.g., the power marketing administrations (PMAs), public power and electric cooperatives) in the same way it regulates the transmission facilities of public utilities. This would include authority to order non-public utilities to participate in RTOs.

With respect to section 211 of the FPA, the Commission can and has used this authority to require transmission providers to provide transmission service. while section 211 applies to public utilities as well as non-public utilities that own and operate transmission facilities, it can be used only on a case-by-case basis in response to an application by an entity (or entities) seeking specific transmission service. Because of its focus on transmission applications, Section 211 is not an efficient authority to rely upon for the Commission to remove industry-wide engineering and economic inefficiencies that are regional in nature.

Additional statutory authority would be useful in at least three specific areas. First, as noted above, it would be helpful to clarify the Commission's authority to order public utilities to participate in RTOs. Second, as also noted above, additional statutory authority is needed to make all transmission system owners subject to the same rules for the provision of transmission services. Efficient markets in network

industries generally require that all service providers be subject to the same rules. Currently, approximately one-third of the Nation's integrated transmission grid is beyond the reach of Order No. 888's open access requirements. Third, additional statutory authority is needed to make compliance with reliability standards mandatory. Currently, the industry operates under a system of voluntary standards that have worked well in the past. However, with increasing numbers of competitive transactions taking place, the reliability of the Nation's electric system requires an enforceable set of reliability standards.

Question No. 5: Your testimony describes a second category of "impediments" consisting of "continuing opportunities for transmission owners to unduly discriminate in the operation of their transmission systems so as to favor their own or their affiliates' power marketing activities." The testimony also states that "In the wake of Order No. 888, however, many market participants continue to allege, and the Commission has in some cases confirmed, that transmission service problems related to discriminatory conduct remain."

Please describe these cases and the actions the Commission has taken to rectify such problems.

Answer: In the Commission's recent RTO NOPR, these cases and the commission's response are discussed in detail(see RTO NOPR, pp 58-85). The Commission is aware of allegations of unduly discriminatory behavior through formal complaints that are filed with the Commission, informal complaints that are made by telephone to the Commission staff's enforcement hotline, and assertions that are made in other public forums, such as comments in response to technical conferences we have held or in pleadings filed in cases before us. Although the Commission's staff attempts to help the parties resolve informal complaints, only formally filed complaints receive an official Commission response.

The allegations fall into several categories: the calculation and posting of the available transmission capability in a way that is favorable to the transmission provider's electric merchant functions and unfavorable to competitors; improper information sharing between the transmission provider and its affiliated merchant functions in ways that favor the merchant function over competitors, in violation of the Commission's standards of conduct; favoritism toward the transmission provider's merchant function during times of transmission congestion and constraints; and transmission providers who do not maintain accurate and useful electronic information (OASIS) sites, which tends to disadvantage competing marketers wishing to have access to the transmission system.

Upon receiving a formal complaint, the Commission investigates and makes findings. In cases where it has identified unduly discriminatory behavior, it takes appropriate action under sections 205 or 206 of the Federal Power Act. For example, in one case (*Washington Water Power Company,* 83 FERC ¶61,282 (1998)), the Commission found that a transmission provider had offered its power marketing affiliate a transmission service that was not generally available to everybody. The Commission ordered that the transmission provider's marketing affiliate forego any profit it made on the transaction for which it obtained unduly preferential service and not to engage in any market-based rate sales over the transmission provider's system for 180 days. In another case involving two public utilities, the Commission found that the transmission providers had improperly withheld transmission capacity for the benefit of their merchant functions. The Commission ordered the recalculation of available transmission capability and offering that capacity in a non-discriminatory manner. *Wisconsin Public Power Inc. System v. Wisconsin Public Service Corporation, et al.,* 83 FERC ¶61,198 (1998).

In addition to acting in response to specific complaints, the Commission has taken other actions to address opportunities for undue discrimination. In Order No. 888, the Commission imposed certain standards of conduct requirements to ensure that transmission owners do not preferentially favor their power marketing affiliates (i.e., do not unduly discriminate against competitors). The Commission has also recently held a public conference on the Capacity Benefit Margin issue, which some parties have alleged is being used in an unduly discriminatory manner in the calculation of available transmission capability. Finally, the Commission recently issued its RTO NOPR which is intended to encourage all public utilities to transfer control of their transmission system to an independent Regional Transmission organization, which would eliminate the opportunity for discriminatory conduct.

Question No. 6: The testimony also states that "Allegations relate to standards of conduct violations and manipulations of the operation of transmission systems to frustrate power marketing competitors, for example by the imposition of transmission curtailments on congested lines."

Does the Commission agree or disagree with such allegations? What has the Commission done in response to such complaints? Please provide specific examples.

Answer: The Commission can only agree or disagree with specific allegations to the extent they are brought to us in a formal complaint and we have conducted an investigation. The Commission has found standard of conduct violations with respect to at least four public utilities. (For a more detailed discussion, see the RTO NOPR, pp. 77-80). I am aware of many additional allegations made informally. While these additional allegations have not been substantiated through a formal process, I believe that it is reasonable to assume that such practices are more prevalent than reflected in formal complaint filings.

Question No. 7: Your testimony also states "there is a great, deal of mistrust among market participants with respect to fairness of the system."

Is this statement based on specific complaints filed with the Commission? If so, how has the Commission responded?

Answer: In this newly competitive environment, where substantial capital is at risk in developing new electric generation and competing for market share, the reliable, open, and non-discriminatory operation of the transmission system takes on unprecedented significance. The Commission had repeatedly been urged to ensure that all users of the system receive fair and comparable treatment from the transmission owners. Many market participants do not take this for granted. My statement is based upon many sources of information available to the Commission, and they are discussed in detail in the RTO NOPR. (see pages 58-83). Specifically, the Commission has received formal and informal complaints, written and oral comments in the course of public proceedings such as technical conferences (Docket No. RM95-9-003) and our ISO Inquiry (Docket No. PL98-5-000), and petitions for rulemaking (such as filed in Docket No. RM98-5-000) and other pleadings filed with us. The number of assertions we have heard indicates a perception by many market participants that transmission providers who also have electric merchant functions can and do find ways to favor their merchant functions and disadvantage market competitors.

The Commission has responded by trying to ensure strict compliance with the functional unbundling requirements of Order No. 888. As discussed with respect to questions above, the commission has expended considerable efforts reviewing and issuing orders with respect to the standards of conduct filed by public utilities. The Commission has also taken strong action in response to formal findings of violations of the functional unbundling requirements. Most recently, the Commission has issued its RTO NOPR which encourages organizational separation of transmission and merchant functions, which is probably the most effective step that could be taken to reduce mistrust.

Question No. 8: For questions five (5) through seven (7), please explain the extent to which the Commission has attempted to address these problems under its current statutory authority. Please specifically address the extent to which the Commission can use its authority under section 211 of the Energy Policy Act of 1992 (EPACT) and Order 888 to address these concerns. If you believe the Commission needs additional statutory authority, please explain what new authority is needed and how it would improve the Commission's ability to address these problems.

Answer: The Commission has used its authority under sections 205 and 206 of the FPA to remedy instances of undue discrimination and undue preference that it has found. Most prominently, the Commission used its authority under sections 205 and 206 of the FPA to remedy undue discrimination as the basis for requiring all public utilities to provide open access transmission and to functionally unbundle their generation and transmission services. Section 205-206 authority, however, does not apply to public power, the PMAs, and most electric cooperatives.

In addition to sections 205 and 206, the commission in the RTO NOPR relied in part upon section 202(a) of the FPA, which was recently delegated to the Commission by the Secretary of Energy. While section 202(a) applies to public utilities as well as non-public utilities, it is primarily a provision for voluntary coordination of utility facilities.

With respect to section 211 of the FPA, the Commission can and has used this authority to require transmission providers to provide transmission service. However, there are at least two difficulties in relying upon section 211 as a remedy for the remaining opportunities for undue discrimination identified in response to Questions 5-7 above. First, the instances of undue discrimination that are now complained of do not usually involve an outright denial of transmission service, or arguments about rates, terms or conditions of the service to be provided; rather they are more likely to involve more subtle sharing and manipulation of transmission availability information by the transmission provider, or curtailment of existing transmission service, that disadvantages marketers competing for sales. Second, section 211 can be used only in response to specific applications for transmission service and it requires a time-consuming procedural process—an application for an order

under section 211 may not be made until 60 days after the applicant has made a request to the transmission provider and the Commission must issue a proposed order prior to issuing a final order. Many transactions today are done on a short-term basis and the opportunities are lost unless transmission can be secured quickly.

Additional statutory authority would be useful to clarify the Commission's authority to require all public utility transmission owners to participate in RTOs as defined in our recent NOPR. The complete separation of the transmission and generation operations of utilities is the best, and perhaps the only, way to remove the opportunities and incentives for transmission owners to favor their generation interests, and to allow all market participants to trust in the fairness of the system. our recent RTO NOPR attempts to encourage RTO participation through voluntary efforts. If this approach is not successful, however, it would be beneficial to have clarified FERC's authority to require such participation.

In addition, Congress also should give the commission authority to regulate the transmission facilities of non-public utilities (e.g., the power marketing administrations (PMAs), public power and electric cooperatives) in the same way it regulates the transmission facilities of public utilities. This would include authority to order non-public utilities to participate in RTOs.

MARKET POWER, MERGERS, AND PUHCA

THURSDAY, MAY 6, 1999

HOUSE OF REPRESENTATIVES,
COMMITTEE ON COMMERCE,
SUBCOMMITTEE ON ENERGY AND POWER,
Washington, DC

The subcommittee met, pursuant to notice, at 10 a.m., in room 2123, Rayburn House Office Building, Hon. Joe Barton (chairman) presiding.

Members present: Representatives Barton, Stearns, Largent, Burr, Whitfield, Norwood, Coburn, Rogan, Shimkus, Pickering, Fossella, Bryant, Bliley (ex officio), Hall, McCarthy, Sawyer, Markey, Pallone, Rush, and Strickland.

Staff present: Catherine Van Way, majority counsel; Joseph Kelliher, majority counsel; Jeffrey Krilla, majority counsel; Ramsen Betfarhad, economic adviser; Donn Salvosa, legislative clerk; Sue D. Sheridan, minority counsel; Consuela M. Washington, minority counsel; and Rick Kessler, minority counsel.

Mr. BARTON. The hearing on electricity competition with special emphasis on market power, mergers and PUHCA by the Commerce Committee's Subcommittee on the Energy and Power will come to order. This is the third in a series of hearings that we are holding on the electricity industry in this country.

At this time, I would recognize the distinguished full committee chairman, the Honorable Tom Bliley of Virginia, for an opening statement.

Chairman BLILEY. Thank you, Mr. Chairman. And I want to commend you for holding this hearing on mergers, market power and PUHCA. Under your leadership today, this subcommittee is examining some of the most complex and difficult issues arising from the electricity power markets transition and regulation to competition.

Our Nation's resolve to protect competitive markets from anticompetitive practices is alive and well on this panel. For over a century antitrust laws have been a bulwark against anticompetitive practices that may tempt market participants to seek a profit at the cost of distorting markets. In order that the benefits of competition and the electricity power market go directly to consumers, the electricity power market must be open, robust and competitive.

Enforcement of antitrust laws will ensure that. Yet on the road to fuller competitive electricity, market power considerations, especially during the transition period, require careful examination. Today many utilities have either vertical or horizontal market power or both.

That market power is sanctioned by the regulatory regime under which the utilities have historically operated. Vigilance in a review of mitigating policies to ensure that market power is not abused during the transition are required. The first Federal role enacted, addressing market power abuses in the electric power industry exclusively, was PUHCA in 1935.

I have heard some good arguments that the time has come for PUHCA repeal. I have said it before, and I will say it again, I do not view a stand-alone PUHCA legislation bill as an answer. The committee has addressed PUHCA repeal as but one piece of a greater effort for the comprehensive restructuring of the industry. I will be interested in what our witnesses have to say about that today.

And, again, Mr. Chairman, I thank you for holding this hearing. I look forward to hearing the testimony of the witnesses.

Thank you very much.

Mr. BARTON. Thank you, Chairman Bliley.

We would now ask the gentleman from Ohio, Mr. Sawyer, would you like an opening statement?

You are going to yield to Mr. Pallone of New Jersey.

The distinguished gentleman from New Jersey is recognized for an opening statement.

Mr. PALLONE. Thank you, Mr. Chairman. Mr. Chairman, I just wanted to raise, initially, a process concern. I agree that it is time to move the restructuring debate forward, and I think we have to do so in a sound manner. But I hope that future hearings will not lump together substantial and complex issues such as the ones being discussed today.

I think our hearing record has to be updated because this is a rapidly changing industry, but we also have to be comprehensive. And for this reason, I don't understand why market power and PUHCA are being discussed in the same hearing. It also forces 12 witnesses to be digested in one sitting.

As you know, there is also another hearing going on upstairs on MTBE, which makes it difficult to, you know, actually sit through both hearings because we have them at the same time. So I would hope that in the future we could separate these topics and shorten the witness list and try to spend more time, if you will, on individual aspects rather than lump them all together as today, particularly when we have another hearing at the same time.

I wanted to say that I do look forward to hearing from our witnesses whether they think PUHCA should be repealed immediately as a stand-alone provision or whether it should be part of a comprehensive package. I also would like to know whether today's witnesses believe that PUHCA utilities are turning to investments abroad, which I keep hearing, whether domestic investments are simultaneously declining, and whether these conditions could be due to barriers created by an outdated PUHCA.

Further, I would like to know from our witnesses whether they believe that the industry will consolidate along the lines of generation, transmission and distribution companies, and if so, what types of effects this might have on consumers as well.

In terms of market power, I would like to know from our witnesses whether the basis for review of market power would be bet-

ter placed with the Justice Department or with the FERC, the Federal Energy Regulatory Commission.

I have some questions I would like to submit for the record and would ask that official responses also be submitted for the record, Mr. Chairman. And I will, unfortunately, be going back and forth between these two hearings that we are having today. Thank you.

Mr. BARTON. Thank you, Mr. Pallone. Let me simply say, before I give my opening statement on your process concern, I understand the frustration about being on two subcommittees at one time. I understand that. I understand that we have a large number of witnesses collectively and individually on the panel. I understand that.

Our problem is that we have had short workweeks.

On this particular hearing, we postponed it and rescheduled it from last week, because we turned out not to have votes on Friday, and it was both the majority and minority members' request that we postpone it. We also had several requests for additional witnesses from both side of the aisle, so that is why we have such a large panel.

It is my intention to have a fairly aggressive schedule of hearings. In fact, I hope to have at least one a week, and we may try to do two a week if we can find a subcommittee hearing room.

We have also started a supplemental process. Congressman Pickering is going to chair a working group where people can come in and address both members and staffs on both side of the aisle, in addition to the formal hearing process. We are going to try to give every view an opportunity to be heard and give, as you put it, a comprehensive record, have that be developed.

So I share that. But just the mechanics of doing some of these things, sometimes we have to compress and do things in an imperfect way, but there is no intent to prevent any member on either side from making sure that they are fully educated and their members and their staffs, and also that all sides of the issues are heard.

Mr. PALLONE. Thank you.

Mr. BARTON. Okay?

The Chair would recognize himself now for an opening statement. As I just told the gentleman from New Jersey, this is the third, but certainly not the last, of a number of hearings that we are going to hold on the issue of electricity deregulation and electricity restructuring. It is my intention to have at least one formal hearing a week on this issue. We may be able, in some weeks, to do two. We do want to move forward in an aggressive fashion with an aggressive schedule.

I want all the members of the committee on both sides of the aisle to be as informed as possible about the subject of restructuring. And we are going to work very cooperatively with staffs on both sides to make sure that the topics are relevant and the witness lists are comprehensive.

On the other hand, we don't want to be repetitive, and if possible, we don't want to have the hearings be so long that people won't attend in the latter parts of the hearing.

With that in mind, our next hearing is going to be on the role of the Federal electric utilities, with emphasis on the Tennessee Valley Authority. We have announced that hearing for next week.

We intend to have at least 4 more days of hearings, and in those hearings we intend to address the issues of public utilities—the Public Utility Regulatory Policy Act, environmental concerns that members on both sides have raised, the issue of stranded costs, the issue of consumer protection, and the status of restructuring the various States that have begun to move forward.

We also hope to take a look at the some of the innovations that are occurring in the electricity generation transmission and distribution sector of the economy. And at the minority's request, which I fully support, we intend to hold a hearing on the administration's bill that has been introduced as a courtesy in the House by Chairman Bliley and former Chairman Dingell.

Today's topic, market power, is a very good topic that needs to be addressed. I personally believe that all consumers should be allowed to purchase goods and services in the electricity sector of the economy in a competitive environment. I think that is preferable to having to purchase them as we do today in a regulated environment only.

With competition, consumers can vote with their feet, so to speak. If their utility company charges too much or they are unhappy with the service or products offered in a truly competitive market, they can move to a competing supplier or a competing service officer. However, consumers will not be able to fully exercise their rights if electricity suppliers are able to and in fact do exert what we know as "market power."

It will come as a surprise to no one today that I believe in free markets. It is my understanding and my hope that most members of the subcommittee also believe in free markets. I personally believe that government should be as uninvolved as possible in our day-to-day decisions. In that vein, when considering deregulating the electricity market, I believe that we have to establish fair rules under which competition can flourish; and then, as with most governments, it is the government that governs the least that governs the best. We should get out of the way and let the market operate.

The key is getting the rules right to begin with and making sure during the transition period, from regulation to full-blown competition, that consumers are not harmed. I might say as an aside that that is a very, very difficult proposition to legislate in a statutory fashion.

My goal is for all consumers in the United States to be able to reap the full benefits of market competition. With that in mind, I am going to be very interested to hear what our witnesses today have to say, especially if they have—if they believe that existing antitrust and merger authority under Federal law, as it is today, is sufficient to protect consumers during the transition period. Perhaps they may tell us that we need to amend those laws; perhaps they may tell us that we need additional statutory authority.

Finally, today, we are going to hear about the Public Utility Holding Company Act. It is not as vibrant as it once was, but it still provides some important consumer and investor protection. I don't believe it should be repealed in its entirety without first giving consumers the greatest protection of all, the ability in an open market to choose their power supplier.

I appreciate the testimony that we are about to hear. I appreciate the hard work that the staffs on both sides have put into making this hearing possible. And I appreciate the witnesses that have agreed to voluntarily testify before us.

I would now like to recognize the distinguished ranking member, Mr. Hall, for an opening statement.

Mr. HALL. Mr. Chairman, thank you. You have covered it very adequately. And sometimes I think we have had so many of these hearings that I will just say opening statement Number 47 or Number 46, and in this computerized day, they can just pick it up and put it in the record and go on.

I just want briefly to thank you for building a full and complete record; it is very important that we do so. While these hearings may seem like they are a little time-consuming and a nuisance sometimes to those of us who sit here and participate in them and have to sit here and listen.

We are eternally grateful to you men and women who have to prepare for these and have to set aside some time for us. Many of you have to travel for these hearings, and each one of these is not a new experience to you, but they are a continuation of what this panel sits through and hears.

But that is the way you do it, and it is very important for Federal and State regulators that we have these hearings, and for the courts as they try to discern the intent of Congress. We owe it to our constituents as customers, to the men and the women in the electricity business to be as thorough as possible, and that is what we are trying to do.

I thank you, Mr. Chairman, and I yield back my time.

Mr. BARTON. Thank you, Congressman Hall.

We would like to recognize the gentleman from Kentucky, Mr. Whitfield, for an opening statement.

Mr. WHITFIELD. Mr. Chairman, I am going to waive my opening statement.

Mr. BARTON. Okay. Does the gentleman Ohio, Mr. Sawyer, wish an opening statement at this time?

Mr. SAWYER. If I could, please, Mr. Chairman. I don't intend to read a long statement.

I just wanted, first, to associate myself with the discomfort that the gentleman from New Jersey expressed, but to offer an appreciation for the logistical difficulties that you face, Mr. Chairman.

I want to disagree with the gentleman from Texas only insofar as, while these may seem like they are time-consuming, I think the timing is enormously worthwhile. And that while the work that goes on on the Federal level, by comparison to the work that is going on within the States may not look as complicated, it is indeed every bit as complicated, because we have the responsibility to try to bring together in large regional markets effective competition within a flexible framework that recognizes the enormous differences that we are going to hear about in detail next week when we talk about the Federal utilities.

I am particularly interested today in the topics that you have brought together in terms of market power and mergers and PUHCA. They may not overlap so much with one another as they abut end to end, and they do affect one another in ways that go

directly to the question of whether or not real competition is actually possible.

In that sense, my continuing interest in transmission as the framework within which a Federal action is appropriate, recognizing that transmission is the key to vigorous markets and reliable service and real and effective competition. Without that kind of useful interconnection, competition indeed could suffer.

In that sense, it is probably the single most important and connecting focus among the topics that have taken place so far and that you have planned for at least the immediate future.

Let me just say in closing that it is a pleasure to have here on our panel an old friend, Ike Hunt, a Securities and Exchange Commissioner. He comes to those responsibilities from the deanship of the University of Akron Law School and a distinguished career in addition to that.

We are pleased to have him here.

Thank you, Mr. Chairman.

Mr. BARTON. Thank you.

We would recognize Mr. Rogan of California for an opening statement.

Mr. ROGAN. Mr. Chairman, thank you. Thank you for calling this hearing.

Mr. Chairman, I ask unanimous consent that my opening statement be made a part of the record.

Mr. BARTON. Without objection.

Mr. ROGAN. Mr. Chairman, further, in my opening statement, I make reference to two letters sent by members of the California delegation to Chairman Bliley. And may I also ask unanimous consent that those be included as part of the record?

Mr. BARTON. Without objection. We will have to show those to the minority. But I don't think they will object.

Mr. ROGAN. In that they are signed by all the Democrats as well as Republican members, I trust that there won't be objection.

Pending no objection, Mr. Chairman, I am happy to yield back the balance of my time.

[The prepared statement of Hon. James E. Rogan follows:]

PREPARED STATEMENT OF HON. JAMES E. ROGAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

I thank the Chairman. Mr. Chairman, today we begin the complex discussion of how to infuse a greater level of competition into our utility industries. The greatest aspect of any electricity restructuring package must empower consumers by providing them with market-based options in the electricity industry.

As in any market, consumer protections in the electricity industry must be established. However, as we examine existing and future utility regulations, we must evaluate at what point federal industry regulations actually inhibit consumers. A clear example of excessive market limitation is the Public Utility Holding Company Act. PUHCA was created 65 years ago to mitigate the concentrated control of vast utility empires in a few hands. In 1935, there was a need for PUHCA, as utility rates skyrocketed and state regulations were powerless to prevent further harm to consumers. PUHCA limited the ability of large holding companies to cross-subsidize or establish vertical market power.

While PUHCA may have been effective in the past, this archaic law was not designed with competitive markets in mind. As we seek methods for sound free-market principles to drive our electricity companies, PUHCA may impede entry into electric generation by the very businesses that would invigorate the industry.

Mr. Chairman, Presidents Reagan, Bush, and Clinton all have been concerned that PUHCA would effectively prevent nationwide retail electric competition by lim-

iting new market entrants. I share these concerns, and look forward to learning how we can change our current policies so that real competition can be infused into our electricity market.

Mr. Chairman, I would now like to focus my comments on an issue vital to the state of California. As you know, California has begun its four-year plan to transition the state's electricity market into a free-market system.

This plan, A.B. 1890, was designed to protect the reliability of electricity services and the interests of large and small consumers. Further, it will enhance the ability of participants to transfer into the new market in a way that would keep rates consistent. As Majority Leader of the California State Assembly at the time A.B. 1890 was crafted, I am pleased to note that both houses of the California Legislature passed this bill with no dissenting votes.

Last year, I worked to garner the signature of every Member of the California House delegation on a letter to Commerce Committee Chairman Bliley. This letter, dated March 20, 1997, urged that any federal electricity reform legislation would not preclude California from fully implementing the electricity restructuring plan laid out in AB 1890. Our delegation was unified in its desire to keep AB 1890 intact.

A few things have changed in our delegation since this letter was written. However, one thing remains clear: the delegation still fully supports AB 1890. I request unanimous consent to insert into the record another letter to Chairman Bliley dated April 26, 1999, which is signed by every new Member of the California House delegation. This letter affirms their support for A.B. 1890 as well.

I thank the Chairman, and look forward to working with my colleagues to provide competition in the electricity market in California and in every state.

Congress of the United States
House of Representatives
Washington, DC 20515

March 20, 1997

Honorable Tom Bliley
Chairman
House Committee on Commerce
2125 Rayburn
Washington, DC 20515

Dear Chairman Bliley:

As you know, on September 23, 1996, the Governor of California signed into law a landmark piece of legislation which was passed unanimously by both houses of the California legislature. This measure provides for the nation's first fully competitive electric utility system.

This historic legislation, Assembly Bill 1890, was the result of months of careful study, thoughtful consideration and intensive deliberation by a broad-based coalition of stake-holders. Historically, in California, it has been difficult to accommodate divergent views on this and other issues. AB 1890, however, is a shining example of success. The final product is supported by manufacturers, consumer groups, environmental groups, labor, and the state's electric utilities.

The new law provides for customer choice to begin on January 1, 1998, and to be fully implemented by the year 2002. This will ensure that all electricity consumers, both large and small, benefit from rate reductions resulting from competition. It will improve the reliability of service, advance the state's environmental concerns, and ensure the financial soundness of the system by allowing utilities the opportunity to recover their stranded costs during the transition without additional costs to the consumer. In short, it will provide tremendous benefits to the citizens of our state as well as those who choose to do business in California. We are justifiably proud that California, which represents the seventh largest economy in the world, is again the vanguard of an unfolding issue. During the 105th Congress, the House Committee on Commerce is poised to take up the issue of electric utility restructuring from a national perspective.

We believe that the decisions made in California on utility restructuring and competition are the right ones for our state, and must have the opportunity to be fully implemented. We trust and expect that this view will be respected as the legislative process moves forward in Congress.

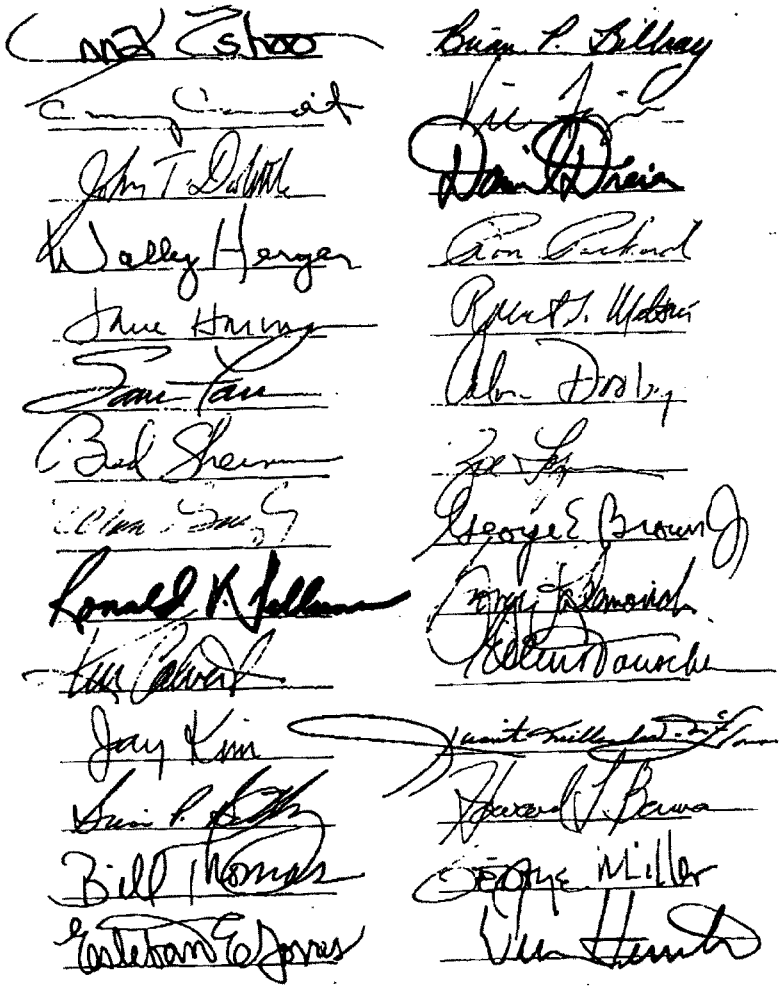
Sincerely,

Jerry Lewis

Lucille Roybal-Allard

Henry A. Waxman

James Moran



Howard "Buck" McKeon
Lynn C. Woolsey
Randy "Duke" Cunningham
Ed Royce
Pete Stark
Tom Lantos
Tom Campbell
Bob Filner
Nancy Pelosi
Frank Riggs
Richard Pombo
Sonny Bono
Dan Rohrabacher
Loretta Sanchez
M. G. Martinez
Maxine Waters
Chris Cox

cc: Speaker Gingrich
Minority Leader Gephardt
Congressman Dingell
Congressman Schaefer
Congressman Hall

TOTAL P.06

Congress of the United States

Washington, DC 20515

April 26, 1999

Honorable Tom Bliley
Chairman
House Committee on Commerce
2125 Rayburn
Washington, DC 20515

Dear Chairman Bliley:

Two years ago, our colleagues in the California congressional delegation wrote to you about a landmark piece of legislation that had been enacted in California to restructure the electric power industry in our state. That legislation, AB 1890, was passed unanimously by both chambers of the California Legislature and signed into law in 1996.

We did not serve in Congress at the time this earlier letter (copy attached) was sent to you, but five of us were members of the California Legislature and were closely involved in the creation and passage of AB 1890. Our purpose in writing today is to add our voices to those of our colleagues in the California delegation who wrote earlier in support of AB 1890, and to let you know that implementation of this state law over the last two and one-half years has been a success.

As was pointed out in the earlier delegation letter, the electric industry restructuring process in California has enjoyed support from a broad range of bipartisan public officeholders, as well as from a diverse group of stakeholders – including manufacturers, consumer groups, environmental groups, labor organizations, and the state's electric utilities – that came together to provide the foundation for AB 1890. The restructuring process in our state has received a strong vote of confidence from the general public, as evidenced by the overwhelming defeat – by a margin of 26.5% voting Yes, 73.5% voting No – last fall of a ballot proposal that would have derailed AB 1890.

The state just marked, on March 31, 1999, the first anniversary of California's transition to an open, competitive electric power market – a transition that will be completed no later than March 2002. Although the implementation process continues, there is much to celebrate. California has established a new Independent System Operator that is ensuring the reliable, nondiscriminatory transmission of electric power throughout California, and a Power Exchange that is providing California consumers with the benefit of an open electric power market with transparent rates. Residential and small business customers are benefiting from a 10% rate

PRINTED ON RECYCLED PAPER

reduction, coupled with a rate freeze, both of which were key features of AB 1890. Even greater savings for electric power customers are expected when the transition is completed.

For these reasons, we strongly endorse AB 1890 and the electric industry restructuring process that is unfolding in our state. We concur in the sentiment expressed by our congressional delegation colleagues two years ago: that "the decisions made in California on utility restructuring and competition are the right ones for our state, and must have the opportunity to be fully implemented." As the federal electricity restructuring debate unfolds in the 106th Congress, we believe that the California experience can help inform the dialogue on this important issue. We also believe that any federal legislation that might be developed must recognize the fundamental change that is already underway in our state, and allow California's electricity competition program to be implemented as the authors of it intended.

Sincerely,

Stephen Kuehl

Mike Thompson

Lynn Woolsey

Grace F. Napolitano

Barbara Lee

Jerry Lewis

Lois Capps

Mary Bono

cc: Congressman John Dingell
Congressman Joe Barton
Congressman Ralph Hall

Mr. BARTON. The gentleman from Massachusetts is recognized for an opening statement.

Mr. MARKEY. Thank you, Mr. Chairman, very much.

In the year 1776, Adam Smith published his classic defense of free market economies, The Wealth of Nations, and in that work is contained a passage which I think quite aptly describes the situation that this subcommittee faces as we consider the issues of electricity competition, utility market power and mergers.

Adam Smith warned, "Were the officers of the Army to oppose with the same zeal and unanimity any reduction in the numbers of forces with which master manufacturers set themselves against every law that is likely to increase the number of their rivals in the home market; were the former to animate their soldiers in the same manner as the latter inflame their workmen to attack with violence and outrage the proposers of any such regulation, to attempt to reduce the Army would be as dangerous as it has now become to attempt to diminish in any respect the monopoly which our manufacturers have obtained against us.

"This monopoly has so much increased the number of some particular tribes of them that, like an overgrown standing Army, they have become formidable to the government, and upon many occasions intimidate the legislature. The member of parliament who supports every proposal for strengthening this monopoly is sure to acquire not only the reputation of understanding trade, but great popularity and influence with an order of men whose number and wealth render them of great importance.

"If he oppose them, on the contrary, and still more if he has authority enough to be able to thwart them, neither the most—neither the most acknowledged probity, nor the highest rank, nor the greatest public services can protect him from the most infamous abuse and detraction, from personal insults, nor sometimes from real danger, arising from the insolent outrage of furious and disappointed monopolists."

More than 200 years after those words were penned, Adam Smith's warning still rings true. We sit here today surrounded by the standing armies of the utility monopolists, who stand ready to battle with great zeal any effort to increase the numbers of their competitors. And they will heap praise and other rewards on those members of parliament who are willing to support their proposals for strengthening or maintaining their monopoly and react with insolent outrage to any attempt to disappoint their schemes for perpetuating their monopoly.

And so that is the central challenge before this subcommittee today. Do we believe in Adam Smith's vision of free markets and competition or do we stand with legions of the monopolists?

In my view, any Federal electricity restructuring legislation must address the prospect that electric utility mergers, excessive utility market power or untrammeled utility diversification into new lines of business might harm electricity consumers, harm competition and energy or other markets or undermine the emergence of a fully competitive electricity market.

While much has changed since the 1930's when the Public Utility Holding Company Act was enacted to curb the outrageous abuses associated with the large multistate utility holding company mo-

nopolies of that era, we still need to address the potential for market power abuses as we make the transition to a competitive generation market.

Without proper protections, utilities who control generation, transmission and distribution assets easily could be attempted to engage in self-dealing transactions with their affiliates, cross-subsidize unregulated business ventures at the expense of the captive consumers in their monopoly transmission or distribution businesses or exploit their continued market dominance to impede the growth of effective competition.

Already the accelerating pace of utility mergers raise the specter of giant mega-utilities that could control electricity in gas markets and effectively bar new market entrants from vying for customers. We, therefore, need to give the FERC the tools to address the potential for anticompetitive actions by utilities.

While our antitrust agencies can do much to address some of the potential problems that we may face as we move to competition, we must recognize that the utility industry is just beginning to move from a government-sanctioned monopoly toward a competitive market, and that even in the new competitive environment, there are still going to be some aspects of the business, such as transmission and distribution, that remain regulated monopolies.

We, therefore, need the expert regulatory agency for the electric utility industry, the FERC, to be involved in addressing these market power issues. And in the last Congress Republican Majority Whip Tom Delay and I introduced legislation aimed at giving FERC the powers needed to address market power and anticompetitive mergers.

In addition to this legislation, we also clearly need to assure that the State regulators have access to books and records and other information they will need to supplement Federal actions in this area.

I thank you, Mr. Chairman for allowing me to make my opening statement. I yield back the balance of my time.

Mr. BARTON. We thank the gentleman from Massachusetts. And we are glad that he has read The Wealth of Nations; that is good to know.

We would recognize the gentleman from Tennessee, Mr. Bryant, for an opening statement.

Mr. BRYANT. Thank you, Mr. Chairman. I would waive my opening statement.

Mr. BARTON. We would recognize the distinguished gentleman from Oklahoma, Mr. Largent, who, rumor has it, is about to introduce a very good piece of legislation for an opening statement.

Mr. LARGENT. Washington is full of rumors.

Thank you, Mr. Chairman. This really is an important hearing. I think of all the issues that we look at as we study electricity restructuring, market power may be one of the most critical. We are going to hear about creating competition, level playing fields, divestitures, vertical, horizontal, cartel-like market power. But the real key for Congress to—the goal should be—in terms of market power is striking balance, balance between government regulation and allowing the free market to work.

And, of course, if you are coming from the side of limited government, we want to hear from the FTC, we want to hear from the Justice Department, how do the current antitrust laws stand up in a free market world, in a competitive electricity market.

And so, Mr. Chairman, I am anxiously awaiting the testimony, and will yield back the balance of my time.

Mr. BARTON. I thank the gentleman from Oklahoma.

The gentleman from North Carolina is recognized for an opening statement, if he so wishes.

Mr. BURR. The gentleman would only thank the chairman for the continuation of these hearings and, hopefully, for their conclusion in the not-too-distant future. And I yield back.

Mr. BARTON. Okay. Seeing no other members present, all members not present who wish to put an opening statement in the record, by unanimous consent that will be ordered.

[Additional statements submitted for the record follow:]

PREPARED STATEMENT OF HON. CLIFF STEARNS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Thank you very much, Mr. Chairman. I am pleased to have the opportunity to hold this hearing and listen to our distinguished panel. In this hearing, we will examine the issues related to market power, mergers, and PUHCA. Consideration of the energy deregulation question demands that we consider market power issues. These considerations are of great significance during our current transition from reliance on regulation to increased reliance on competition.

Before we begin, I would first like to welcome a member from our second panel, Mr. Michael Kurtz, General Manager of Gainesville Regional Utilities, in Gainesville, Florida. Today he is testifying as a representative public power entities, particularly in Northern Florida. I look forward to his testimony.

As most of us know, market power is the ability of a firm or a coordinated group of firms to profitably price above the competitive level for an extended period of time. This power can be accumulated or abused through both vertical and horizontal arrangements (including mergers.) Market power can result in higher prices, inefficient allocations of scarce resources, and distortions of consumer choices.

While States regulators have taken a variety of approaches to address market power, today we will primarily concern ourselves with Federal authority to address market power. Does Congress need to pass legislation giving Federal or State regulators additional authority to address utility market power? I hope our panelists can shed some light on this question.

The Public Utility Holding Company Act of 1935 was enacted to simplify utility holding company systems. PUHCA's approach was to reform the industry structure by creating many more non-affiliated utilities, limiting the ability of large holding companies to recreate themselves, and establishing new regulatory rules to prevent the remaining holding companies from evading regulation.

PUHCA was not designed with competitive markets in mind. I question the need for it. The past three Administrations have proposed PUHCA repeal. In fact, Mr. Chairman, my comprehensive electric restructuring legislation, the Electric Energy Empowerment Act of 1999, repeals PUHCA. I look forward to our panelists' opinions on the need for PUHCA repeal.

Again, I appreciate the opportunity to hear from our witnesses on these important issues of market power, mergers, and PUHCA. Thank you, Mr. Chairman.

PREPARED STATEMENT OF HON. JOHN D. DINGELL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Today's hearing attempts to cover a lot of ground concerning matters of central importance to the electric restructuring debate. Protecting consumers from the raw exercise of market power has always been a concern of the Congress, and it is an appropriate focus for the Subcommittee.

During the 1920's and '30's, Congress carefully studied the expansion of the utility industry and the quality of service it provided to consumers. After years of investigations, Congress enacted two statutes—the Federal Power Act and the Public

Utility Holding Company Act of 1935—to protect consumers and shareholders, and to ensure that no company could manipulate the marketplace.

The concerns Congress responded to then—affiliate abuses, self-dealing, cross-subsidization, and exploitation of captive consumers—are the same concerns we must be wary of today. In addition, in states which have opened up their retail markets, market power can be used to undermine competition, producing the worst of all worlds—unregulated markets dominated by one or more companies in a position to manipulate markets to their own advantage and to the consumer's detriment.

At the Subcommittee's last hearing, Chairman Hoecker of the Federal Energy Regulatory Commission suggested that, in light of changes in the marketplace, Congress needs to provide the Commission with new authorities to remedy discriminatory practices. The Administration bill contains several amendments to the Federal Power Act which are very interesting. Although I am not necessarily opposed to these, I would observe that some of the suggestions—authority to order divestiture and to mandate participation in transmission organizations—are of a profound nature. We should not enact such changes on the basis of economic theory or conjecture, but only on the basis of a thorough record clearly describing the nature and extent of market abuses, and the resulting need for such far-reaching "reforms." The Federal Power Act and PUHCA were not lightly undertaken, and any proposal to significantly amend these laws should be equally well founded.

Finally, I would like to say a few words about PUHCA. I have a passing interest in this statute, which is little understood and perhaps insufficiently appreciated. If I ran a registered holding company, I'm sure I would chafe at the Act's restrictions—and it may be that PUHCA deserves reexamination in light of current market conditions. Congress has carefully crafted several limited exemptions from the Act in recent years, based on a thorough understanding of both the purpose and the likely effect of such changes. To date, these exemptions seem to be working well, and I am not opposed to further discussion of the Act's role in today's markets.

However, it is inappropriate to consider major changes to PUHCA on the basis of a hope and a prayer that competition will automatically replace its consumer protections. It is also the case that PUHCA has important implications for the securities markets and for shareholder protection, and this is proper subject for the Subcommittee on Finance and Hazardous Materials.

I commend the Chairman for beginning to address these important issues today, and look forward to the witnesses' testimony.

Mr. BARTON. We want to welcome our first panel today. The first panel is a group of distinguished members of the administration, we have Mr. Douglas Melamed, who is the Principal Deputy Attorney General of the Antitrust Division of the U.S. Department of Justice. We have the Honorable Mozelle Thompson, who is a Commissioner of the Federal Trade Commission. We have the Honorable Isaac C. Hunt, who is a Commissioner of the Securities and Exchange Commission. And last, but not least, we have Mr. Douglas W. Smith, the General Counsel of the Federal Energy Regulation Commission.

Welcome, gentlemen. Your statements are going to be entered into the record in their entirety. We are going to start with Mr. Melamed, and give you approximately 5 minutes. But if you take a little bit longer, that is acceptable. And we will just go right down the line.

So, Mr. Melamed, you are recognized for 5 minutes.

STATEMENTS OF A. DOUGLAS MELAMED, PRINCIPAL DEPUTY ATTORNEY GENERAL, ANTITRUST DIVISION, DEPARTMENT OF JUSTICE; HON. MOZELLE W. THOMPSON, COMMISSIONER, FEDERAL TRADE COMMISSION; HON. ISAAC C. HUNT, JR., COMMISSIONER, SECURITIES AND EXCHANGE COMMISSION; AND DOUGLAS W. SMITH, GENERAL COUNSEL, FEDERAL ENERGY REGULATORY COMMISSION

Mr. MELAMED. Thank you, Mr. Chairman.

Good morning, members of the subcommittee. I appreciate——

Mr. BARTON. You need to put the microphone very close to you. The gentleman from Massachusetts.

Mr. MARKEY. I was just going to make that request.

Mr. MELAMED. I appreciate the opportunity to speak to you about some of the issues relating to market power in the electric power industry.

Mr. BARTON. You actually need to speak into the microphone. You need it close and you need to speak into it.

Mr. MELAMED. I will keep working at it.

With sales totaling more than $200 billion annually in the United States, it would be hard to overstate the importance of the electric power industry to the American economy and to American families. All of us have a stake in eliminating obstacles to efficient and economical generation and transmission of electricity.

It has become possible, with improved technology, to generate electric power efficiently with much smaller generating plants than those typically relied upon in the past. There is, thus, a growing consensus that the generation segment of electric power supply could become more efficient and economical under competitive market forces.

The transmission and distribution segments, on the other hand, will likely retain their natural monopoly characteristics for the foreseeable future. The challenge, thus, is to foster vigorously competitive generation markets within the context of regulated transmission and distribution monopolies.

Many States are moving to open their retail markets to competition. It is thus important that Congress consider the need for Federal legislation to address possible market power problems that could impede the efforts to increase competition in this industry. The key to retail competition in the electric power industry is a well-functioning wholesale market, and because wholesale markets are regional in nature and subject to Federal regulation, legislation to remove impediments to competition in wholesale markets must be undertaken at the Federal level.

Let me now outline the views of the Department of Justice about the basic components of such legislation. Because of the existing structure of the electric power industry, there are likely to remain significant market power problems in the transmission and generation of electricity, even as the industry is restructured to increase the role of competitive market forces.

The antitrust laws do not prohibit the mere possession of monopoly or market power that is the result of skill, accident, or a previous regulatory regime. I think this point responds to some of the concerns that were raised earlier this morning by both Chairman Barton and Congressman Pallone.

Antitrust remedies are thus not well-suited to address problems of market power in the electric power industry that result from existing higher levels of concentration and generation or from existing vertical integration. We believe, therefore, that regulators—FERC, in particular—should be given additional tools to remedy market power problems that are found to exist.

The provisions that would give FERC clear authority to remedy possible market power problems are an important part of the ad-

ministration's recently unveiled Comprehensive Electricity Competition Act. Let me explain why.

Owners of electric power transmission facilities in the U.S. commonly also own generation facilities, and their control over transmission gives them the ability to thwart competition in generation. Owners of transmission have the incentive and the ability to favor their own generation facilities and to restrict access to transmission facilities by the generation facilities of competitors.

FERC took a historic step toward addressing this problem in 1996 by enacting Order 888, which requires that all utilities over which FERC has jurisdiction provide open and nondiscriminatory access to transmission facilities for wholesale buyers and sellers. Monitoring and enforcing compliance with regulations against discrimination are particularly difficult, however, when quality of service is as time-sensitive as it is in electric power.

Because power is sold on an hourly basis, market dynamics, and thus the incentive and ability to exploit market power, can shift over the course of each day making it virtually impossible to intervene before conditions have changed. There is thus no way to ensure that a transmission owner will not operate its transmission assets in a manner that favors its own generation and thereby impairs competition.

Regional system operators are a promising solution to this problem. The administration proposal calls for amending the Federal Power Act to make clear that FERC has the authority to acquire transmission utilities, to turn over operational control of those facilities to a regional, independent system operator. Such a structural remedy can eliminate the ability of the owner of monopoly transmission facilities to act anticompetitively by ensuring that transmission services are provided by a neutral entity that has no stake in any particular generation facility and thus has no incentive to discriminate against competitors.

It is critical that ISOs be large enough to operate the transmission system efficiently and reliably. The provision in the administration proposal authorizing FERC to establish minimal criteria for the approval of ISOs would allow FERC to reject those that are too small to operate the transmission system reliably and efficiently.

High concentrations of ownership or generation capacity may allow the exercise of market power in another way, even if competition is permitted in wholesale and retail markets. The administration bill would give FERC the authority to mitigate such market power in wholesale markets, as well as backup authority to remedy market power in retail markets upon requests from a State if the State determines that it lacks the authority to remedy a retail market power problem.

Consistent with the Department's strong preference for structural remedies for competitive problems—responding, I might add, to Congressman Largent's comment a moment ago—FERC would be given express authority to order divestiture of generation facilities to the extent necessary to mitigate market power after consultation with the department and the Federal Trade Commission.

Let me conclude my testimony by briefly discussing possible reform of the Public Utility Holding Company Act of 1935. The ad-

ministration opposes stand-alone repeal of the act. In our review, the interlocking nature of the system of Federal laws regarding utility regulation, including PUHCA and the Federal Power Act, makes it preferable that those statutes be amended either as part of comprehensive restructuring legislation, or concurrently with such legislation, rather than on a piecemeal basis.

The administration's restructuring legislation includes a repeal of PUHCA, but the bill also includes several other measures designed to protect consumers from potential holding company abuses.

In closing, we are confident that truly competitive electricity generation will surpass regulation in efficiently allocating resources and maximizing consumer welfare. And we look forward to continuing to work with the subcommittee on the important issue of market power.

I will be pleased to answer whatever questions you may have. Thank you.

[The prepared statement of A. Douglas Melamed follows:]

PREPARED STATEMENT OF A. DOUGLAS MELAMED, PRINCIPAL DEPUTY ASSISTANT ATTORNEY GENERAL, ANTITRUST DIVISION, DEPARTMENT OF JUSTICE

Good morning, Mr. Chairman and Members of the Subcommittee. I appreciate the opportunity to speak to you about some of the issues relating to market power in the electric power industry.

With sales totaling more than $200 billion annually in the U.S., it would be hard to overstate the importance of the electric power industry to the American economy and to American families. All of us have a stake in eliminating obstacles to efficient and economical generation and transmission of electricity.

The electric power industry developed historically from a patchwork of isolated and vertically integrated electric utilities, each generating and distributing electric energy to consumers in relatively compact service areas. Advances in technology over time made power generation more efficient on a larger scale and made transmission of electric energy possible over long distances. These advances encouraged interconnection among utility transmission networks, initially for enhanced reliability and then for improved economy of service.

More recently, it has become possible, with improved technology, to generate electric power at efficient cost levels with much smaller generating plants. There is now a growing consensus that the generation segment of electric power supply could become more efficient and economical under competitive market forces. The transmission and distribution segments, on the other hand, will likely retain their natural monopoly characteristics for the foreseeable future. The challenge, then, is to foster vigorously competitive generation markets within the context of regulated transmission and distribution monopolies. It is in pursuit of the goal of promoting competitive generation markets that the Administration submitted its comprehensive electricity restructuring bill to Congress last month.

In thinking about restructuring, it is important to remember that the electric power industry has a number of unique characteristics that distinguish it not only from basic manufactured goods markets, but also from other network industries such as telecommunications. The product—electric energy—cannot be stored; and consumer demand for it varies widely from season to season, from day to day, and from hour to hour. Actual quantities generated must continuously and instantaneously match widely varying consumer demand.

In addition, the flow of energy over an electric power network cannot economically be directed through switches to follow a particular path, so in the power grid of today and the immediate future, energy will flow along the path of least resistance. Therefore, the actual physical delivery patterns for electricity may not match the contractual arrangements for sale of electricity, and successful transmission will depend on the relative output levels of all generators on the power grid.

Many states are moving to open their retail markets to competition. It is thus important that Congress consider the need for federal legislation to address possible market power problems that could impede the efforts to increase competition in the electric power industry. We believe that the bill that the Administration submitted

to Congress comprehensively and adequately addresses the market power issues about which we are all concerned.

The keys to retail competition in the electric power industry are well-functioning wholesale markets. Although much progress has been made in this regard, there is more to be done. Because power markets are regional in nature, federal legislation to remove impediments to competition in these markets is necessary.

In what follows, I will outline the views of the Department of Justice about the basic components of such legislation. I will first give a brief overview of enforcement activity by the Department in the electricity industry. I will then discuss some of the market power problems facing the industry and legislative proposals that we believe are necessary to address them. And I will conclude by discussing possible reform of the Public Utility Holding Company Act of 1935.

Enforcement Activity of the Antitrust Division

The Antitrust Division has long played an important role in protecting and promoting free and open markets in the electric power industry. A seminal antitrust case in this industry was an enforcement action brought by the Antitrust Division under the Sherman Act to stop the Otter Tail Power Company from monopolizing the retail distribution of electric power in its service area in Minnesota, North Dakota, and South Dakota. Otter Tail owned the transmission lines in its service area, and one of the means it employed to monopolize the market was to refuse to transmit, or "wheel," power over its lines to municipal utilities competing with it for local distribution. In 1973, the Supreme Court upheld a lower court order requiring Otter Tail to wheel power to the municipal utilities, ruling that the electric power industry was subject to the antitrust laws even though it was also subject to regulation by the Federal Power Commission.

The Division has brought two recent enforcement actions involving the electricity industry. The first was an action against Rochester Gas and Electric ("RG&E") concerning a contract between RG&E and the University of Rochester in which RG&E promised to sell electricity to the University at reduced rates in exchange for the University's promise not to compete against RG&E in the sale of electricity to consumers.

The case had its origin in the very high regulated electricity rates in New York in the early 1990s. In response, the New York Public Service Commission opened a proceeding to permit utilities to set prices through individual negotiations with certain customers rather than according to a tariff filed with the state.

In the meantime, the University of Rochester, a major industrial customer of RG&E, was examining ways to reduce its energy costs. The University had a decades-old facility that produced steam for heating and cooling campus buildings. The University determined that it could build a more efficient plant to meet its steam needs and also produce—or cogenerate—more electricity than it needed as a byproduct. New York State law expressly permitted the University to sell the plant's excess electricity to other users, in competition with RG&E.

The new plant was never built. Instead, RG&E and the University entered into an agreement. In part, the agreement resembled a simple—and legal—requirements contract, under which RG&E agreed to supply the University with electricity at discounted rates and the University agreed to "remain a customer of RG&E for all of its power needs' for seven years. But the agreement did not stop there. It also contained a seven-year restriction, unrelated to RG&E's sale and the University's purchase of electricity, pursuant to which the University promised "not to solicit or join with any other customers of RG&E to . . . provide them with electric power . . . from any source other than RG&E."

The Division brought an action under the Sherman Act against RG&E, challenging the agreement not to compete between RG&E and the University. This action was resolved by a consent decree that prohibits RG&E from entering into agreements not to compete, with certain limited exceptions (for example, contracts to sell a business).

The second action was a challenge of the merger of Pacific Enterprises ("Pacific"), a California natural gas utility, and Enova Corporation ("Enova"), a California electric utility. The Department was concerned that, as a result of the merger, the combined Pacific/Enova would have the incentive and ability to use its natural gas transportation monopoly to withhold gas or gas transportation from competing gas-fired electric plants that competed with Enova. Gas-fired plants are generally the most costly to operate, and they set the price for all electricity sold during times, such as summer, when electricity demand is at its highest. The complaint alleged that Pacific/Enova would, by restricting the access to natural gas of certain competing gas-fired plants, be able to raise their costs and thereby to increase electricity prices to California consumers. The complaint further alleged that Pacific/Enova

would have an incentive to do so because it is a low-cost producer of electricity and would therefore stand to profit from any increase in the price of electricity.

The settlement requires Enova to divest its largest low-cost electricity plants. Once this is accomplished, the merger will no longer create incentives for Enova to raise electricity prices. Enova is also required to provide notice to and obtain the approval of the Department should it wish to acquire or manage certain California electric power facilities in the future.

Market Power

Let me now turn to the issue of market power. Because of the existing structure of the electric power industry, there are likely to remain significant market power problems in the transmission and generation of electricity, even as the industry is restructured to increase the role of competitive market forces.

The authority of the Department of Justice to enforce the antitrust laws with respect to the electric power industry does not sufficiently address the ability of electric utilities to exercise market power that can thwart free competition within the industry. The antitrust laws do not outlaw the mere possession of monopoly power that is the result of skill, accident, or a previous regulatory regime. Antitrust remedies are thus not well-suited to address problems of market power in the electric power industry that result from existing high levels of concentration in generation or vertical integration. In the Administration's electricity bill we have, therefore, granted regulators the tools to remedy market power problems that may be found to exist.

The provisions that would give FERC clear authority to remedy possible market power problems are an important part of the Administration's recently unveiled Comprehensive Electricity Competition Act. Let me explain why.

Transmission Access

Owners of electric power transmission facilities in the U.S. commonly also own generation facilities, and their control over transmission gives them the ability to thwart competition in generation. Owners of transmission have the incentive and the ability to favor their own generation facilities and otherwise to restrict the access to transmission facilities by the generation facilities of competitors. Such discrimination can take the form of denying competitors in electricity generation access to the transmission monopolist's services or offering less favorable terms than those provided to its own generation facilities. The FERC took an historic step toward addressing this problem by enacting Order 888, which requires that all utilities over which FERC has jurisdiction provide open and nondiscriminatory access to transmission facilities for wholesale buyers and sellers.

Monitoring and enforcing compliance with regulations against discrimination are particularly difficult, however, when quality of service is as time-sensitive as it is in electric power. Because power is sold on an hourly basis, market dynamics—and thus the incentive and ability to exploit market power—can shift over the course of each day, making it virtually impossible to intervene before conditions have changed. There is thus no way to ensure that a transmission owner will not operate its transmission assets in a manner that favors its own generation.

Independent Regional System Operators ("RSOs") are a promising solution to this problem. RSOs are entities that operate the transmission grid independent of the interests of the owners of the generation facilities. The Administration proposal calls for amending the Federal Power Act to clarify that FERC has the authority to require transmission utilities to turn over operational control of transmission facilities to a regional independent system operator. FERC would also be given the authority to set other requirements pertaining to RSOs as needed to serve the public interest. Such a structural remedy can eliminate the incentive and ability of the owner of monopoly transmission facilities to act anticompetitively by ensuring that transmission services are provided to competitors by a neutral entity which has no stake in any particular generation facility and thus has no incentive to discriminate.

It is critical that RSOs be large enough to operate the transmission system efficiently and reliably. The provision in the Administration proposal authorizing FERC to establish minimum criteria for the approval of RSOs would allow FERC to reject RSOs that may be improvements over the status quo but are too small to operate the transmission system reliably and efficiently.

Optimally-sized RSOs can also help to mitigate market power that is the result of high concentrations of ownership of generation assets. RSOs can do so by eliminating transmission rate pancaking and thereby enlarging geographic markets. Rate pancaking occurs when a transmission customer is forced to pay separate rates for a transaction that crosses multiple transmission systems, even though the total costs of the systems would produce a rate, if the systems were treated as one, that

is lower than the sum of the "pancaked" rates. Pancaking results in total transmission prices that do not accurately reflect the actual cost associated with a particular transaction. It thus distorts competition both by increasing transmission prices and by tending to insulate nearby generation facilities from what might otherwise be more vigorous competition from more distant facilities.

Large regional RSOs can also internalize certain transaction costs, such as those associated with loop flows, as well as play an important role in the control and management of constrained transmission interfaces, particularly those which significantly impact competition in regional power markets. Poorly managed, competitively significant constraints can hinder transactions across the interface and invite anticompetitive manipulations of the interface. We fear that, without independent operation of the transmission grid, regulators will be unable to address adequately the almost certain flood of complaints of self-dealing that will undoubtedly allege manipulations of posted available transmission capacity and abuses of the native load preference that is granted utilities under Order 888.

Some transmission owners may decline voluntarily to turn over control of their transmission facilities to an ISO. Given the importance of ensuring that the transmission system operates in a nondiscriminatory and efficient manner, it is critical to competition in the electricity industry that legislation clarify FERC's authority to order transmission owners to join FERC-approved RSOs.

Generation Market Power

High concentrations of ownership of generation may allow the exercise of market power, even if there is competition in wholesale and retail markets. The Administration bill would give FERC the authority to mitigate market power in wholesale markets, as well as backup authority to remedy market power in retail markets upon request from a state if the state, in the course of implementing a retail competition plan, determines that it has insufficient authority to remedy a retail market power problem. Consistent with the Department's strong preference for structural remedies for competitive problems, FERC would be given express authority to order divestiture of generation facilities to the extent necessary to mitigate market power, in consultation with the Department and the Federal Trade Commission. The authority would be implemented by requiring generators with market power to submit a mitigation plan, which FERC could approve with or without modification.

Giving FERC the necessary tools to remedy market power in generation is critical because vertically integrated electric utilities have typically had market power in their distribution areas, and significant pockets of market power may remain after wholesale and retail competition are widely introduced. We do not know the extent to which this will be the case after restructuring occurs, but if it turns out that there are significant post-restructuring market power problems, FERC must be given the necessary tools to address them.

PUHCA Reform

I would like to conclude my testimony by briefly discussing possible reform of the Public Utility Holding Company Act of 1935 ("PUHCA"). During the Great Depression, a handful of large multi-state corporations that controlled a significant amount of electricity generation and transmission collapsed. Congress responded by enacting PUHCA. This legislation split up the companies and imposed certain restrictions on utilities operating in more than one state. The result has been an industry dominated by vertically integrated utilities regulated by state commissions.

The Administration opposes standalone repeal of PUHCA. In our view, the interlocking nature of the system of federal laws regarding utility regulation, including PUHCA and the Federal Power Act, makes it preferable that these statutes be amended either as part of comprehensive restructuring legislation or concurrently with such legislation, rather than on a piecemeal basis.

The Administration's restructuring legislation includes a repeal of PUHCA. However, the bill also includes several measures designed to protect consumers from the potential for holding company abuses such as cross-subsidization. These measures should include enhanced merger review by FERC, additional state and federal access to holding company data, and the market power provisions I discussed earlier. The Administration believes that it is important to approach electricity restructuring issues comprehensively in order for Congress to be able to evaluate the context in which changes in PUHCA are to take place.

Conclusion

We are confident that truly competitive electricity generation will surpass regulation in efficiently allocating resources and maximizing consumer welfare. Moreover, we believe that the Administration's electricity bill comprehensively addresses the competitive issues that will arise in a restructured market, and establishes the

framework through which truly competitive markets can thrive. We look forward to continuing to work with the Subcommittee on the important issue of market power.

Mr. BARTON. Thank you, Mr. Melamed.

Before I recognize Mr. Thompson, I actually have The Wealth of Nations here. And I hope people can see that it has been used. I have actually read it. I want to quote from a little bit different part. I want to quote from chapter 2 for my good friend, Mr. Markey, because I think it goes to the purpose of this hearing today.

It says, "Man has almost constant occasion for the help of his brethren, and it is in vain for him to expect it from their benevolence only. He will be far more likely to prevail if he can interest their self-love in his favor and show them that it is for their own advantage to do for him what he requires of them.

"Whoever offers to another a bargain of any kind proposes to do this. Give me that which I want and you shall have that which you want is the meaning of every such offer, and it is in this manner that we obtain from another the far greater part of those good offices which we stand in need of. It is not from the benevolence of the butcher, the brewer or the baker that we expect our dinner, but from their regard to their own self-interest."

That is why we are here, to see if we can get an open market. And copies of this book are available. They can be purchased.

All right. With that, I would welcome Mr. Thompson. We are going to set the clock at about 7 minutes, because it is really not fair to ask you gentlemen, I think, to summarize in 5 minutes.

So, Mr. Thompson.

STATEMENT OF HON. MOZELLE W. THOMPSON

Mr. THOMPSON. Thank you. And good morning Chairman Barton and members of the committee. I am pleased to appear before you today to present testimony concerning the important topic of deregulation in competition in the electric power industry.

We have submitted the Commission's full prepared statement for the record, but I am compelled to say that my testimony today in response to questions is my own and doesn't necessarily represent the views of the Commission or any other commissioner. The staff of the Commission has, in the past, commented to the FERC on the importance of wholesale competition and on the appropriate analytical framework for evaluating mergers.

The Commission has also provided comments to a number of States on the importance of considering the impact of market power as they introduce retail competition in the electric power industry. Consistent with that role, on September 13 and 14 of this year, the Commission will further assist States and localities by holding a public workshop on market power and consumer protection considerations in the electric power industry.

Now, my colleague from the Department of Justice has described numerous enforcement actions in this area in his written testimony, so I won't discuss the FTC's own activities. But I can state that the FTC's experience shows that vigorous market competition provides consumers with the benefits of low prices, good products, and greater innovation.

In principle, these benefits should be available to electric power consumers as a century of regulation gives way to competition;

however, these benefits will not be achieved without appropriate action to alleviate market power impacts.

The starting point for competition in the electric power industry is not the level playing field of a newly developed market. Instead, we are starting with what are essentially regulated monopolies; ensuring that consumers receive the benefit of deregulation, they would be greatly affected by the ability of the energy market to move toward a more open and competitive stance.

How that occurs is largely dependent on factors presented in each case, but in all cases, a recognition of market power issues is critical to achieving competitive benefit.

While the Federal antitrust laws are not a panacea for all competitive concerns, their application can help in this transition by making sure that mergers don't aggravate market power problems or shield incumbent companies from new competition. The antitrust laws can also help by preventing the use of anticompetitive acts and practices such as predation, raising rivals' costs and discrimination in granting access to essential facilities by companies seeking to inhibit competition from new entrants or suppliers.

It is important to note, however, that current antitrust laws do not directly address the conditions present in the energy market where market dominance results from decades of regulation and is not accompanied by the above-described unfair tactics. To address these conditions, the administration proposes to give FERC authority to address existing market power and remedy it in the wholesale power markets.

We agree that FERC, in consultation with the antitrust agencies, should have available the array of potential antitrust remedies, including ordering companies, to divest generation assets to several buyers in order to decrease the company's market dominance.

However, remedying existing market power in the retail segment is more problematic. Anticompetitive conduct would be a predicate for antitrust action against retail market power, yet local distribution monopolies may be able to exercise their power to the detriment of consumers without having to engage in clearly anticompetitive behavior.

At present, the proposed energy reform efforts would leave States with substantial regulatory responsibilities for local energy distribution. Yet regulating retail competition will likely entail reviewing the distribution and marketing power of companies across State lines in regional markets. It is unlikely that most States are well equipped to protect competition in these types of situations. Federal antitrust agencies, working in consultation with FERC, can help by contributing assessments of market power and the methods and principles that we use to analyze mergers and unfair methods of competition.

The remedies applied to these cases can also be applied to alleviate the market power problem. The Federal antitrust agencies can contribute to ensuring that newly deregulated energy markets are open and competitive.

Now, the two types of market power that are of antitrust concern as we move to retail electric competition are, first, horizontal market power, permitting prices to be raised above competitive levels for an extended period; and second, vertical market power that

could easily be exercised through discriminatory access to transmission which today largely remains a monopoly.

The final market power issue concerns mergers. For example, mergers between generating firms may create market power that could be exercised by withholding capacity in order to drive up rates; while mergers at the retail level between electric utilities, or between utilities and independent retail marketers, could harm existing or potential competition.

Deregulation in a number of industries has shown us that it can provide substantial benefits to consumers. And while we have similar hopes in the electric power industry where market forces have had an effect on firms long accustomed to the slower, sheltered pace of regulated life, the potential for consumer savings and increased choice is not guaranteed.

Vigorous antitrust enforcement will be an essential tool for ensuring competition, especially in the formative years as the regulatory grasp is loosening. In particular, strong merger enforcement will be necessary to ensure that deregulation does not result in the accumulation and abuse of private market power.

The Commission stands ready to meet its enforcement responsibilities and looks forward to working cooperatively with the FERC and the Department of Justice to protect the consumer gains that should follow the introduction of market forces to the electric power industry.

Thank you.

[The prepared statement of Hon. Mozelle W. Thompson follows:]

PREPARED STATEMENT OF MOZELLE W. THOMPSON,[1] COMMISSIONER, FEDERAL TRADE COMMISSION

I. INTRODUCTION

Mr. Chairman and members of the Committee, the Federal Trade Commission is pleased to appear before you today to present testimony concerning the important topic of deregulation and competition in the electric power industry, and how deregulation may raise issues of market power. We will also discuss the issue of mergers in an industry undergoing deregulation. The staff of the Commission has in the past commented to the Federal Energy Regulatory Commission ("FERC") on the importance of wholesale competition[2] and on the appropriate analytical framework for evaluating mergers.[3] The Commission has also provided comments to a number of states on the importance of considering the impact of market power as they introduce retail competition in the electric power industry.[4] To further assist states and localities in examining these issues, on September 13th and 14th of this year, the Commission will hold a public workshop on market power and consumer protection considerations in the electric power industry.

---

[1] This written statement represents the views of the Federal Trade Commission. My oral presentation and responses to questions are my own, and do not necessarily represent the views of the Commission or any other Commissioner.

[2] *See* Comment of the Staff of the Bureau of Economics, Federal Trade Commission, "Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities, Recovery of Stranded Costs by Public Utilities and Transmitting Utilities," Dkt. No. RM96-6-000 9 (Aug. 7, 1995) ("BE/FERC I").

[3] *See* Comment of the Staff of the Bureau of Economics, Federal Trade Commission, "Inquiry Concerning Commission's Merger Policy Under the Federal Power Act," Dkt. Nos. RM95-8-000 and RM94-7-001 (May 7, 1996) ("BE/FERC II").

[4] For the Commission's most recent state comment, see Comment of the Staff of the Bureau of Economics of the Federal Trade Commission Before the Alabama Public Service Commission, Dkt. No. 26427, Restructuring in the Electricity Utility Industry (Jan. 8, 1999). Other recent comments have been submitted to the Louisiana Public Service Commission, Dkt. No. U-21453 (affiliate transactions) (Oct. 30, 1998); the Public Utility Commission of Nevada, PUCN Dkt. No. 97-5034 (affiliate transactions) (Sept. 22, 1998); the Mississippi Public Service Commission, Dkt. No. 96-UA-389 (Transco proposal) (Aug. 28, 1998).

The FTC is a law enforcement agency whose statutory authority covers a broad spectrum of the American economy, including the electric power industry. The Commission enforces, among other statutes, the FTC Act[5] and the Clayton Act,[6] sharing with the Department of Justice authority under Section 7 of the Clayton Act to prohibit mergers or acquisitions that may "substantially lessen competition or tend to create a monopoly."[7] In addition, Section 5 of the FTC Act prohibits "unfair methods of competition" and "unfair or deceptive acts or practices," thus giving the Commission responsibilities in both the antitrust and consumer protection areas. The Commission also provides advice and guidance on competition issues, based upon its substantial experience in applying antitrust principles across many different industries.

The FTC's experience has taught the Commission that competition between market participants will ordinarily provide consumers with the benefits of low prices, good products, and greater innovation. In principle, these benefits should be provided in the electric power industry as a century of regulation gives way to competition. However, these benefits will not be achieved without appropriate action to alleviate market power impacts.

There are huge resources at stake in this industry. Total industry revenues are estimated at $200 billion a year, and total industry capital investment is around $700 billion, or almost 10% of total U. S. capital investment. If the levels of cost savings and technological improvements in this industry approach those attained in other previously deregulated industries, many consumers likely will be substantially better off in terms of lower prices and increased choices.[8] But these potential savings and innovations will not appear automatically. Proper application of antitrust principles and enforcement should ensure that the benefits of competition reach consumers.

II. REGULATORY BACKGROUND IN THE ELECTRIC POWER INDUSTRY

In order to evaluate the impact of market power issues in the electric power industry and to better understand the role of the antitrust agencies in addressing market power, it is important to review the unique history of this industry. For most of this century, the electric power industry has been heavily regulated because the industry was perceived to be a natural monopoly. In an effort to minimize costs, the industry was organized as a series of local, vertically integrated monopolies. For the most part, the power company owned the generation, transmission, storage, and distribution systems. Each of these local monopolies had market power, but it was market power that was controlled by federal and state regulatory bodies. Mergers were allowed to take place without regard to market power because regulation prevented market power abuse, and many of these mergers would have been prohibited in a nonregulated industry.

Technical and organizational innovations in the last decade may have made room for competition in the generation and sale of electric power. However, the starting point for competition in the electric power industry is not the level playing field characteristic of a newly developing market. Instead, we are starting with regulated monopolies. Ensuring that consumers receive the benefits of deregulation may be greatly affected by the ability of the energy market to move to an open and competitive stance rather than one dominated by newly unregulated monopolies. How that occurs is largely dependent on the factors present in each case. In some instances, for example, there may be no transition problem because easy entry at the generation and transmission levels will eliminate most market power. In other instances, however, competitive constraints on existing market power may be only modest at best. In all cases, however, a recognition of market power issues is critical to achieving the benefits of competition.

While Federal antitrust laws are not a panacea for all competitive concerns, their application can help in this transition to competition by making sure that mergers do not aggravate market power problems or shield incumbent companies from new competition. The antitrust laws can also help by preventing the use of anticompetitive acts and practices such as predation, raising rivals' costs, and discrimination

---

[5] 15 U.S.C. §§ 41-58.

[6] 15 U.S.C. §§ 12-27.

[7] 15 U.S.C. § 18.

[8] *See* R. Crandall and J. Ellig, Economic Deregulation and Customer Choice: Lessons for the Electric Industry, Center for Market Processes at 2-3 (1996) (within 10 years of substantial deregulation, prices in the natural gas, long distance telecommunications, airlines, trucking, and railroad industries decreased between 25 and 50 percent while quality of service improved). Of course, these benefits were not spread evenly among all consumers, and some previously subsidized service may have been negatively impacted.

in granting access to essential facilities, by companies seeking to inhibit competition from new entrants or suppliers.

It is important to note, however, that current antitrust laws do not directly address the current conditions in the energy market where market dominance resulting from decades of regulation are not accompanied by the above-described unfair methods of competition. To address these conditions, the administration proposes to give FERC authority to assess existing market power and remedy it in wholesale power markets. The array of potential remedies could include ordering companies to divest generation assets to several buyers in order to decrease the companies' market dominance. However, remedying existing market power in the *retail* segment is more problematic.

Anticompetitive conduct would be a predicate for antitrust enforcement against retail market power, yet the local distribution monopolies may be able to exercise their power to the detriment of consumers without having to engage in clearly anticompetitive behavior. At present, all proposed energy reform efforts would leave states with substantial regulatory responsibilities for local energy distribution. Yet regulating retail competition will entail reviewing the distribution and marketing of electric power across state lines in regional markets. It is unlikely that states will be well-suited to protect competition in these types of markets.

The federal antitrust agencies, working in consultation with FERC, can significantly contribute to an assessment of existing market power, even though our current enforcement activities do not directly address this issue. First, the analytical methods and principles that we use to analyze mergers and unfair methods of competition are equally applicable to an existing market power problem in a wholesale or retail electric market. Second, the remedies applied to merger and non-merger cases can also be applied to alleviate existing market power. In sum, concerns about existing market power in this formerly monopolistic industry are appropriate. The federal antitrust agencies can contribute to ensuring that newly deregulated energy markets are open and competitive. The Commission looks forward to working in consultation with FERC, along with the Department of Justice, to address market power issues.

III. SOME SPECIFIC CONCERNS

Economic theory and experience with other industries tell us that the transition from regulated monopolies to competition is not an automatic process " doing it right requires actively promoting competition and guarding against practices that stifle competition. For several reasons, the previous accumulation and potential abuse of market power may blunt the competitive potential of deregulatory efforts.

First, because industry participants have become used to a regulatory environment, some may attempt to protect or duplicate many of the comfortable aspects of that environment. Where they are accustomed to being a local monopoly and using the regulatory process to bar or disadvantage new entry, industry members may attempt to use monopolistic or cartel behavior (such as information-sharing) to protect their entrenched positions after deregulation. A monopolist will not ordinarily welcome new entry, and issues of access or structural realignment designed to promote access will have to be considered with those incentives in mind.

Second, the transition from regulation to competition is never instantaneous or complete. Market participants may find themselves subject to inconsistent requirements. Some participants may become subject to market forces while others remain regulated, or different participants may be subject to different regulations. It may be inefficient and unfair to have different regulatory rules apply to direct competitors. In the electric power industry, for example, potential anticompetitive behavior may be monitored by FERC, state public utility commissions, or the federal antitrust agencies, depending on the pace and mix of deregulatory efforts. In a deregulatory environment, it is important to provide consistent competitive analysis and review.

Third, regulatory bodies may have policy goals other than competition that warrant consideration in the transition to a competitive environment. In the electric power industry, for example, universal lifeline service[9] at low cost is an important public policy goal. Another important policy goal in the electric power industry is environmental protection. These considerations usually fall outside the scope of traditional antitrust analysis. Accordingly, some continuing regulation or other special provisions may be needed to ensure that other policy goals are taken into account.

[9] In the electric power and telephone industries, regulatory agencies require providers to offer basic, low-cost service that may be subsidized by consumers who purchase additional services.

Fourth, removing entry and capital expenditure controls from an industry subject to a long period of regulation will unleash pent-up demand for corporate restructuring. Resulting consolidations may be procompetitive or competitively neutral, or they may instead be an illegal attempt to acquire market power.

These four conditions imply that the antitrust laws will have to be applied flexibly to address the issues that arise in transitional, or formerly regulated, industries. Regulatory regimes are usually established in response to some market failure, perceived or actual, that makes market forces inadequate to protect consumers and promote efficiency. Even if a consensus exists that the existing regulatory schemes are unresponsive or ineffective, or that technology obviates the need for regulation, the impact of regulation on the industry structure, incentives, and expectations requires that the antitrust agencies be especially sensitive in applying antitrust rules while market forces regain primacy.

Applying antitrust rules with special care does not, however, mean a "hands off" approach. The consumer and efficiency gains from deregulation could be jeopardized without appropriate antitrust enforcement during and after deregulation. The goal is to see regulation replaced with competition, not with collusion or dominant firm behavior. Here, the antitrust laws' flexibility is a major advantage. Antitrust jurisprudence unfolds on a case-by-case approach, constantly adapting to new information and new experiences. Where, as here, the deregulated world will be significantly different from the experience of most industry participants, it is difficult to know in advance what oversight will work best. The difficulty of predicting how the industry will look in the future suggests that fixing government oversight policy in concrete at an early stage could be counterproductive. In this type of uncertain environment, flexible antitrust enforcement may be particularly important.

Although the decision about how to proceed has potentially substantial economic consequences for consumers, we will not comment on the method and scope of regulatory reform, but will state that strong antitrust oversight of the industry will and should remain vital no matter what course of deregulation is chosen.

IV. MARKET POWER ISSUES

As previously stated, no matter how deregulation proceeds, market power issues must be addressed if the benefits are to accrue to consumers. Two kinds of market power are of antitrust concern as we move to retail electric competition. The first is horizontal market power, permitting prices to be raised above competitive levels for an extended period, and the second is vertical market power that could be exercised through discriminatory access to transmission, which today largely remains a monopoly.[10]

A. Horizontal Market Power

Horizontal market power in this context refers to the ability of one or more electric generating or retailing firms to raise prices above competitive levels for an extended period of time. Horizontal market power results in higher prices, inefficient allocations of scarce resources, and distortions of consumer choices. Concerns about horizontal market power in generation during deregulation have been heightened by the pioneering British deregulatory experience, as well as experience with the initial efforts in the United States. Following the implementation of electric industry restructuring in the United Kingdom, researchers determined that the two private generating firms that dominated the industry were exercising market power.[11] These findings prompted subsequent orders for divestiture of generation capacity. Very recent evidence from the initial deregulatory efforts in California indicates that market power problems in generation also exist there.[12]

B. Vertical Market Power

In addition to horizontal market power, effective antitrust oversight will require close examination of the incentives and ability of a vertically integrated transmission monopolist, whose rate of return is regulated, to evade the regulatory con-

---

[10] As previously noted, in addition to already-existing market power, market power can be acquired through merger.

[11] Green, R. J. and Newbery, D., "Competition in the British Electricity Spot Market," 100 J. Pol. Econ. 929 (1995). *See also* Alex Henney, "The Mega-NOPR: A Brit Crosses the Pond to Explain What's Happening at FERC," Pub. Utils. Fort., July 1, 1995 at 29; "U.K.'s National Power, Powergen Must Sell Off Up to 6000 MW, Lower Rates," Elec. Util. Wk., Feb. 21, 1994.

[12] The Market Monitoring Committee of the California Power Exchange, Second Report on Market Issues in the California Power Exchange Energy Markets, at 67 (March 9, 1999) ("there is evidence that some generators were successfully exercising their market power during high-demand hours").

straint in order to earn a higher profit. Its participation in an unregulated market may give it the means to do so, either by discriminating against its competitors in the unregulated market or by shifting costs between the regulated and unregulated markets.[13]

The vertical relationships in this industry are different from those in almost all other industries that have not experienced long periods of pervasive regulation. The important issue this industry structure raises is how to ensure that the benefits of new competition in power generation actually reach the consumer. A key to effective competition is to provide open access[14] for independent generators to vertically integrated transmission and distribution systems so that lower prices in generation are passed on to consumers. The problem is that a vertically integrated transmission monopolist ordinarily would have an incentive to discriminate against independent generators. As a result, consumers might be deprived of the benefits of an independent generator's lower costs. While one solution could be requiring vertically integrated companies to be split up so that transmission entities would not be controlled by generating companies, large scale forced divestiture could prove costly in terms of complex legal liability issues for existing contracts and the sacrifice of potentially important economies of scope and vertical integration.[15] Consequently, the method chosen by both the states and FERC to assure open access and efficient pricing in the transmission and distribution grids is to require that products be unbundled and to require that the pricing decisions of the vertically integrated firms be transparent.[16] If correctly done, this unbundling should prevent a monopolist from discriminating against independent power generators and from shifting costs to the regulated portion of its business.[17]

Two methods of unbundling currently are being used by regulators in the electric power industry. For wholesale sales of interstate transmission of electricity, FERC requires "functional" unbundling, whereby it orders a transmission monopolist to grant open access and charge the same prices to independent generators that it charges internally to its own generator plants. A number of states (with concurrence from FERC), on the other hand, have opted for what the FTC staff has termed "operational" unbundling, in which an independent system operator is established to operate the transmission and distribution grids to insure open access and transparent pricing while the monopolist retains ownership of the physical assets.[18] The operational unbundling plan may work to preserve economies of vertical integration, internalize loop flow externalities, and assure transparent investment signals for potential investors[19] while eliminating the strategic opportunities of the monopolist[20] to favor subtly its own generating capacity.[21]

---

[13] *See* Brennan, T., "Why Regulated Firms Should Be Kept Out of Unregulated Markets: Understanding the Divestiture in United States v. AT&T," 32 Antitrust Bull. 741 (1987), and "Cross Subsidization and Cost Misallocation by Regulated Monopolists," 2 J. Reg. Econ. 37 (1990).

[14] Open access refers to the principle that a monopoly owner of transmission or distribution assets must make them available to independent generators at price and service levels equal to those provided to its owned generators. FERC has focused on behavioral rules for open access and on developing mandatory common information sources concerning supply and transmission conditions. *See* BE/FERC I at 15-16.

[15] A number of utilities have followed a path of voluntary divestiture in order to compete more effectively in the deregulated climate. See Comments of Pacific Gas and Electric Company on Divestiture of Generation Facilities, "Order Instituting Rulemaking on the Commission's Proposed Policies Governing Restructuring California's Electric Services Industry and Reforming Regulation," Dkt. No. R.94-04-031 (Mar. 19, 1996).

[16] *See* FERC Order 888, Dkt. RM958-000.

[17] Brennan, T., "Cross Subsidization and Cost Misallocation by Regulated Monopolists," 2 J. Reg. Econ. 37 (1990).

[18] *See* BE/FERC I at 3.

[19] Operation of a transmission system by an independent system operator should assist investors in distinguishing between high transmission prices caused by physical bottlenecks at peak demand periods and high prices caused by the exercise of market power.

[20] Because supply and demand for electricity are so time-sensitive, even the slightest delay in transmission can have a serious impact on the reliability of any generator. A regulatory agency might find it very difficult to implement functional unbundling because of the difficulty of monitoring the numerous individual transactions nationwide to prevent degradations of contracts between independent generators and wholesale purchasers. *See* BE/FERC I at 5-9.

[21] A third possibility considered by some states is to create a "Transco," a for-profit, independent transmission company affiliate that would operate the transmission grid (which would continue to be owned by the transmission company) and would be subject to nondiscrimination rules. In comments to the state of Mississippi, *supra* n.4, staff noted that Transcos may present particularly difficult governance questions, are likely to be biased against remedies to transmission congestion that involve new generation, and may not provide greater operating efficiencies than independent system operators.

Consistent with economic theory regarding potential competition concerns of this nature, numerous independent producers and large industrial users have alleged discriminatory conduct in the operation of transmission facilities.[22] The FTC staff has commented on some of these issues in the past,[23] and stands ready to provide further assistance if called upon.

C. Mergers

As previously noted, the final market power issue concerns mergers. For example, mergers between generating firms may create market power that could be exercised by withholding capacity in order to drive up rates, while mergers at the retail level, between electric utilities or between electric utilities and independent retail marketers, could harm existing or potential competition.

Following deregulation, horizontal mergers are more likely than vertical mergers in the electric power industry, given the current high level of vertical integration.[24] Our merger analysis is not industry specific; it is designed to apply across all industries. Nonetheless, this industry, like all industries, has certain unique features that would require that the analysis be applied in a flexible manner. Using the analysis described in the *Horizontal Merger Guidelines,* jointly developed by the Commission and the Department of Justice,[25] the enforcement agencies assess whether the proposed transaction would harm consumers of any relevant product or service through increased prices, lower quantity, quality or service levels, or reduced technological innovation.

Defining the relevant product and geographic markets is the first step in determining where any potential anticompetitive effects will be felt. A relevant product market is one in which consumers of the product would not switch to an alternative product in numbers sufficient to make a small but significant increase in price unprofitable.[26] Similarly, a relevant geographic market comprises the locations of all of the alternative suppliers to which customers would likely turn if prices of the relevant product rose by a small but significant amount.

In many industries, the more distinctive and important inquiry concerns the relevant product market, where the consumers' substitutes are determined. In the electric power industry, both product and geographic markets may prove difficult to define with absolute precision. Within the overall electricity market, discrete electricity product markets will need to be defined, taking into account, among other things, time, reliability, and interruptibility. The more difficult issue in this industry may be defining the relevant geographic market. As open access to the transmission and distribution grids becomes the norm, consumers will be able to turn to ever more distant sources of electricity. The geographic market is unlikely to be national in scope, but may include parts of Canada or Mexico during some periods. But establishing the relevant markets may be more complicated because changes in the definition of the product market also change the scope of the geographic market.[27]

---

[22] *See, e.g.,* "Petition for a Rulemaking on Electric Power Industry Structure and Commercial Practices and Motion to Clarify and Reconsider Certain Open-Access Commercial Practices," filed with FERC by Altra Energy Technologies, Inc. and others on March 25, 1998. Aside from the question of compliance with FERC Order 888, there is a question about the breadth of its application. While FERC orders generally apply broadly to all energy sales involving interstate commerce, Order 888 does not apply to transmission by traditional vertically integrated utilities to accommodate "native" load. Transmission to accommodate native load accounts for a large portion of total transmission. Order No. 888, 61 Fed. Reg. at 21552.

[23] BE/FERC I.

[24] Vertical mergers with fuel suppliers are a prominent exception. The Commission's recent settlements in *CMS* and *PacifiCorp* addressed concerns with raising rivals' costs. *See CMS Energy Corp.,* FTC File No. 991 0046 (consent agreement accepted for public comment, Mar. 18,1999); *PacifiCorp,* FTC File No. 971 0091 (consent agreement accepted for public comment, Feb. 17, 1999). The proposed consent order in *PacifiCorp* was withdrawn when the acquisition was abandoned.

[25] U.S. Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines,* 4 Trade Reg. Rep. (CCH) ¶13,104 (Apr. 2, 1992), *as amended,* April 8, 1997. FERC announced that it would follow the principles in the *Guidelines* in its own analysis of utility consolidations. *See* Inquiry Concerning the Commission's Merger Policy under the Federal Power Act, RM96-6-000, 61 Fed. Reg. 68,595 (Dec. 18, 1996).

[26] Specifically, the markets are defined by asking whether a hypothetical monopolist could raise prices by a "small but significant and nontransitory" amount, such that not enough buyers would switch to alternatives to make the price increases unprofitable. If the price increases would not be profitable, the relevant market is too narrowly defined. *See Merger Guidelines* § 1.11.

[27] Electricity cannot be stored in any measurable quantities; it must be generated as it is consumed. Also, demand varies substantially not only seasonally but by time of day. Thus, the substitute sellers of electricity to any given consumer may be a number of firms offering subtly dif-

Once markets have been determined, the participants and their market shares must be identified. A market that is divided evenly among many participants will rarely have the potential for abuse of market power.[28] The *Merger Guidelines* use a measure of market share distribution called the Herfindahl-Hirschman Index to determine the concentration of firms in the industry. In this industry, as in others, however, antitrust analysis goes significantly beyond the mere calculation of market shares. Certain economic characteristics may make this industry susceptible to cartel behavior at a level of concentration different from the point at which we would otherwise be concerned. A careful and thorough analysis of each transaction must therefore be undertaken once the relevant markets and market shares have been determined. If experience suggests that this industry is particularly subject to cartel behavior, or that mergers indirectly promote cartel behavior, then threshold levels of concern indicated by market shares may need to be adjusted.

Entry and efficiencies are factors that are given considerable emphasis in the *Guidelines.* If entry into a market is easy, post-merger market participants likely will be unable profitably to increase prices above the pre-merger level. Entry analysis in the electric power industry poses a number of difficulties. The size of an efficient generating plant has decreased significantly but it still may take longer than the *Guidelines* benchmark of two years to enter at that level. Siting and environmental problems may complicate and delay entry at any level. Excess capacity and the decommissioning costs of nuclear power plants are important factors to consider. The ease of entry in this industry may vary from case to case as relevant markets change. For instance, available sites for new building may be more abundant in some areas than in others, making entry quicker and less costly.

The potential for anticompetitive effects does not end the inquiry in a typical merger investigation. Where the potential for anticompetitive effects is a close question, the potential efficiencies generated by the merger must be considered. Cognizable efficiencies may include economies of scale, integration of production facilities, plant specialization, and lower transportation costs.

The antitrust agencies have long considered efficiencies as relevant to the exercise of their prosecutorial discretion when deciding whether to challenge a transaction. In a close case, an agency may refrain from challenging a merger if it appears that the merger would generate substantial efficiencies. After a series of Commission hearings on Competition Policy in the New High-Tech, Global Marketplace indicated concern with how the antitrust agencies consider efficiencies in evaluating mergers, the Commission and the Department of Justice published a revised efficiency section for the *Guidelines*.[29]

Efficiencies may have particular significance for the electric power industry. In an industry that has been pervasively regulated for many years, efficiencies are likely to play an enhanced role in motivating restructuring after deregulation. Where capital mobility was once circumscribed by regulators, firms will now be able to pursue the most efficient, market-determined structure.[30]

V. CONCLUSION

Deregulation in a number of industries has proven to be beneficial to many consumers and the competitive process. The deregulated industries generally exhibit lower prices, increased quality and quantity of goods and services, and heightened innovation. The electric power industry is currently experiencing substantial deregulation. While it is unclear whether that process will be driven by the states or by the federal government, the outcome in either case should be that market forces will have an effect on firms long accustomed to the slower, sheltered pace of regulated life.

---

ferent products. Some consumers may want guaranteed reliability, while others may opt for interruptible power at lower prices. Some consumers may choose to defer power consumption to off-peak hours in return for lower prices. Each of these consumer decisions affects the definition of the relevant product market and may affect the number of potential suppliers in that market.

[28] Other things being equal, an acquiring firm will find it more difficult to engage in anticompetitive conduct, either unilaterally or in conjunction with others, in an unconcentrated than in a concentrated market. *See Merger Guidelines* § 2.0.

[29] U.S. Department of Justice and Federal Trade Commission, Revised Section 4 of the *Horizontal Merger Guidelines* (Apr. 8, 1997).

[30] For instance, independent generators that have acted as maverick firms may be able to acquire additional capacity quickly, thus enhancing their ability and incentive to lower prices. Firms with an inefficient mix of generating plants for their markets (e. g., more low cost coal fired plants and fewer flexible natural gas fired plants in a market with highly volatile time of day demand peaks) may be able to alleviate this inefficiency by adjusting their capacity to the demand.

The potential for consumer savings and increased choice is enormous, but it is certainly not guaranteed. Vigilant antitrust enforcement is an essential component of a market economy, especially in the formative years after the regulatory grasp is loosened. In particular, strong merger enforcement is necessary to ensure that the inevitable restructuring does not result in the accumulation and abuse of private market power. The Commission stands ready to meet its enforcement responsibilities to protect the consumer gains that should follow the introduction of market forces to the electric power industry.

Mr. BARTON. Thank you Mr. Thompson.

We would now like to hear from the Honorable Isaac Hunt, who is a Commissioner with the SEC. Mr. Hunt, your statement is in the record in its entirety. We would ask you to attempt to summarize it in 7 minutes.

STATEMENT OF HON. ISAAC C. HUNT, JR.

Mr. HUNT. Yes, sir. Thank you. Chairman Barton——

Mr. BARTON. And speak—you know, those microphones really are very directional.

Mr. HUNT. Sorry.

Mr. BARTON. Thank you.

Mr. HUNT. I am pleased to have this opportunity to testify before you this morning on behalf of the SEC regarding the Public Utility Holding Company Act of 1935. The Commission continues to support efforts to repeal the 1935 act and replace it with legislation that preserves certain important consumer protections.

In the first quarter of this century, the electric and gas utility industry had developed serious problems through the misuse of the holding company structure. The 1935 act was passed by Congress to address these problems. Reorganization and simplification of existing public utility holding companies in order to eliminate those abuses was a major part of the SEC's work in the years following passage of the 1935 act.

By the early 1980's, the SEC concluded that the 1935 act had accomplished its basic purpose and that its remaining provisions to a large extent either duplicated other State or Federal regulations or otherwise were no longer necessary to prevent the recurrence of the abuses that lead to its enactment.

The SEC concluded that many aspects of the 1935 act regulation had become redundant. State regulation had expanded and strengthened since 1935, and the SEC had enhanced its regulation of all issuers of securities, including public utility holding companies. In addition, institutional investors such as pension funds and insurance companies had become more sophisticated and demanded more detailed information from all issuers of securities than was previously available.

Also changes in the accounting profession and the investment banking industry had provided investors and consumers with a range of protections unforeseen in 1935; therefore, the SEC unanimously recommended that Congress repeal the statute.

Because the potential for abuse through the use of multistate holding company structures and related concerns about consumer protection continued to exist and because of the lack of consensus for change, repeal legislation was not enacted in the early 1980's. Since that time, however, the SEC has continued its effort to administer the 1935 act flexibly to accommodate developments in the

industry while adhering to the basic purpose of the statute. In addition, Congress has created a number of statutory exceptions to the regulatory framework of the 1935 act.

In the summer of 1994, in light of regulatory and other changes taking place in the utility industry, the SEC staff, at the direction of Chairman Arthur Levitt, undertook a study of regulation of public utility companies that culminated in a June 1995 report. Based on the report, the SEC has recommended that Congress consider three legislative options for eliminating unnecessary regulatory burdens.

The preferred option is repeal of the 1935 act accompanied by the creation of additional authority at the State and Federal level to permit the continued protection of consumers.

The Federal Energy Regulatory Commission should have the authority to exercise jurisdiction over transactions among holding company affiliates. The FERC and State utility commissions should be able to review these transactions by having access to books and records. This course of action will achieve the economic benefits of unconditional repeal and also protect consumers.

The SEC, of course, is aware that the proposals of comprehensive reform of energy legislation are under consideration by Congress. Representative Stearns and Burr of this committee introduced two of these proposals, H.R. 1587 and H.R. 662. Repeal of the 1935 act could also be accomplished as a part of this overall reform. The SEC respectively defers to the judgment of Congress as to whether the public interest is better served by separate repeal of the 1935 act or repeal as part of a larger legislative initiative.

The continuing efforts to restructure the utility industry raise major competitive issues relating to the market power of utilities. The 1935 act was intended to address, among other things, the concentration of control of ownership of the public utility industry.

These issues were considered by the SEC staff report. The act requires the SEC to disapprove the utility acquisition if it will tend toward concentrated control of public utility companies in a manner detrimental to the public interest or to the interest of investors or consumers.

Traditionally, the SEC's analysis of utility acquisitions includes consideration of Federal antitrust policies. However, the SEC is not the only agency that reviews the potential anticompetitive effects of utility acquisitions. In many instances, proposed utility acquisitions are subject to FERC and State approval.

Like the SEC, the FERC must consider antitrust implications of matters before it. The potential anticompetitive effects are also reviewed by the Department of Justice and the Federal Trade Commission. In recent years, the SEC has looked to all of these regulators for their expertise in certain operational issues, including the competition issues. In particular, the SEC has looked to these regulators in matters where the combined entity resulting from a merger would have control of key transmission facilities and of surplus power.

Although the SEC does independently assess the transaction under the standards of the 1935 act, we have generally relied upon and "watchfully deferred" to the FERC's greater expertise regarding issues related to utility competition; therefore, repeal of the

1935 act is unlikely to affect how market power issues are reviewed at the Federal level.

While the 1935 act provides an additional layer of regulatory approval for certain utility mergers, the Commission's reliance, where appropriate, on other regulators for the key market power determination, makes its review of market power issues largely redundant.

I would be pleased to answer your questions, Mr. Chairman. Thank you.

[The prepared statement of Isaac C. Hunt, Jr. follows:]

PREPARED STATEMENT OF ISAAC C. HUNT, JR., COMMISSIONER, SECURITIES AND EXCHANGE COMMISSION

Chairman Barton, Ranking Member Hall, and Members of the Subcommittee: I am pleased to have this opportunity to testify before you on behalf of the Securities and Exchange Commission ("SEC"). The SEC continues to support repeal of the Public Utility Holding Company Act of 1935 ("1935 Act"). Repeal should be done in a manner that eliminates duplicative regulation while also preserving important protections for customers of utility companies in multistate holding company systems.

I. INTRODUCTION

The electric and gas utility industry had developed serious problems in the first quarter of the century through the misuse of the holding company structure.[1] The 1935 Act was enacted to address these problems. Reorganization and simplification of existing public utility holding companies in order to eliminate those abuses was a major part of the SEC's work in the years following passage of the 1935 Act.

In the early 1980's, the SEC unanimously recommended that Congress repeal the statute.[2] The SEC concluded that the 1935 Act had accomplished its basic purpose and that its remaining provisions, to a large extent, either duplicated other state or federal regulation or otherwise were no longer necessary to prevent recurrence of the abuses that led to its enactment. Many aspects of 1935 Act regulation had become redundant: state regulation had expanded and strengthened since 1935, and the SEC had enhanced its regulation of all issuers of securities, including public utility holding companies. In addition, institutional investors such as pension funds and insurance companies had become more sophisticated and demanded more detailed information from all issuers of securities than was previously available. Changes in the accounting profession and the investment banking industry also had provided investors and consumers with a range of protections unforeseen in 1935.

Because the potential for abuse through the use of multistate holding company structures, and related concerns about consumer protection, continued to exist, and because of a lack of consensus for change, repeal legislation was not enacted in the early 1980s. Since that time, however, the SEC has continued its efforts to administer the 1935 Act flexibly to accommodate developments in the industry while adhering to the basic purpose of the statute. In addition, Congress has created a number of statutory exceptions to the regulatory framework of the 1935 Act.[3]

II. THE SEC'S STUDY

In response to continuing changes in the utility industry in recent years, and the accelerated pace of those changes, Chairman Arthur Levitt directed the SEC's Division of Investment Management in 1994 to undertake a study, under the guidance of then-Commissioner Richard Y. Roberts, to examine the continued vitality of the 1935 Act. The study was undertaken as a result of the developments noted above

[1] These abuses included inadequate disclosure of the financial position and earning power of holding companies, unsound accounting practices, excessive debt issuances and abusive affiliate transactions. *See* 1935 Act section 1(b), 15 U.S.C. § 79a(b).

[2] *See Public Utility Holding Company Act Amendments: Hearings on S. 1869, S. 1870 and S. 1871 Before the Subcomm. on Securities of the Senate Comm. on Banking, Housing, and Urban Affairs,* 97th Cong., 2d Sess. 359-421 (1982) (statement of SEC).

[3] Most recently, Congress enacted the Telecommunications Act of 1996. Pub. L. 104-104, 110 Stat. 56 (1996). The Telecommunications Act permits registered holding companies, without prior SEC approval under the 1935 Act, to acquire and retain interests in companies engaged in a broad range of telecommunications activities.

and the SEC's continuing need to respond flexibly in the administration of the 1935 Act. Its purpose was to identify unnecessary and overlapping regulation, and at the same time to identify those features of the statute that remain appropriate in the regulation of the contemporary electric and gas industries.[4]

The SEC staff worked with representatives of the utility industry, consumer groups, trade associations, investment banks, rating agencies, economists, state, local and federal regulators, and other interested parties during the course of the study. In June 1995, a report of the findings made during the study ("Report") was issued. Based on these findings, the SEC has recommended, and continues to recommend, that Congress repeal the 1935 Act. At the same time, however, the SEC also recommends enactment of legislation to provide necessary authority to the Federal Energy Regulatory Commission ("FERC") and the state public utility commissions relating to affiliate transactions, audits and access to books and records, for the continued protection of utility consumers.

There are several reasons why the SEC supports conditional repeal of the 1935 Act. As the Report indicates, portions of the 1935 Act, such as those governing issuance of securities, acquisition of other utilities, and acquisition of nonutility businesses by registered holding companies, largely duplicate other existing regulation and controls imposed by the market. Nevertheless, there is a continuing need to ensure the protection of consumers.

Electric and gas utilities have historically functioned as rate-regulated monopolies, and there is a continuing risk that a monopoly, if left unguarded, could charge higher rates and use the additional funds to subsidize affiliated businesses in order to boost its competitive position in other markets ("cross-subsidization"). So long as electric and gas companies continue to function as monopolies, the need to protect against the cross-subsidization of nonutility businesses will remain. The best means of guarding against cross-subsidization is likely to be audits of books and records and federal oversight of affiliate transactions.

Utility rates are regulated by state authorities, and some regulators subject these rates to stricter scrutiny than others. A survey of state regulation, undertaken in conjunction with the study, revealed that the states may not have adequate authority to perform audit and review functions with respect to multistate holding companies. The provisions of the 1935 Act provide significant assistance to these states in their effort to protect utility consumers. Earlier efforts to repeal the 1935 Act may have failed because they did not address this potential "regulatory gap" in consumer protection.

III. PROPOSALS TO REPEAL THE 1935 ACT

Repeal of the 1935 Act may be accomplished either separately or as part of a more comprehensive package of energy reform legislation. Four bills have been introduced in both Houses of Congress that provide for the repeal of the 1935 Act, either as part of comprehensive energy restructuring or on a stand-alone basis. H.R. 1587, introduced by Congressman Stearns on April 27, 1999, and H.R. 667, introduced by Congressman Burr on February 10, 1999 (collectively, the "House Bills"), would repeal the 1935 Act as part of broader energy-related legislation.[5] For example, the House Bills would provide the FERC with the right to examine books and records of registered holding companies and their affiliates that are relevant to costs incurred by associated utility companies, in order to protect ratepayers. The House Bills would also provide an interested state commission with access to such books and records (subject to protection for confidential information), if they are relevant to costs incurred by utility companies subject to the state commission's jurisdiction and are needed for the effective discharge of the state commission's responsibilities

[4] The study focused primarily on registered holding company systems, of which there are currently nineteen. The 1935 Act was enacted to address problems arising from multistate operations, and reflects a general presumption that intrastate holding companies and certain other types of holding companies which the 1935 Act exempts and which now number more than one hundred, are adequately regulated by local authorities. Despite their small number, registered holding companies account for a significant portion of the energy utility resources in this country. As of December 31, 1998, the nineteen registered holding companies owned more than $170 billion of electric utility assets, approximately 25 percent of all assets owned by investor-owned electric utilities. Electric utilities owned by registered holding companies served 26.4 million customers, or approximately 22% of all electric customers in the United States.

[5] S.516, which was introduced in the Senate on March 3, 1999, would also repeal the 1935 Act as part of broader energy-related legislation. S.313, which was introduced in the Senate on January 27, 1999, would repeal the 1935 Act on a stand-alone basis. The 1935 Act repeal provisions in the Senate and House bills are, in substance, the same, except that H.R. 1587, among other things, would exempt from its provisions holding companies currently exempt from registration under the 1935 Act. These differences may require further analysis.

in connection with a pending proceeding. Finally, the House Bills would provide a transition period in which states, utilities and other parties affected by the change in the regulatory regime could prepare for the new regime. The House Bills accomplish many of the goals of the conditional repeal contemplated by the SEC.

As the SEC has stated in testimony on bills introduced in the last Congress to repeal the 1935 Act, the House Bills do not give the FERC the authority it needs to oversee transactions among affiliates in holding company systems and, in this respect, do not reflect the SEC's preferred legislative option.[6] Provisions granting access to books and records provide the FERC and the state commissions with the authority they need to identify affiliate transactions and their terms and effects on utility costs and rates. However, the potential for cross-subsidization and consequent detriment to consumers remain, and the SEC believes that it is important for the FERC to have the flexibility to engage in more extensive regulation, if necessary. As a result, the SEC continues to support a broader grant of authority to the FERC to oversee these transactions, including, if the FERC deems it appropriate, prior review and approval of affiliate transactions.

The SEC notes that the Report recommended a transition period of at least one year in duration. The National Association of Regulatory Utility Commissioners has since suggested that a longer period is necessary, in view of the fact that many state legislatures only meet biennially. The SEC would have no objection to a longer transition period.

IV. OTHER RECOMMENDATIONS

Two other legislative options were recommended by the SEC staff Report: complete repeal of the 1935 Act and a grant of broader exemptive authority under the 1935 Act to the SEC.

The SEC believes that complete repeal, the second legislative option, is premature, because the monopoly power of the industry has not yet been completely erased and because of the inconsistent pattern of state regulation described above. Some commentators contend, however, that the states have the ability, if they choose to exercise it, to create regulatory structures that will protect utility consumers in holding company systems to the same extent as they are protected by the 1935 Act. Complete repeal, like conditional repeal, would require a reasonable transition period. As noted above, some states may need a period of at least two years to enact new legislation or to add resources to meet the additional regulatory burden that would accompany unconditional repeal of the 1935 Act.

The third option is to provide the SEC with more authority to exempt holding company systems from the requirements of the 1935 Act.[7] An expansion of exemptive authority would not, of course, achieve the economic benefits of conditional or unconditional repeal of the 1935 Act, or simplify the federal regulatory structure.[8] Further, this option would continue to enmesh the SEC in difficult issues of energy policy.

The SEC understands that many believe that repeal of the 1935 Act should be accomplished as part of a more comprehensive package of energy reform legislation. Repeal of the 1935 Act could also be considered as part of this overall reform. The SEC respectfully defers to the judgment of Congress as to whether the public inter-

---

[6] *See The Public Utility Holding Company Act of 1997: Hearings on S. 621 Before the Senate Comm. on Banking, Housing, and Urban Affairs,* 105th Cong., 1st Sess. (1997) (testimony of Isaac C. Hunt, Jr. Commissioner, SEC); and *Regarding Repeal of the Public Utility Holding Company Act of 1935: Hearings on S. 621 Before the Senate Comm. on Energy and Natural Resources,* 105th Cong., 1st Sess. (1997) (testimony of Barry Barbash, Director, Div. of Investment Management, SEC).

[7] The SEC's current exemptive authority is considerably narrower than the exemptive authority under other federal securities laws. A model of broader exemptive authority is contained in section 6(c) of the Investment Company Act of 1940, 15 U.S.C. § 80a-6(c), which grants the SEC the authority by rule or order to exempt any person or transaction from any provision or rule if the exemption is necessary or appropriate in the public interest and consistent with the protection of investors. *See also* section 206A of the Investment Advisers Act of 1940, 15 U.S.C. § 80b-6a; and section 36 of the Securities and Exchange Act of 1934, as recently amended by the National Securities Markets Improvement Act of 1996, 15 U.S.C. § 78mm (same).

[8] In the past, the SEC has testified before Congress with respect to concerns that arose after the decision by the U.S. Court of Appeals for the District of Columbia Circuit in *Ohio Power v. FERC,* 954 F.2d 779 (D.C. Cir.), *cert. denied,* 113 S.Ct. 483 (1992). *See Registered Holding Company Transactions: Hearing on the 1992 Ohio Power Decision Before the Subcomm. on Energy and Power of the House of Representatives Comm. on Energy and Commerce,* 103d Cong., 2d Sess. 35-48 (1994) (testimony of Richard Y. Roberts, Commissioner, SEC). The legislative repeal options discussed above would eliminate the problem of conflicting SEC and FERC decisions that were the subject of that decision.

est is better served by separate repeal of the 1935 Act or repeal as part of a larger legislative initiative.

V. MARKET POWER ISSUES

The continuing efforts to restructure the utility industry raise major competitive issues related to the "market power" of utilities. The 1935 Act was intended to address, among other things, the concentration of control of ownership of the public-utility industry. These issues were considered by the SEC's staff in the Report.

Section 10(b)(1) of the Act requires the SEC to disapprove a utility acquisition if it will tend toward concentrated control of public-utility companies in a manner detrimental to the public interest or the interest of investors or consumers.[9] Traditionally, the SEC's analysis of utility acquisitions under section 10(b)(1) includes consideration of federal antitrust policies.[10] More specifically, the anticompetitive ramifications of an acquisition have traditionally been considered in light of the fact that public utilities are regulated monopolies subject to the ratemaking authority of federal and state administrative bodies.[11]

However, the SEC is not the only agency that reviews the potential anticompetitive effects of utility acquisitions. In many instances, proposed utility acquisitions are subject to FERC and state approval. Like the SEC, the FERC must consider antitrust implications of matters before it.[12] In addition, the potential anticompetitive effects are also reviewed by the Department of Justice or the Federal Trade Commission.

In recent years, the SEC has looked to all these regulators for their expertise in certain operational issues, including competitive issues. In particular, in matters where the combined entity resulting from a merger would have control of key transmission facilities and of surplus power. Although the SEC does independently assess the transaction under the standard of the 1935 Act, we have generally relied upon the FERC's greater expertise regarding issues related to utility competition. The Court of Appeals for the District of Columbia Circuit has stated that "when the SEC and another regulatory agency both have jurisdiction over a particular transaction, the SEC may 'watchfully defer' to the proceedings held before—and the result reached by—that other agency."[13]

Therefore, repeal of the 1935 Act is unlikely to effect how market power issues are reviewed at the federal level. While the 1935 Act provides an additional layer of regulatory approval for certain utility mergers, the Commission's reliance, where appropriate, on other regulators for the key market power determination, make its review of market power issues largely redundant.

VI. ADMINISTRATIVE ACTION

The SEC continues to support a comprehensive approach to reform of the 1935 Act. The SEC has implemented many of the numerous administrative initiatives that were recommended in the Report to streamline regulation.[14] Despite the effects

---

[9] The SEC must also consider whether the purchase price is reasonable; whether the purchase will unduly complicate the capitalization of the resulting system; and whether the transaction will serve the public interest by tending toward the economic and efficient development of an integrated public-utility system.

[10] *Municipal Electric Association v. SEC,* 413 F.2d 1052, 1056-07 (D.C. Cir. 1969) (section 10(b)(1) analysis "must take significant content" from "the federal anti-trust policies"), cited in *City of Holyoke v. SEC,* 972 F.2d 358, 363; *Environmental Action, Inc. v. SEC,* 895 F.2d 1255, 1260 (9th Cir. 1990) ("Federal antitrust policies are to inform the SEC's interpretation of section 10(b)(1)").

[11] *Entergy Corp.,* Holding Co. Act Release No. 25952 (Dec. 17, 1993), citing *Northeast Utilities,* Holding Co. Act Release No. 25221, *request for reconsideration denied,* Holding Co. Act Release No. 26037 (Apr. 28, 1994), *remanded sub nom. Cajun Electric Power Cooperative, Inc. v. SEC,* 1994 WL 704047 (D.C. Cir. Nov. 16, 1994).

[12] *See Gulf States Utilities Co., v. FPC,* 411 U.S. 747 (1973).

[13] *Madison Gas and Electric Company v. SEC,* 168 F.3d 1337, (D.C. Cir. 1999); *City of Holyoke v. SEC, supra* note 10, citing *Wisconsin's Environmental Decade, Inc. v. SEC,* 882 F.2d 523 (D.C. Cir. 1989).

[14] The Report recommended rule amendments to broaden exemptions for routine financings by subsidiaries of registered holding companies (*see* Holding Co. Act Release No. 26312 (June 20, 1995), 60 FR 33640 (June 28, 1995)) and to provide a new exemption for the acquisition of interests in companies that engage in energy-related and gas-related activities (*see* Holding Co. Act Release No. 26313 (June 20, 1995), 60 FR 33642 (June 28, 1995) (proposing rule 58) and No. 26667 (Feb. 14, 1997), 62 FR 7900 (Feb. 20, 1997) (adopting rule 58)). In addition, the Report recommended changes in administration of the Act that would permit a "shelf" approach for approval of financing transactions, relax constraints on utility acquisitions and streamline the ap-

Continued

of these initiatives, changes in the utility industry are resulting in increased activity under the 1935 Act, especially in the area of mergers and acquisitions, diversification and affiliate transactions. Hence, continuation of the 1935 Act in its present form will require additional resources. Moreover, during 1998, mergers resulted in the formation of three new registered holding companies. The options of conditional repeal or an expansion of the SEC's exemptive authority also raise the issue of resources. At present, sixteen full-time professional SEC employees are employed in the administration of the 1935 Act. Their work includes (1) analysis and disposition of various transactions for which the 1935 Act requires prior SEC authorization, (2) status issues under the 1935 Act, (3) audits of holding company systems and related companies, and (4) drafting and implementation of rulemaking proposals to reflect changes in the utility industry and in financial regulation. Repeal of the 1935 Act would not achieve significant cost savings for the federal government, particularly if some of these responsibilities were carried out by the FERC. Expanded exemptive authority, on the other hand, could require greater resources, in view of the need to evaluate and implement broad requests for exemptive relief.

The SEC takes seriously its duties to administer faithfully the letter and spirit of the 1935 Act, and is committed to promoting the fairness, liquidity, and efficiency of the United States securities markets. By supporting conditional repeal of the 1935 Act, the SEC hopes to reduce unnecessary regulatory burdens on America's energy industry while providing adequate protections for energy consumers.

Mr. BARTON. Thank you, Commissioner Hunt.

We would now like to welcome Mr. Douglas Smith, who is the General Counsel for the Federal Energy Regulatory Commission. Again, your statement is in the record in its entirety, and we would ask you to try and summarize in 7 minutes.

STATEMENT OF DOUGLAS W. SMITH

Mr. SMITH. Thank you. Good morning, Mr. Chairman and members of the subcommittee. My name is Douglas Smith, and I am the General Counsel for the Federal Energy Regulatory Commission. I am here today as a Commission staff witness and do not speak for the Commission as a whole or for individual members of the Commission.

I appreciate the opportunity to discuss with you today the important matter of competition policy in the electric industry, and particularly, the issues of market power, mergers, and the Public Utility Holding Company Act.

The traditional regulatory approach in this industry was to accept that electric utilities were natural monopolies and to address market power and protect ratepayer interests primarily by relying on cost-of-service rate regulation. In recent years, however, we have recognized that generation is not a natural monopoly. In the Energy Policy Act of 1992, Congress strongly endorsed competition in wholesale power markets with amendments to the Federal Power Act and the Holding Company Act.

The Commission shares this overarching goal of promoting competition in wholesale electricity markets, having concluded that vigorous competition, as opposed to traditional forms of price regulation, can best protect the interests of ratepayers. The Commission has pursued procompetitive goals by ordering open access to transmission facilities in Order Number 888 and in its policies on mergers and market-based wholesale rates.

Competition in bulk power markets can be frustrated, however, by the exercise of market power. Market power may take many

---

proval process for such transactions. The Report also recommended an increased focus upon auditing regulated companies and assisting state and local regulators in obtaining access to books, records and accounts.

forms including, most notably, control of access to transmission facilities necessary to deliver electricity, concentration in generation markets, or control of inputs to generation such as fuel.

Market power considerations related to ownership and control of transmission facilities are at the core of Order Number 888's open access transmission policies. Fair and open access to reliable transmission service is an essential predicate to competition in bulk power markets. Effective regulation of the relatively small transmission sector enables competition, with its consequent ratepayer benefits, in a much larger generation sector.

The Commission is seeking further improvements in the transmission arena to support fully competitive wholesale power markets. Of particular importance, it is exploring how it might promote the formation of regional transmission organizations that have operational control over a region's transmission grid and are independent of the financial interests of power market participants. Such regional transmission organizations can enhance competition by reducing rate pancaking, eliminating opportunities for bias in transmission operations and allowing for more efficient and reliable operation and planning of the transmission grid.

The Commission also considers market power issues in reviewing applications for mergers or other jurisdictional transactions. In assessing whether a proposed merger is consistent with the public interest, the Commission considers factors including the effect of the merger on competition and the effect of the merger on rates. If a merger would create or enhance market power, the Commission has authority to condition approval of a merger so as to mitigate any anticompetitive effects.

As Congress considers legislative reforms relating to the electric industry, it should consider whether regulators will have the range of tools necessary to address market power problems that may threaten competition. With respect to transmission, for instance, FERC Chairman Jim Hoecker recently testified before this subcommittee in favor of extending open access requirements to all transmitting utilities in the lower 48 States, clarifying FERC authority to provide for independent regional management of the transmission grid, and establishing a fair and effective program of mandatory reliability standards.

Let me turn briefly to the Holding Company Act. As a general matter, as you have heard, the Securities and Exchange Commission regulates registered utility holding companies, while the FERC regulates the operating electric utility and gas pipeline subsidiaries of the registered holding companies. The DC Circuit's Ohio Power decision limiting FERC review of the prudence of interaffiliate contracts left a gap in FERC's rate regulation of electric utilities. The result is that utility customers served by registered holding companies have less rate protection than customers served by nonregistered systems.

Any legislation to reform or repeal the Holding Company Act should ensure that FERC and the States have adequate authority to examine the books and records of all companies in a holding company system that are relevant to reviewing the costs incurred by an affiliated electric utility.

As we continue to move toward bulk power markets in which price is set predominantly by the market rather than by regulators, we must ensure effective regulation of essential transmission facilities and the mitigation of market power. These issues require careful attention from Congress, FERC, the antitrust agencies and our State counterparts. The Federal statutory regime should protect customers by combining procompetitive policies with the regulatory tools necessary to constrain market power effectively.

Thank you. I would be glad to take any questions.

[The prepared statement of Douglas W. Smith follows:]

PREPARED STATEMENT OF DOUGLAS W. SMITH, GENERAL COUNSEL, FEDERAL ENERGY REGULATORY COMMISSION

Mr. Chairman and Members of the Subcommittee: Good morning. My name is Douglas Smith, and I am the General Counsel for the Federal Energy Regulatory Commission. I am here today as a Commission staff witness, and do not speak for the Commission itself or for individual members of the Commission. Thank you for the opportunity to appear before you today to discuss competition policy in the electric industry, and particularly the issues of market power, mergers and the Public Utility Holding Company Act of 1935 (PUHCA).

One of the Commission's overarching goals is to promote competition in wholesale power markets, having concluded that effective competition, as opposed to traditional forms of price regulation, can best protect the interests of ratepayers. Market power, however, can be exercised to the detriment of effective competition and consumers. Thus, the Commission regulates transmission service, mergers, and wholesale power rates so as to prevent the exercise of market power in bulk power markets. As Congress considers electricity legislation, it will be important to ensure that appropriate and effective tools are available to address market power issues if competition is to continue to grow in the bulk power markets.

I. MARKET POWER

In enacting Part II of the Federal Power Act (FPA) in 1935, one of the primary Congressional goals was to protect electric ratepayers from abuses of market power. In furtherance of this goal, Congress directed the Commission to oversee sales for resale and transmission service provided by public utilities in interstate commerce. Under sections 205 and 206, the Commission must ensure that the rates, terms and conditions of these services are just, reasonable, and not unduly discriminatory or preferential. Under section 203, the Commission must review proposed mergers, acquisitions and dispositions of jurisdictional facilities by public utilities, if the value of the facilities exceeds $50,000, and must approve such transactions if they are consistent with the public interest. The Commission's regulation under these sections applies only to "public utilities," which mainly include investor-owned utilities and exclude the federal power marketing administrations, municipal utilities, and most rural electric cooperatives.

The traditional regulatory approach was to accept that electric utilities were natural monopolies, and to address market power and protect ratepayer interests primarily by relying on cost-of-service rate regulation.

In the 1980s and early 1990s, industry developments indicated that the interests of ratepayers could be better protected by competition in generation markets than by cost-based regulation for wholesale sales. The benefits of competition in place of traditional regulation were increasingly evident in other industries, such as trucking, railroads, telecommunications and natural gas. Also, prompted by a range of economic, legislative and technological factors, some competition among generators already had begun developing in the electric industry. One key factor was the Public Utility Regulatory Policies Act of 1978 (PURPA), which opened the door for non-utility generators.

In the Energy Policy Act of 1992, Congress strongly endorsed competition in wholesale power markets with amendments to the FPA and PUHCA. The Commission has pursued this pro-competition focus by ordering open access to transmission facilities in Order No. 888, and in its merger and wholesale rate policies. The Commission's primary focus has shifted from cost-based ratemaking to creating the conditions for robust competition. This transition has required the Commission to pay increasing attention to issues of market structure, market power and market monitoring.

Competition in bulk power markets can be diminished or blocked by the exercise of market power. Market power may take many forms, including control of access to transmission facilities necessary to deliver electricity, concentration in generation markets, or control of inputs to generation such as fuel.

Market power problems can result in higher prices to customers. For example, absent regulation, a vertically-integrated utility could prevent its competitors in wholesale power markets from using its transmission facilities to deliver power to buyers. Buyers then would have fewer competitive options and, as a result, may have to pay higher prices. Similarly, a utility with a large enough share of the generating capacity in a market can raise prices by withholding supply from the market. A utility that controls enough of an input to power production (such as pipeline capacity for delivering natural gas to power plants) can achieve the same result.

Market power can be created or enhanced by mergers. Mergers can eliminate a competitor from the market and concentrate control of generating assets. Mergers can also enhance vertical market power, by giving the merged company a new or increased ability and incentive to restrict inputs to power production.

Discussed below are five key market power issues: transmission market power; market-based rates for sales of power; mergers of public utility facilities; State regulation of market power; and possible legislative reforms.

A. Transmission Market Power

Market power considerations related to ownership and control of transmission facilities are at the core of the Commission's open access transmission policies. Fair and open access to reliable transmission service is an essential predicate to competition in bulk power markets. Effective regulation of the relatively small transmission sector (which accounts for 10% of overall utility costs) enables competition, with its consequent ratepayer benefits, in the much larger generation sector (which accounts for 60% of total utility costs).

In the Energy Policy Act of 1992, Congress broadened the Commission's authority under section 211 of the FPA to require transmission service on a case-by-case basis. This legislation, as implemented by the Commission, helped to expand the trading opportunities of wholesale sellers and buyers. However, the Commission concluded that competition in wholesale markets still was being inhibited by the lack of non-discriminatory access to transmission facilities. Generation sellers owning transmission facilities were stifling competition by discriminating against competing sellers that sought to use their transmission facilities, either by denying or delaying transmission service or by imposing discriminatory rates, terms and conditions for service. The Commission recognized that it needed to act generically to provide for open access transmission if it was to meet the Congressional goal of developing competitive wholesale markets.

Consequently, the Commission in 1996, through a major rulemaking called Order No. 888, ordered open (non-discriminatory) access to the transmission facilities of public utilities. Order No. 888 allows transmission customers to obtain service that they could not previously obtain, and to secure those services more quickly and with more certainty about rates, terms and conditions. This open access obligation prohibits public utilities from discriminating against competitors' transactions in favor of their own wholesale sales of power.

In Order No. 888, the Commission also encouraged, but did not require, the formation of independent system operators (ISOs) to promote broader, regional power markets and provide greater assurance of non-discrimination. Since then, six ISOs have been established (in California, the mid-Atlantic states, New England, New York, the Midwest and Texas), and four of these are currently operational.

The Commission is seeking further improvements in transmission access and grid operation to support fully competitive wholesale power markets. Of particular importance, it is exploring how it might promote the formation of regional transmission organizations (RTOs) such as ISOs and independent companies that own and operate transmission facilities (transcos). An RTO that covers an appropriately configured region, has adequate operational control over the transmission grid, and is independent of the financial interests of power market participants, can address obstacles to competition by reducing rate pancaking, eliminating opportunities for bias in transmission operations, and allowing for more efficient and reliable operation and planning of the transmission grid.

As FERC's Chairman Hoecker testified before this Subcommittee two weeks ago, legislation on transmission issues is needed to ensure the full development of wholesale competition and maintain our high standard of reliability. Specifically, Chairman Hoecker recommended legislation that would: bring all transmission facilities in the lower 48 states within the Commission's open access transmission rules; clarify the Commission's authority to promote regional management of the transmission

grid through regional transmission organizations; and, establish a fair and effective program to protect bulk power reliability. Addressing these transmission-related issues should be a priority in any legislative reform agenda.

B. Market-Based Rate Review

To promote competition, the Commission allows market-based rates for wholesale sales of electricity when an applicant shows that it and its affiliates lack or have mitigated market power. In evaluating horizontal market power for these purposes, the Commission distinguishes between new generating facilities and existing facilities. For sales from new generating facilities, the Commission applies a rebuttable presumption that the applicant lacks generation market power, but intervenors may present specific evidence to the contrary. For sales from existing generating facilities, the Commission uses a case-specific analysis of whether the applicant and its affiliates control a significant share of the total generation capacity that can be accessed by the utilities directly interconnected to the applicant or its affiliates. The Commission's general benchmark for concern is a market share of 20 percent or more.

In evaluating vertical market power for these purposes, the Commission considers the extent of the applicant's control of any inputs to power production. Most applicants for market-based rates lack significant control of such inputs and thus present no vertical market power concerns. The Commission analyzes the control of transmission facilities separately from other sources of vertical market power and, for purposes of market-based rates, currently accepts compliance with Order No. 888's open access requirements as adequate mitigation of transmission market power.

If an applicant or its affiliates appear to have market power that has not been mitigated, the Commission generally will deny market-based rates. Alternatively, the Commission may preclude the use of an applicant's market-based rates in specific geographic areas in which the applicant fails to demonstrate a lack of market power, or may impose other appropriate conditions on the use of market-based rates.

Should the Commission identify market power problems after market-based rates have been authorized, it can revoke market-based rates and return to cost-of-service regulation. This remedy does not eliminate the underlying market power but, instead, relies on price regulation to mitigate the potential for its exercise.

C. Merger Review

The Commission considers market power issues in reviewing applications for mergers or other jurisdictional acquisitions or dispositions of assets. In a merger policy statement issued in December 1996, the Commission stated that, in assessing whether a proposed merger was in the public interest, it would consider the effects of the merger on competition, on rates and on regulation. The Commission sought to streamline its merger review process and to reduce filing burdens on merger applicants by adopting the Department of Justice/Federal Trade Commission merger guidelines as the framework for analyzing a merger's horizontal effects on competition. These guidelines set out five steps for analyzing mergers, based on: (1) whether the merger would significantly increase market concentration; (2) whether the merger would result in adverse competitive effects; (3) whether entry would mitigate the merger's adverse effects; (4) whether the merger would result in efficiency gains not achievable by other means; and (5) whether, absent the merger, either party would likely fail.

The Commission's merger policy statement also described a conservative analytical screen for quickly identifying mergers unlikely to raise horizontal market power concerns. The screen analysis focuses on the first step identified in the DOJ/FTC guidelines, *i.e.*, whether the merger would significantly increase concentration. The screen analysis relies on a "delivered price" test to define relevant markets and the suppliers that can deliver power to affected customers at competitive prices. If the screen analysis shows that the proposed merger will not increase market concentration by more than 100 HHI points in a moderately concentrated post-merger market (defined as 1,000 to 1,800 HHI points) or 50 HHI points in a highly concentrated post-merger market (defined as exceeding 1,800 HHI points), the Commission will not set the matter for hearing to further consider competitive effects.

The Commission's analysis of vertical market power concerns is similar. A vertical merger is unlikely to harm competition unless the merged company has the incentive and the ability to affect prices or quantities in the upstream (input) market and the downstream (electricity) market. For example, a company must be able, and have an incentive, to restrict service or raise prices for an input such as natural gas pipeline capacity and, as a result, restrict service or raise prices in supplying wholesale power.

If a merger will create market power or enhance the applicants' market power significantly, mitigation of these effects is required in order to ensure that the merger is consistent with the public interest. Section 203 of the FPA gives the Commission authority to approve a merger conditionally, *i.e.*, subject to "such terms and conditions as it finds necessary or appropriate to secure the maintenance of adequate service and the coordination in the public interest of facilities subject to the jurisdiction of the Commission." In order to mitigate merger-enhanced market power, the Commission has conditioned merger approvals on measures such as providing others with access to the merged company's constrained transmission facilities, and restricting a fuel-supplying affiliate from giving information to its power-selling affiliates about fuel deliveries to competing power sellers.

The Commission's jurisdiction over mergers and acquisitions is limited in certain ways. First, the Commission has no direct jurisdiction over transfers of generation facilities. It can review transactions involving a public utility only when they involve other facilities that are jurisdictional (such as transmission facilities or contracts for wholesale sales). Thus, although concentration of generation assets may directly affect competition in wholesale markets, transactions involving only generation assets may not be subject to FPA review.

Second, the Commission lacks direct jurisdiction over mergers of public utility holding companies. While the Commission has considered such mergers to involve jurisdictional indirect mergers of public utility subsidiaries of the holding companies, or changes in control over the jurisdictional facilities of the public utility subsidiaries, the FPA is not explicit on this point.

These jurisdictional gaps could be usefully addressed in the course of legislative reform.

D. State Issues

Chairman Barton's letter of invitation for this hearing asked that I address the states' ability to effectively address market power issues. The states are well aware of the potential harm caused by market power. To wit, the National Association of Regulatory Utility Commissioners (NARUC) has issued a resolution on market power in a restructured electric power industry which finds that market power abuses "can diminish the economic gains to consumers from a restructured electric power industry, in which long-term consumer interests require that neither incumbents nor new entrants gain or retain unfair market advantage." The resolution also concluded that "after-the-fact antitrust enforcement may not be sufficient to protect against market power abuses in the transition from monopoly to competitive markets."

As States address market power issues in the context of, for instance, merger reviews and retail competition initiatives, certain limits on their ability to protect against market power abuses may become significant. The extent of this concern is best explored with witnesses testifying on behalf of the States. However, I will briefly mention three issues. First, electricity markets are becoming larger, regional markets, and individual states may find themselves geographically limited in their ability to identify and remedy market power problems. Second, state regulators may lack the state law authority or resources needed to tackle new and challenging market power issues. Third, transmission and wholesale sales in interstate commerce may affect retail competition but are within exclusive Federal jurisdiction.

In such circumstances, the States may seek Federal assistance in addressing market power problems in regional electricity markets. The Commission, to the extent of its existing authority, can serve as a backstop for States in circumstances where a State lacks adequate authority and seeks FERC's assistance. For example, FERC has stated its willingness to assess a merger's effects on retail competition if asked by an affected state commission lacking adequate authority under state law. However, in this example, there may be insufficient authority—State or Federal—to address market power in retail markets.

E. Legislative Reforms on Market Power

As we seek to rely primarily on competition as opposed to traditional price regulation to protect the interests of ratepayers, regulators must have the range of tools necessary to address market power problems that may threaten competition. Reforms to the Federal statutory scheme are appropriate to permit regulators to keep up with the new market power challenges.

The Administration's newly-proposed bill addresses a number of market power issues. With respect to transmission, the bill would permit the Commission to extend its open access requirements to non-public utilities in the lower 48 States, would clarify the Commission's authority to promote regional management of the transmission grid through RTOs, and would establish a fair and effective program

of mandatory reliability standards. Chairman Hoecker testified recently in favor of such changes.

The Administration's bill also would close the gap in the Commission's jurisdiction over mergers involving only generation facilities, and would clarify that holding companies with electric utility subsidiaries cannot merge without Commission review. The bill would further allow FERC to address market power in retail markets, if asked by a state commission lacking adequate authority to address the problem, and would give the Commission explicit authority to address market power in wholesale markets by requiring a public utility to file and implement a mitigation plan. Each of these reforms also deserves careful consideration as you consider legislation to promote competitive electricity markets.

II. PUBLIC UTILITY HOLDING COMPANY ACT

As a general matter, the Securities and Exchange Commission (SEC) regulates registered utility holding companies while FERC regulates the operating electric utility and gas pipeline subsidiaries of the registered holding companies. The agencies often have responsibility to evaluate the same general matter, but from the perspective of different members of the holding company system and for different purposes. FERC focuses primarily on a transaction's effect on utility ratepayers. The SEC focuses primarily on a transaction's effect on corporate structure and investors.

Under section 32 of PUHCA (added by the Energy Policy Act of 1992), FERC must determine whether an applicant meets the definition of an exempt wholesale generator and thus is exempt from PUHCA. With minor exceptions, the SEC continues to make PUHCA exemption determinations under other provisions of PUHCA.

In the area of utility rates, the SEC must approve service, sales and construction contracts among members of a registered holding company system. FERC must approve wholesale rates reflecting the reasonable costs incurred by a public utility under such contracts.

This last example of overlapping jurisdiction has been a subject of concern. In 1992, the United States Court of Appeals for the District of Columbia Circuit held, in Ohio Power Company v. FERC, 954 F.2d 779 (D.C. Cir. 1992) (*Ohio Power*), that if a public utility subsidiary of a registered holding company enters into a service, sales or construction contract with an affiliate company, the costs incurred under that affiliate contract cannot be reviewed by FERC. The SEC has to approve the contract before it is entered into. However, FERC cannot examine the reasonableness or prudence of the costs incurred under that contract. FERC must allow those costs to be recovered in wholesale electric rates, even if the utility could have obtained comparable goods or services at a lower price from a non-affiliate.

The *Ohio Power* decision has left a significant gap in rate regulation of electric utilities. The result is that utility customers served by registered holding companies have less rate protection than customers served by non-registered systems. If the contract approval provisions of PUHCA are retained, this regulatory gap should be closed to restore FERC's ability to regulate the rates of utilities that are members of registered holding company systems.

Setting aside the *Ohio Power* issue, let me address PUHCA more broadly. PUHCA was not crafted with competitive electricity markets in mind. For example, acquisitions by registered holding companies generally must tend toward the development of an "integrated public-utility system." To meet this requirement, the holding company's system must be "physically interconnected or capable of physical interconnection" and "confined in its operations to a single area or region." This requirement tends to encourage geographic concentrations of generation ownership. Similarly, although the 1992 amendments providing for exempt wholesale generators removed regulatory obstacles to new entrants in the wholesale generation market, these new generators cannot compete, under the current exemption, for retail sales in markets where States have provided retail competition.

Any legislation to reform or repeal PUHCA, however, should ensure that the Commission and the States have adequate authority to examine the books and records of all companies in a holding company system that are relevant to costs incurred by an affiliated utility. This type of authority will provide a new, effective tool to protect against affiliate abuse and ensure that remaining captive consumers do not cross-subsidize entrepreneurial ventures.

III. CONCLUSION

Competition in electricity markets will not effectively protect ratepayers if some market participants can exercise market power. Thus, as we continue to move toward more competitive power markets and remove regulatory controls over sales of power, we must ensure effective regulation of essential transmission facilities and

the mitigation of market power. These issues require careful attention by Congress, FERC, the antitrust agencies and our State counterparts. The Federal statutory regime should protect consumers by combining pro-competitive policies with the regulatory tools necessary to constrain market power effectively.

Thank you again for the opportunity to offer my views here this morning. I would be pleased to answer any questions you may have.

Mr. BARTON. Thank you, Mr. Smith.

The Chair recognizes himself for the first 5 minutes of questions.

I didn't hear your verbal statements, however, I did scan your written testimony last evening, but I won't swear that I read them verbatim. I didn't see this definition of market power.

Can any of you gentlemen define for me the area that we would have under consideration when trying to determine if there is a market power violation and what the variables are that would be considered in trying to determine whether something should be done to lower market power?

That is the easy question.

Mr. MELAMED. That is the right one for me then.

Chairman Barton, I think the concept of market power that would be appropriate here is the same as the concept ordinarily used in antitrust enforcement, and that is market power is defined as the power of an individual firm to raise prices—profitably to raise and maintain prices above competitive levels.

As a practical matter, a likely condition of market power is that the firm is not subject to sufficient checks by rivals, by alternatives vying for the patronage of its customers, to discipline its price and require that its price be at competitive levels.

Mr. BARTON. Does anybody else want to take a crack at that? Okay.

Mr. SMITH. I would just note that there are a number of different kinds of market power that we need to be concerned about. One, in this industry, is control over essential transmission facilities. This has been at the core of a lot of the Commission's activities in recent years, with the Commission making sure that there is open access to the essential facilities needed to participate in competitive markets.

The second obviously is concentration in generation markets, where the issue is whether the markets are sufficiently concentrated that players could withhold generation and raise prices.

Mr. BARTON. Well, by definition, under current situations in most localities with 100 percent market power, you only have one electric supplier to your home or your business. And the whole goal of this operation is to give people choices so that there are multiple suppliers for each home; and I think transmission access is key to trying to have true competition.

But I don't think that we can adopt a deregulation bill with a definition of market power that is similar to what the Supreme Court had for pornography: They don't know how to define it, but they know it when they see it. I mean, that tends to put the onus on the market, and if we take the first gentleman, his definition, he seemed to allude to kind of an activity test that you have to determine what the average market price should be, and then make some determination if for some reason it is higher than that. So I know that is a very difficult question.

But I would really appreciate it if you would set some of the best minds in your Commissions to working on it, and for the written record, give us a little bit more definition.

Mr. Thompson, did you want to say something before I ask my second question?

Mr. THOMPSON. I appreciate your caveat, but I think what is important to recognize: You are right, we are in a situation where you already have essentially monopolies on a regional or a local basis. The real question is, how do they move toward competition, and do they move toward it in a timely fashion in a way that also permits other competitors to come in.

So you are right in noting where we are right now. The reason that we talked about the importance of the tools that are used to mitigate the impacts of market power is how other competitors come into the market and how you level the playing field so that they can get access not only to essential facilities, but also provide the array of services and price that consumers want to see.

Mr. BARTON. So you want more of an openness, ease of entry, availability to the market?

Mr. THOMPSON. I think that is going to be an important feature. But it is also important to recognize—and what is hard to deal with in this issue is that I recognize that in various parts of the country, you have different situations, depending on each region. So you are going to have to provide some flexibility in order to adjust to the given conditions and the particular monopoly that is in existence.

Mr. BARTON. My time has expired. I want to ask one question and again this may be something you want to submit for the record. But I think the General Counsel from FERC hit on something about there has to be transmission access. And I am toying with the concept, and if we get to a situation where we are able to draft a comprehensive bill, that we should put in some sort of a petition process so that there can be a petition made to the relevant Federal agency that existing transmission capacity is insufficient to allow true competition, that the Federal Energy Regulatory Commission, the Federal Trade Commission or whatever Federal agency has jurisdiction would certify that there is a need for additional transmission capacity, and leave it up to the States to go through the siting process and the allocation process.

Is that concept of trying to give additional expedited access in terms of additional transmission—is that something that you gentlemen think could be a part of a comprehensive bill?

I have never seen such distinguished witnesses seem to be at a loss for words for such simple questions.

Mr. SMITH. I will pipe in.

Clearly, physical facility-related transmission constraints are a restraint on competition. And in some places, as I am sure you are aware, the issues about the role of the States and the role of the Federal Government in transmission siting are complex and politically complicated.

One thing I would mention is that the Commission is hopeful that, with the growth of regional transmission organizations as independent operators and planners for the transmission system in a region, these organizations will have the credibility to make the

kinds of findings that you are talking about. They would make an independent judgment about whether particular transmission facilities are necessary for either reliability reasons or market efficiency reasons. Having an independent regional judgment about that might have the same kind of effect I think you are talking about—giving some impetus to the States to proceed with projects that might not be in the sole interest of that State, but would be in the interest of competition more generally.

Mr. BARTON. Well, my concept is to let the Federal level make a determination based on a petition that there is a need, but then let the State or regional officials do the siting and the capacity allocation so that you don't impinge on State's rights and the regionality that you talked about.

If you all want to give some additional thought to that. Would you like to say something, Mr. Melamed, before I recognize Mr. Hall?

Mr. MELAMED. If I could briefly, Chairman Barton.

You are quite right that access to transmission is the key, the critical element here if there is going to be real competition at retail or in generation. One approach is a regulatory approach such as FERC Order 888, and elaborated on the way that you suggested; and to the extent that that is necessary to enhance access, that would be a desirable step.

But the administration's position and the Antitrust Division's position would be that it would be preferable to try to do structural remedies wherever possible to avoid the need for increasingly intrusive regulation. And therefore, giving FERC the authority to turn operational control of transmission over to the independent regional system operators and thereby removing centers for obstructions to access, we think, would be an important and valuable alternative to regulation and a superior one to regulation to achieve that same objective.

Mr. BARTON. My only point is you may need additional capacity. It may not just be a legal constraint. It may actually be a physical constraint.

Mr. MELAMED. I agree with that.

Mr. BARTON. The gentleman from Texas, Mr. Hall, is recognized for 5 minutes.

Mr. HALL. Thank you, Mr. Chairman. I guess I direct my question either to Mr. Smith or Mr. Melamed.

The administration bill authorizes FERC to order divestiture of utility assets if they are requested to do so by a State. And I think you all seem to support that. How would this work in case of a multistate utility, where various State commissions might have differing opinions about, say, for the—even the need for divesture; and do they all have to agree, or can one ask for divesture and they get it? How does that work?

I might ask Mr. Smith of the FERC if you would answer.

Mr. SMITH. It depends whether the administration bill is written to preempt the State role in that decision. And I honestly don't know whether it is written that way or not. One could write it either way so that one needed to get concurrent approvals from the States in order to make the divestiture happen or that the Federal

Government could order divestiture notwithstanding the views of the States.

I don't know which way it is written, but I suspect it is intended to be preemptive. But I don't know that.

Mr. HALL. You don't have any opinion on that or any suggested wording for amendments that might bring it into an area that would be a little easier and more understandable? If you do, give them—submit them for the record.

Mr. Hunt, you state in your testimony on page 4 that the best means of guarding against cross-subsidization is likely to be audits of books and records and Federal oversight of affiliation transactions. Tell me why this can't be accomplished by State regulatory authority. Can it, and if it can't, why can't it?

Mr. HUNT. Well, we think that as an overall Federal policy matter, giving the audit power and books and records and inspection power to the Federal Energy Regulatory Commission makes sense. It would make for a more uniform examination of the books and records and perhaps a more uniform determination of the issues that arise in acquisitions and other things than if a multi-state holding company were only overseen on a State by State basis.

Mr. HALL. You do that in the name of uniformity?

Mr. HUNT. I think so, yes, sir. I think the Commission thinks there is still a role for Federal regulatory activity in the whole area of utility production and regulation, although we clearly believe that the role for the SEC is probably a day that has come and passed, but that the FERC and the Department of Justice and the Federal Trade Commission in terms of anticompetitive aspects and the FERC in terms of regulating transmissions still have a significant role to play.

Mr. HALL. Any other opinions on that?

Mr. SMITH. I would just comment from the FERC perspective——

Mr. HALL. Yes.

Mr. SMITH. [continuing] from the FERC perspective, and I would assume that the State issues parallel our issues.

We have many utilities in this country that have market-based rate authority, but many of them also still have cost-based rates that we regulate. And in order to effectively assess the prudence of costs that utilities are seeking to include in cost-based rates when they are engaging in transactions with holding company affiliates, which are not arm's length transactions, we feel that we would need access to the books of the affiliates.

Right now, from FERC's perspective, it is the electric utility itself and not its affiliates that are jurisdictional. So the idea is to make sure that we can get the books and records from the affiliate to assess whether the costs are prudently incurred and should be included in cost-based rates.

I think the States have the same kind of concern about their ability to reach the books and records of affiliates.

Mr. HALL. Okay. I thank you. I yield back my time.

Mr. BARTON. The gentleman from Texas yields back his time.

The gentleman from Oklahoma, Mr. Largent, is recognized for 5 minutes for questions only.

Mr. LARGENT. Thank you, Mr. Chairman.

Mr. Smith, what current authority, regulatory authority, does FERC have over generation?

Mr. SMITH. We regulate wholesale power rates and we regulate jurisdictional mergers and dispositions of assets. We don't directly regulate generation; States regulate generation facilities.

Mr. LARGENT. Can you give me an example of either a horizontal or a vertical power, market power exercised legally, that would fall outside of current antitrust laws?

Mr. SMITH. Do you mean Federal Power Act review or the antitrust laws more broadly?

Mr. LARGENT. More broadly. The antitrust laws, yes.

Mr. SMITH. I would defer to Mr. Melamed. But I think the antitrust laws would apply to all of these transactions, the way they do to the transactions in the economy generally.

Mr. LARGENT. Mr. Melamed, if you want to comment on that. I am trying to find out—give me an example of a vertical or horizontal market power being exercised legally that would fall outside of antitrust laws that are currently on the books.

Mr. MELAMED. Okay. Leaving aside the question of whatever regulatory constraints there might be, if a monopoly generation facility increased prices and exercised market power, or a monopoly transmission facility increased prices, or under some circumstances, sought to favor its own generation facility in transmission, those forms of conduct that simply reflect the ordinary exercise of lawfully existing market power that is created today, lawfully——

Mr. LARGENT. Wait a minute. We are talking about a competitive market so you have got somebody exercising market power by raising their prices at a time that they have got competitors in there that are competing with them on a price basis.

So why—I mean, how would that work? I don't even understand, in a free market situation, how that would be an exercise of market power, how that would even be logical to do.

Mr. MELAMED. What you are suggesting, Congressman, is that it may be that if—that once competition is permitted, there will be sufficient competitive constraints, there won't be market power—no firm will have it because it will be constrained by competition.

Mr. LARGENT. No, what I am saying is, there could be market power exercised vertically or horizontally, but not legally, that would fall outside of the bounds of what we already have on the books that could be approached by your department as an antitrust behavior.

Mr. MELAMED. Let us imagine that we permit competition, we deregulate the wholesale market, and it so happens that there is only one major generation facility capable of serving a particular set of customers——

Mr. LARGENT. Wait. That is not even rationale, because the whole idea is the reason that we can go to a retail competitive market is because we can wheel power from other generators that are outside a geographic area.

Mr. MELAMED. If the transmission facilities are sufficiently open and the technology——

Mr. LARGENT. Which is what every bill—which is what we are all about. I mean, this whole issue is about open access, so assume open access.

Mr. MELAMED. If we have adequate open access and the technology is sufficiently robust, then it is the case that there should not be market power because the generation facilities will be subject to competitive constraints from other generation facilities, and we wouldn't have an exercise of market power.

I thought your question was imagining, what if there were market power, could it be exercised in a way that could not be reached or prohibited by the antitrust laws. And the answer to that question is, yes. If there is—if there is existing market power, by reason of an industry structure that arose lawfully in the past, the antitrust laws don't prohibit increasing prices or otherwise merely exercising market power.

Mr. LARGENT. I heard several people testify, well, if they have all of the generation facilities and they can kind of collude and raise prices or lower generation in an effort to raise prices, that clearly is antitrust behavior; or if you have somebody that has a vertically integrated system so they own generation transmission and distribution, and they can just say, well, we control this area, so we will limit access. That, again, would clearly be antitrust behavior, especially in a restructured environment that is illegal currently.

So what I am trying to drive at, why do we need to have or grant FERC authority and generation where they have very limited authority today; why do we need to grant FERC authority to order divesture in a competitive market? That is my question.

Mr. MELAMED. Well, the authority is needed, I believe, because if there are circumstances in which some of your assumptions don't apply, if there is a situation which because of technological or perhaps unregulatable problems in the transmission network, there are generation facilities that have market power, there is no way the antitrust laws can eliminate that market power.

Similarly, we believe FERC should be given authority to require turning over control of transmission facilities to regional operators because that should be superior to regulatory access requirements as a means of ensuring that the transmission facilities will not be used in a way so as to perpetuate market power.

Mr. BARTON. We are going to have to reclaim the time. We have a floor vote on the House floor, the adoption of the rule on the Kosovo supplemental. I have sent Congressman Stearns to vote. And we intend to continue the hearing without taking a break.

The Chair would recognize Mr. Sawyer for 5 minutes.

Mr. SAWYER. Thank you, Mr. Chairman. Unless Mr. Stearns is going to vote for me, I have to take a break myself as well.

Mr. BARTON. I think we can get your 5 minutes in.

Mr. SAWYER. Okay. Thank you.

Let me just ask generally, transmission, per se, is clearly at the heart of much of what we are talking about here, particularly with regard to the last question. A lot of different kinds of structures for ownership and governance of transmission entities have been proposed, ranging from those where separate transmission companies with separate ownership would be established, and the divesture

that you are talking about, and others where there would continue to be shared ownership.

Can you comment on your sense of whether or not one is better than another, whether the differences across the country would suggest different structures in different places, and how you would propose to establish, if not regulation, then oversight of those kinds of structures.

Mr. SMITH. Sure.

The Commission has undertaken a series of 11 public meetings around the country over the course of the last year on the general topic of regional transmission organizations and independent system operators. And there are a variety of views about whether one form, one corporate form, or one governance form, is preferable to another.

I think where I would come out personally—and this is something where the Commission is still working through its policy development—is that there are three key issues. One is that the organization have operational control over the transmission facilities. They can also own them. I don't think they need to own them, but they need to have sufficient operational control so that you could be confident that there isn't a bias issue, and you are getting the regional benefits.

Second is that the organization needs to be independent of the people buying and selling in the electricity market, so that you don't have the reality or even the perception of bias in the operation of the transmission system.

And the third is that it needs to be of a sufficient regional scope that you get the regional benefits, addressing issues such as rate pancaking, reliability issues, and loop flows. The larger the area, typically, the more benefit you get from the organization.

So I think those are the three pillars on which our policies are going to develop, and we will have to wait and see where we come out on the details.

Mr. SAWYER. You have seen the kind of reliability standards that the so-called consensus standards that have come forward. Are those sufficient by themselves? Are they sufficiently flexible to adapt to changing circumstances or do you think voluntary standards are sufficient?

Mr. SMITH. I think we have switched topics slightly.

Mr. SAWYER. Yes, we have.

Mr. SMITH. I just wanted to make sure.

Mr. BARTON. It is allowed by a member to switch topics.

Mr. SMITH. Okay.

Mr. SAWYER. And your use of the word "slightly" was very generous.

Mr. SMITH. Chairman Hoecker, when he was here a couple of weeks ago, testified in favor of the general approach, that has been approved by the North American Electric Reliability Council and that has been endorsed in the administration's bill of establishing a system for developing and enforcing mandatory reliability standards. I think that is an essential element to making the transmission system reliable and making these markets work.

Mr. SAWYER. Let me go back to the chairman's question, because it really is where those two questions that I was asking about link

up, and that is, the question of State regulatory authority and the question of whether the States have sufficient disinterest and interest in the broader system to undertake the difficult matter of siting and expenditures necessary to build a strong and reliable and interactive transmission system.

I have taken the view that it probably makes more sense to do that in a way that crosses those State jurisdictions and recognizes the central role that the transmission plays in building regional markets.

Could you comment on that?

Mr. SMITH. I have two comments: One is that, as I mentioned earlier, I think the Commission is hopeful that as these regional transmission organizations grow, they will have a role in disinterested, neutral multistate planning for transmission expansion; and not that they would get to preempt States, but that that would be a useful input to State decisionmaking on whether they should proceed with transmission siting and the State regulatory approvals.

The other thing I would mention is that the administration's bill has in it a provision with regard to interstate regional compacts, which is another way of trying to get the States to work together on difficult transmission siting issues.

Mr. SAWYER. If I can just have one more question.

Mr. BARTON. I don't see anybody here to object, so——

Mr. SAWYER. You could.

Mr. BARTON. No. You are asking very good questions.

Mr. SAWYER. Let me ask you whether you have concerns about the opposite side, not bringing together transmission facilities, but the places where there are gaps in sufficient transmission in order to serve as isolated markets.

Do you see that as a problem, the potential for isolated markets and, perhaps, even to atrophy economically for lack of sufficient transmission service and sufficient competition to make that real? Does that make sense?

Mr. SMITH. Yes. There is a real concern about what get referred to as "load pockets," which are areas where, because of the configuration of generation and transmission, there are very few generators or owners of generation that can serve a particular load—either all the time or during peak conditions or during some significant period of time.

There are a variety of kinds of solutions to that problem. One is additional transmission facilities that essentially expand the market so that power can flow in and out of what used to be a load pocket more freely. The second might be additional generation within the load pocket. And the third might be divestiture of the existing generation within the load pocket.

For instance, if there was only one owner within the load pocket that had traditionally been subject to cost of service regulation and, for instance, a State wanted to move to retail competition, one approach might be to require divestiture of the generation within the load pocket to 3 or 4 or 5 companies that could compete with each other within the load pocket, so you would be less concerned about whether or not it was interconnected with the larger region.

Mr. SAWYER. Mr. Chairman, I am going to have to go, or I am going to miss my vote. Let me just say, I have a couple of other questions I am interested in: the role of FERC in terms of mergers; and the duplicative roles with other agencies and whether or not that might be better served by limiting the number of agencies that operate in that way; and finally, I really was interested in the sense that Mr. Thompson talked about, how distribution facilities can yield specific kinds of market power without direct anti-competitive practices and how you would propose to address those.

But I don't have time to sit here and listen to the answer, or I am going to miss my vote.

Mr. Chairman, if I might submit those questions later. I would appreciate the opportunity to do that.

Mr. STEARNS [presiding.] Without objection.

Mr. SAWYER. Thank you.

Mr. STEARNS. Normally we recess, but we wanted to continue since we have a full schedule here; and so I am standing in for the chairman, Mr. Barton. And I will get my questions, and hopefully other members will come back and we can continue here.

Let me give you a hypothetical question here. Utility X controls 80 percent of the generation in a State; that State opens its retail markets to competition and ceases retail rate regulation. There are barriers to entry. Transmission is constrained, and siting merchant plants is difficult. Utility X starts to set retail prices at levels above the market levels. All it does is, it raises its prices—no exclusionary behavior, no attempt to gain 100 percent of the market, no unfair trade practices.

Under current law, what can your agency do to stop utility X from charging high prices?

Mr. Thompson.

Mr. THOMPSON. This is similar to the question that—I regret that Congressman Largent left, because you are exactly pointing out one of the problems and one of the reasons why you need to be able to address market power in a little bit broader way than you would under normal antitrust law. Because right now, in those circumstances, if—let us say they don't raise the problem prices, but keep the prices the same, affecting prices from dropping, then right now one of the problems that you have is that absent any real action, there is probably a hole in the antitrust law.

Mr. STEARNS. There is a hole in the antitrust law?

Mr. THOMPSON. We can't necessarily get to that problem because there is not a predatory practice in and of itself or any other unlawful conduct.

The problem that you have within the industry is that you have these essentially regulated monopolies that are going to be unregulated, and they can more or less sit there because they have—they have reached this critical mass; and by the fact that they have such a large share of what there is right now, it provides a disincentive for other competitors to come in.

So even through things like legitimate contracts, through the power of reasonable rates that—they can delay the ability of other competitors to come in, that is going to be significant, and that is why FERC needs—I think it would be helpful to have them be able to address market power to create the appropriate climate for com-

petition in the event that there is inability for others to enter simply because of the dominance of one or two within a given market.

Mr. STEARNS. Let me ask the counsel. Mr. Smith, what would your response be?

Mr. SMITH. Well, under current law, the Federal Energy Regulatory Commission wouldn't have any authority over that issue, because I assume you are talking about sales at retail, which are not subject to Federal Power Act review.

I would just note that under the bill that the administration has proposed, I think it is a two-step process. The first step would be for the State itself to identify the problem and take whatever action it had the authority to take to remedy that problem, which could include things like requiring divestiture of the generation assets so that there would be multiple people competing in that region.

Mr. STEARNS. Without the State asking, nothing would happen?

Mr. SMITH. Even under the administration bill, I believe that is right. The trigger for FERC being able to step into a retail market problem would be the State identifying a market power problem that it didn't have the authority to remedy.

Mr. STEARNS. Okay.

Mr. Melamed, do you have something that you would like to add?

Mr. MELAMED. No, I think the answers thus far have been correct.

I might want to amend an implication that one might draw from the way Commissioner Thompson phrased the answer. I think the term "hole in the antitrust laws," to the extent it suggests an inadequacy of those laws or a problem with them, I would disagree with. I think there are very good reasons why the antitrust laws wouldn't reach the hypothetical that you pose, and that is why I think the administration's bill properly puts remedial authority in the FERC.

But, otherwise, I agree with what was said.

Mr. STEARNS. You don't think there is a hole in the antitrust law?

Mr. MELAMED. Not if that is not meant to be a criticism of the antitrust laws.

Mr. THOMPSON. I stand corrected there in his characterization.

Mr. STEARNS. One proposed Federal remedy for mitigating market power is reimposition of rate regulation by FERC. If FERC is granted that authority, should it be able to set retail rates as well as wholesale rates? Would merely regulating wholesale rates be an effective remedy?

Why don't we start with Mr. Commissioner Hunt, maybe if you would like to, or we can go to the General Counsel.

Mr. HUNT. Well, sir, when you are talking about market—first of all, the Commission really regulates the activities of the holding companies rather than the operating affiliates.

Mr. STEARNS. Okay.

Mr. HUNT. That is FERC. And as to the anticompetitive aspects, it is probably DOJ and the Federal Trade Commission.

Mr. STEARNS. Mr. Melamed.

Mr. HUNT. What we really look at has been the security issuances of the holding company and how those affected either

consumers or investors, but in terms of the rates and the structures of the operating facilities, we really don't have much to do with that.

Mr. STEARNS. Thank you.

Mr. Melamed.

Mr. MELAMED. Frankly, Congressman Stearns, I think that question is best addressed to Mr. Smith.

The Justice Department's perspective on this is principally a concern with ensuring that there are structural measures taken to maximize the likelihood of competition, and thereby to minimize the need for ongoing rate regulation.

Mr. STEARNS. Mr. Smith, would you like to comment?

Mr. SMITH. Sure. I think there will be authority for FERC at the wholesale level and States at the retail level to reimpose cost-of-service-based price regulation, if they find market power. The question is whether that sort of policy is the direction we want to go. The question is, do we want to go back to a cost-of-service regime, or is the policy goal really to have competition without market power.

Mr. BURR. Would the gentleman yield for one quick question?

Mr. STEARNS. Surely.

Mr. BURR. Is it FERC's opinion that they have the power to do that on retail today?

Mr. SMITH. No.

Mr. BURR. Do you have the power on retail today to set a rate?

Mr. SMITH. No.

Mr. BURR. Thank you.

Mr. STEARNS. There has been some question about generation and transmission entry. So this is a question I think, Mr. Smith, that you can help me with. Do you believe entry into generation and transmission is easy; or are there significant barriers to entry, and what can Congress do to eliminate barriers to entry and generation—barriers to entry into generation and transmission?

Mr. SMITH. Clearly, I think the most important barrier to entry for new generators is the issue of transmission access. And the Congress has established and then the Commission has followed up on an aggressive policy of bringing open access to transmission regulation.

I wouldn't say that eliminates all barriers to entry. One of the issues we heard when we went around the country to talk about regional transmission organizations, for instance, was whether new entrants were confident that they were going to get an entirely fair deal from transmission owners who were also competitors in the generation market. And I think one of the benefits of moving to independent regional transmission organizations is that you deal with that confidence issue that will encourage people to enter.

Mr. STEARNS. I thank you. My time has expired.

The gentleman from Massachusetts is recognized for 5 minutes.

Mr. MARKEY. Thank you.

Mr. Melamed, if the Justice Department's ability to bring an antitrust case in the Microsoft situation was dependent upon a request from the attorney general of the State of Washington to request that you begin it, because he or she did not believe that they had the capacity to bring the case, how long do you think you

would have waited for the attorney general in the State of Washington to make that request against them?

Mr. MELAMED. Well, I can't literally answer that question, but I understand the thrust of it.

I think there may be one important difference, Congressman Markey, though, between the kind of situation that you have in mind and the issue in the administration's proposed bill with respect to FERC's authority—I take it you are addressing FERC's authority to require mitigation of market power to solve a retail problem. The difference is this.

In the energy situation, we would be talking about the question of whether FERC should exercise Federal authority to solve a retail problem that takes place in an individual State, and that raises a question of whether the State might have, in effect, an opportunity first to decide whether to request that.

In a case like the Microsoft case, and obviously many others, the concern is with national or regional or sometimes global markets, rather than simply a retail problem in an individual State; and naturally the appropriate role for the States in the case of larger markets, I think would be less than it might be in this situation.

Mr. MARKEY. But the situation would be the same; that is, that the biggest utility would also be the biggest employer in the State, the same that Microsoft is the biggest employer in Washington State? And so waiting for the political dynamic whereby any particular attorney general has the ability—has the gumption, the nerve, to risk his career by knowing you are taking on the most powerful company is sometimes problematic. That is my only point.

Let me ask this—an unlikely, too, from my own personal experience. It is counterintuitive for politicians to take on the biggest employers in their State; it happens occasionally, but rarely.

Mr. Smith, in your testimony, you note that the FERC lacks jurisdiction over transfers of generation facilities and other mergers of public utility holding companies. Take Mr. Largent's question, and then take this generation issue, and take New England or take some region and explain how a company might be able, through control of its generating—of the generating capacity to block competition within a region.

What would the dynamics be that would make that possible?

Mr. SMITH. I am not sure I exactly understand the question. But let me take a crack at it, and tell me if I am getting it right.

Mr. MARKEY. If there were other generators inside of a region or outside of a region, seeking to get in, but there was a powerful generating monopoly, we would say for this purpose, what would that monopoly look like that would make it impossible or difficult for other generators to reach their ultimate customers?

Mr. SMITH. Well, I guess most importantly I would say, if it owned transmission as well as generation, it would at least potentially have the ability to bias transmission access.

Mr. MARKEY. What if they did not own transmission?

Mr. SMITH. Well, if they don't own transmission, then I think the issue is a facilities-related issue which is, is there a dominant generator within the area that can be served on the existing transmission grid to serve whatever customer or customers you are worried about?

If——

Mr. MARKEY. Again—let me ask the question further. So if they don't own the means of transmission, but they just are still the dominant generator, is there a case that could be made that there would still be monopoly power?

Mr. SMITH. Yes.

Mr. MARKEY. How is that created?

Mr. SMITH. It may be concentration that already exists.

Mr. MARKEY. But I say if other generators can reach their ultimate customers over independently owned transmission lines, isn't there a marketplace which is created that—that wouldn't lead to lower prices and a collapse of the dominant position of the generator? Or would you argue that there is another scenario where the independent generator would not be able—the smaller generator would not be able to reach customers?

Mr. SMITH. I wouldn't argue that. I think the key issue is access to the market for people that want to compete with a dominant generator.

Mr. MARKEY. Is that a transmission question or a generation question?

Mr. SMITH. I think it is a transmission question.

Mr. MARKEY. But not necessarily—so that would satisfy—so you are saying that you would need the power, the FERC would need the power to come in where there was a concentration of generation and transmission power in a single regional company, but not if that did not exist?

Mr. SMITH. To state the extreme case, if there were no transmission constraints and you had a dominant generator and one generator that owned all the plants in New England, but people from New York and PJM and Chicago could reach customers in New England, I don't think you would have a problem.

That is not the real fact pattern. The fact is, you have some combination of transmission facilities with their own constraints and generation ownership within the markets defined by those transmission constraints, and there may or may not be dominance.

Mr. MARKEY. So might divestiture of generation be needed to address transmission market power questions?

Mr. SMITH. I think our view is probably not. I mean that one can address transmission market power by requiring open access and making sure that it is effective.

Mr. MARKEY. But that would probably be the power FERC would have to—is that correct, as a backstop incapable of accomplishing that goal?

Mr. SMITH. Yes, I guess what I would say is that the strongest case for authority to order divestiture of generation is that in areas where transmission is constrained in, to take an example, a load pocket, if there is concentration within the load pocket, there are two cures. One is make sure it is not a load pocket, by building new transmission so other people can get there; or by requiring divestiture of the generation owners so there are multiple people competing within the load pocket.

Mr. MARKEY. So you could deal with it by using either alternative, but one or the other would have to be exercised in order to ensure that the other generator——

Mr. STEARNS. The gentleman's time has expired.

Mr. MARKEY. Thank you, Mr. Chairman.

Mr. STEARNS. Mr. Whitfield, the gentleman from Kentucky, is recognized for 5 minutes.

Mr. WHITFIELD. Thank you very much, Mr. Chairman. I just have a couple of questions.

As you all know, the public utility companies, like TVA and Bonneville Power and others, are not subject to antitrust laws, nor are they really regulated by FERC. And I am just wondering if you had any opinion on that as it relates to deregulation.

Mr. SMITH. I will give you our views.

Our chairman testified before this subcommittee several weeks ago in favor of legislation that would bring all of the transmission facilities in the lower 48 States under FERC jurisdiction for purposes of ensuring open access, and that would include the transmission facilities owned by the federally owned utilities.

Mr. WHITFIELD. Any views on the antitrust laws?

Mr. MELAMED. Generally speaking, we believe that the antitrust laws should be applied uniformly throughout industries and to all industries, and therefore, support the administration proposal for a conditional repeal of PUHCA. But, of course, as I stated in my prior testimony, that shouldn't be done piecemeal; it should be done only if the other regulatory changes, particularly enhancement of FERC's authority, are also enacted so that we don't leave a regulatory gap.

Mr. WHITFIELD. Thank you very much.

I would like to yield to the gentleman from North Carolina.

Mr. BURR. I thank the gentleman from Kentucky.

Let me ask you, Mr. Smith, you just went through a scenario with Mr. Markey and you basically said there were two options as it related to making sure that market power didn't exist as you opened up potentially a monopoly.

Let me ask you, is there a third option that you can think of? You mentioned two; can there be a third?

Mr. SMITH. Give me a hint.

Mr. BURR. Well, is it possible that if you successfully created level competition, an outside concern might look at building a new generation facility within the same territory that you have defined as a market power situation, that could only be addressed through a regulatory means?

Mr. SMITH. Yes. I would say that is right. Fundamentally, the issue is you need to have more competitors than you have now. That can be done by eliminating transmission constraints or——

Mr. BURR. We know as soon as we open it up, we take every monopoly that is out there, and they are now competing against each other; and that is not counting the people who weren't in it before because it was a monopoly who could get in the business of owning and operating a generation facility, correct?

Mr. SMITH. Certainly, you could have new entrants.

Mr. BURR. Out of the three choices, how long would you give the competition creating a new generating facility before you would look toward a regulatory fix or an enforcement fix?

Mr. SMITH. I think that building new generation facilities within a load pocket has potential, but there are a couple of issues. One

is, because you need to build a new plant, there is some time required just to build it. Second, often load pockets are in urban areas, and there may be other kinds of constraints on building new facilities, like, for instance, air pollution.

Mr. BURR. I think—the last natural gas facility I heard about I think the construction time was down to 6 months. Is that about right?

Mr. SMITH. I don't know. But they are getting simpler, so you can build them faster and faster.

Mr. BURR. Mr. Chairman, may I ask, am I also next in line or——

Mr. STEARNS. That is correct, Mr. Burr, you are next in line after Mr. Whitfield.

Mr. BURR. I will just continue on if you would watch the clock for a minute.

Mr. Melamed, I want to compliment you on your testimony. It was one of the most thorough and best I have ever heard. Did you write it?

Mr. MELAMED. Did I write it? Well, Milton Marquis, sitting over there, and I wrote it, yes.

Mr. BURR. Let me ask you, who had to review that testimony before you gave it?

Mr. MELAMED. It was reviewed through an interagency process. I don't know exactly.

Mr. BURR. Was it reviewed by any other agency?

Mr. MELAMED. Yes.

Mr. BURR. What? Which?

Mr. MELAMED. I don't know which ones, but others interested in this matter.

Mr. BURR. I think you probably have a pretty good idea. Could you guess for us?

Mr. MELAMED. I think the Department of Energy, the NEC, maybe FERC. I don't know, but—I literally don't know, I didn't participate in that aspect.

Mr. BURR. Have you ever visited a generation facility?

Mr. MELAMED. On business? No.

Mr. BURR. Have you ever gone to a transmission center where they——

Mr. MELAMED. No.

Mr. BURR. [continuing] move power and account for it?

Mr. MELAMED. No.

Mr. BURR. How about any of the other panelists? Mr. Hunt?

Mr. HUNT. Yes, sir.

Mr. BURR. Transmission, generation or both?

Mr. HUNT. Generation.

Mr. BURR. Mr. Smith?

Mr. SMITH. Generation.

Mr. BARTON. Mr. Burr, I have been to all of those.

Mr. BURR. And I feel like you will have the opportunity again, Mr. Chairman.

Commissioner Thompson.

Mr. THOMPSON. I have never visited, but I have had—I spent a lot of time financing them.

Mr. BURR. I do too. It is called a monthly bill. That is one of the reasons I am somewhat passionate about finding a new way to bring competition into it.

Let me ask you, Mr. Smith, since Order 888, how many times has FERC regulated the wholesale price?

Mr. SMITH. I am not sure exactly what you mean. We——

Mr. BURR. I wasn't sure what you meant when you said FERC had the ability to set pricing.

Mr. SMITH. We continue to do cost-based regulation on a significant fraction of wholesale sales.

Mr. BURR. But FERC is not out there, nor do you anticipate that you have the ability to set the wholesale price; am I correct?

Mr. SMITH. Well, we set cost-based rates for some wholesale sales.

Mr. BURR. Okay.

Mr. Melamed, you mentioned a couple times the dominant, market dominant company. Could you name one for me? Out of all of the monopolies that are out there today, could you name a company that you, as the Department of Justice, looking at the antitrust laws—if we were to open this up, name one company that you would consider to be a market dominant company the day we opened.

Mr. MELAMED. Obviously you are referring to this industry?

Mr. BURR. Well, yes, the electric industry.

Mr. MELAMED. Right. Well, how about Rochester Gas and Electric? We brought an antitrust case against them on the premise they were a monopoly.

Mr. BURR. I understand that. But do they—under your definition of a market dominant company that you described very passionately, would that define Rochester Gas?

Mr. MELAMED. Well, frankly, I don't recall that I used the term "market dominant." I may have used "market power" or "monopoly." Those have precise meanings in antitrust and economics, and the answer is yes.

Mr. BURR. Let me rephrase the question. Do you see any company out there today that, if we were to open up, create an open market for retail sales, that would be so dominant that the Department of Justice would be concerned about their existence in its current form?

Mr. MELAMED. We see—to the extent we have been involved in this industry, a number of local electricity producers and transmission companies that appear at the moment to be monopolies.

Mr. BURR. We are only talking about generation now.

Mr. MELAMED. Okay.

Mr. BURR. Transmission is still going to be a regulated entity of FERC. We are going to assume, like Mr. Largent did, that FERC is going to do such a wonderful job that, in fact, the lines are going to be open. If you and I wanted to sell power, we could do it.

Mr. MELAMED. Right. The question then is, what will the world look like, assuming that there is deregulatory legislation passed and legal barriers to competition have relaxed, for which we don't have a complete answer. One of the things that is a fundamental underpinning of antitrust enforcement is, it depends on very careful case-by-case scrutiny of the facts.

Our point is that we don't know enough yet as a Federal Government agency, frankly, to be able to say with assurance there will be no problems in transmission, there will be no problems in generation, and therefore, that there will be no market power problems to worry about. That is why we believe FERC should have the authority in the event that after deregulation, upon investigation, it turns out that there are individual problems of market power or monopoly power that can't be remedied without some kind of a further effort to mitigate market power.

Mr. BURR. So the only entity that can give us the assurance that the retail marketplace will operate correctly is a Federal entity versus the marketplace?

Mr. MELAMED. No, no, no, I don't believe I said that.

The administration bill, as I am sure you know, provides FERC with specific authority with respect to concerns about residual market power at the generation level affecting competition at retail. FERC's authority to require mitigation will be dependent upon a request from a State, after the State had determined that it did not have adequate resources to deal with the problems. At the wholesale level, across the State lines, which are regional in nature, FERC, we believe, should be given that authority without depending on awaiting a State referral.

Mr. BURR. I thank the witnesses. I yield back.

Mr. STEARNS. The gentleman's time has expired.

Mr. Strickland is recognized for——

Mr. STRICKLAND. No questions.

Mr. STEARNS. No questions.

Mr. Pickering is recognized for 5 minutes.

Mr. PICKERING. Thank you, Mr. Chairman.

And I would like to follow up on some of the questions that both Mr. Largent and Mr. Burr had concerning possible or potential concentration and generation.

Mr. Smith, do you have any type of market test, that you would say would be a threshold trigger as to a percentage of generation capacity in a given market, that would cause you to have concern that would then possibly kick in a divestiture requirement?

Mr. SMITH. It is a compound question. We do have some standards, some policies, with regard to assessing whether generators or utilities have market power. We have one that we apply for the purpose of determining whether a generator should be allowed to use market-based rates, as opposed to cost-based rates. And we have one that we use in assessing mergers that will involve concentration of generation.

We have adopted the DOJ-FTC merger guidelines as the basis for doing the merger review. We have a significantly simpler analysis that we use for purposes of market-based rates.

Mr. PICKERING. Which is? What is that test?

Mr. SMITH. It is called the "hub-and-spoke test." You essentially figure out the market share of the applicant within the area defined by the service territory of the applicant itself and all of the utilities that abut the utility. And I think the market-share test for worrying about market power is 20 percent in that region.

Mr. PICKERING. Okay. If you have open access—and I believe that there is somewhat of a consensus among the panel that open

access requirements in a competitive world with new legislation should address most of the market power questions, is that correct, without having to go to the additional step of having divestiture; is that a correct assumption of the panel's views?

Mr. SMITH. It is an oversimplification of my views.

I would say that there——

Mr. PICKERING. You want maximum power; is that correct?

Mr. SMITH. No. But I think, as I said——

Mr. PICKERING. Or flexibility?

Mr. SMITH. [continuing] in my testimony, we need enough authority to deal with the range of problems that we would encounter.

Let me give you a specific example, which is where there is open access, but there aren't sufficient transmission facilities. Going back to the example of load pockets, there are areas—and it has come up already in California and New York City both at wholesale and at retail—where there are one or only a few generators within an area that can be effectively served because of transmission constraints in those areas. What we have done in California for the so-called "must-run units" is to retain cost-based rates.

As I understand it, in New York City, there was a State concern about market power in the city of New York itself. They wanted to go to retail competition, and they required divestiture of Con Ed facilities within the city so that there would be multiple parties competing within the load pocket.

Mr. PICKERING. Let me follow up by asking, if open access is one of the primary tools, the other tool that the administration seems to be proposing on both the transmission and generation side would be an RTO organization.

Walk me through how an RTO would work and address market power issues as the administration or you see it.

Mr. SMITH. As we talked about a little bit earlier, there can be a variety of forms of an RTO, but the essential characteristics are that, either by transferring ownership to a new organization or by transferring operational control of transmission facilities to a regional organization, you would have one regional operator of a transmission system, and that one of the essential purposes of this is to make sure that the operation of the transmission system is independent of the interests of the people who are selling power in that market.

Mr. PICKERING. Now, would a transco, would it be sufficient if you had a transco within that structure that would be structurally separated—nondiscriminatory open access? Could you have the safeguards sufficient that you could go with a transco approach?

Mr. SMITH. If what you mean by a transco, which is the commonly accepted usage, is that you transfer both operational control and ownership to the new organization and you could meet the other tests of independence and sufficient regional scope, then, yes, I would say that would satisfy that test.

Mr. PICKERING. If you don't transfer ownership.

Mr. SMITH. Then it looks more like what we have called, to date, "independent system operators." And we think both of those models are certainly in play. To date, the Commission in Order 888 set

forth 11 principles on ISOs, and we have acted on five ISO proposals.

We have one pending transco proposal.

Mr. STEARNS. The gentleman's time has expired.

We will just conclude. The chairman of the subcommittee has a few questions.

Mr. Barton.

Mr. BARTON. I just have two questions, but I want to thank you all first for your attendance.

Mr. Hunt, you have gone strangely unasked about your testimony.

Mr. HUNT. Yes, sir.

Mr. BARTON. And I thought you gave an excellent statement, a very strong statement about PUHCA repeal with appropriate safeguards in terms of regulatory authority. You said that it reflects the unanimous support of the SEC commission.

Does it also reflect the unanimous support of the Clinton, administration more broadly?

Mr. HUNT. I don't think so, Mr. Chairman. I think the administration's view is that PUHCA repeal ought to be considered as part of an overall energy legislative reform, rather than on a stand-alone basis. It is our view at the Commission that, with the proper safeguards and the appropriate additional powers given to FERC and to the States, stand-alone repeal would not harm investors or consumers at all. But we perfectly understand the other point of view that it ought to be part of an overall energy legislative reform package.

Mr. BARTON. Okay, thank you. And we do have a representative of the FERC here, so this question is to the other three gentlemen, if you care to comment.

FERC Order 888, if you listened to our good commissioners, they seem to be very proud of that and they go out of their way to comment on how excellent a regulatory order it is. Do you other gentlemen think that in and of itself that that is all that needs to be done in the area of vertical interaction and transmission access, or are there other statutory steps that should be taken as we look at comprehensive review?

Mr. HUNT. I think that is going to have to depend on where the technology goes and what the industry looks like as we try to deregulate. I think—as I understand 888, it is a great order. But I think that the industry is evolving so fast that it is going to be hard to know where we ought to go in the long term.

Mr. BARTON. You would say on behalf of the SEC, it could be improved upon in legislation?

Mr. HUNT. Well, I wouldn't presume to say it could be improved upon, but it could be seriously looked at and maybe improved.

Mr. BARTON. Don't you assume that if we seriously look at it, we are going to improve it?

Mr. HUNT. I assume in the wisdom of Congress everything can be improved that you look at.

Mr. BARTON. That is good.

Does either of you other two gentlemen wish to comment on FERC 888?

Mr. MELAMED. Just, I guess, to repeat really what I may have attempted to say earlier. That order is a regulatory order that seeks by regulation to require open access to transmission. It is always difficult to, by regulation, ensure that access is truly nondiscriminatory and truly open to competitors, and that is why we support the administration's proposal to give FERC the authority to require the transfer of control of a transmission facility to independent operators, because that is structural change that we think might in some cases be necessary to improve on a mere regulatory approach.

Mr. BARTON. Mr. Thompson?

Mr. THOMPSON. I would agree with that in the sense that it is important to recognize there are a couple of things that are happening within this market. We don't know where it is going to go, but I think it is important while you are addressing what could happen right now that you provide sufficient tools to address the possible problems that we already begin to see.

As I already mentioned, we have already received questions from States about how to open up markets, what are the antitrust issues, and what kind of remedies should be available.

That is why it is important at this stage, while you are taking a comprehensive look at this, to provide the maximum amount of tools. It is possible that the open access, that open access may do a lot. But I would also caution not to underestimate the weight of inertia; and second, that if the importance of deregulation is to provide consumers with the benefits of competition, we should do what we can to make sure that those benefits come on sooner rather than later.

And what I am concerned about is that if we are not careful and we don't provide adequate tools, then the degree of inertia and even some of what appear to be legitimate practices, but under the context of market power, could go unaddressed for a long period of time.

Mr. BARTON. Thank you. And I don't want my friends at FERC to think we are not supportive of FERC 888. It is a good rule. But I think it can be improved upon, and I think it needs to be statutorily.

Thank you, Mr. Chairman.

Mr. STEARNS. I thank the chairman.

Does anyone else have concluding comments?

Mr. Burr is recognized.

Mr. BURR. Just a couple of quick questions, Mr. Chairman, since mergers were included, and I feel mergers are somewhat of a catalyst for competition in many cases. Let me ask you, Commissioner Thompson, is there an average number of days that the FTC—for the normal merger process, do you know what the average days are that it takes for mergers to move through the process at the FTC?

Mr. THOMPSON. I don't want to give you an answer off the top of my head, because it depends on the circumstance; but we do have rules about when the timeframes are triggered. But some transactions are a lot more complicated than others, and we work with the parties to try to alleviate the concerns that we have.

Mr. BURR. One of the debates that we will have throughout the formation of a bill is, what do we do with the merger responsi-

bility? Is it shared, is it concentrated at FERC, exactly what do we do, and though FERC has gotten better, I think one of the last ones was that it took 14 months just to put together the hearings for the mergers.

And I guess my question would be to you, Mr. Thompson, given your position with the Federal Trade Commission, mergers that take that long for the hearing process, what do they do to stimulate that level of competition?

Mr. THOMPSON. I guess I am reluctant to comment on FERC's process, because I don't know it well enough, but what I would say is the following: that I think it is in everyone's interest when you are looking at a merger that has strong potential consumer benefits of competition, that we try to provide those benefits as quickly as possible.

And what I would also say is that we have developed and we expect to continue our close relationship with FERC and DOJ so that we can provide the appropriate guidance and the process moves along smoothly.

Mr. BURR. Is that a process that you would feel comfortable, focusing just at the Department of Justice and the Federal Trade Commission, given the high degree of expertise with mergers of companies throughout this country?

Mr. THOMPSON. Well, I do know that there is—I believe the administration proposal provides that we have a consultative role with FERC.

Mr. BURR. I am asking if you and the Department of Justice have a primary and sole role for merger decisions, what is your comfort level with that?

Mr. THOMPSON. I think at this stage that what is important is that FERC has 60 years of experience in dealing with the complicated policy issues in energy. And I think, working together will ensure that consumers benefit. What I would hate to see is a circumstance where, because anyone is compelled to reinvent the wheel, that we wouldn't have the benefits of both of our expertise.

Mr. BURR. I am confident that the Federal Trade Commission and the Department of Justice would consult with every expert in the field on a merger. And I am sure that that is a practice that you utilize today.

The question is, where should the primary jurisdiction for the decision and who should be the engine for driving the process? And I guess my question is, since the Federal Trade Commission does that regularly, do you feel comfortable doing it in the electricity industry in the future?

Mr. THOMPSON. Well, I can say that we are supportive of FERC's primary role here.

Mr. BURR. I thank you. And I thank the chairman and yield back.

Mr. STEARNS. I thank the member.

Mr. Pickering is recognized briefly.

Mr. PICKERING. Thank you, Mr. Chairman.

Just to follow up quickly with Mr. Smith on merger and acquisition authority. One thing that we are seeing in telecommunications with mergers and acquisitions when we go to competition is the un-

predictability, the uncertainty, the delays, sometimes extortion of companies involved on noncompetitive grounds.

Would you support FERC having timetables, by which they would have to approve or disapprove mergers and acquisitions—let us say, 120 to 180 days, that would give certainty as we go into a competitive marketplace?

Mr. SMITH. The Commission adopted timetables to address precisely the kinds of concerns you are talking about in a merger policy statement in December 1996.

Mr. PICKERING. Do you follow those timetables on a regular basis?

Mr. SMITH. Yes, we have had, I think, 23 merger applications since the issuance of the policy statement which was 2½ years ago. The timing that it provided for was that we would act on merger applications that did not require a hearing within 5 months. We have a few cases that have just come in, so the 5 months hasn't run, but all of the cases that we have acted on, we have acted on within that 5-month timeframe.

And I believe in 2 or 3 of those cases, the merger raised complicated competition issues and, therefore, was referred to hearing.

Mr. PICKERING. So since you have an internal policy of timetables, you would not object to statutory deadlines in a legislative approach at the same time that would conform and be consistent with your principles that you set out internally?

Mr. SMITH. Well, I would be worried about such timetables if the result was that mergers would be approved at the end of the timeframe if no action had been taken. I think that addressing market power issues explicitly in the context of mergers is an important enough requirement that you wouldn't want failure to act within a statutory timeframe to be deemed as approval of the merger.

Mr. PICKERING. And the last and quick question. Again, going back to generation and possible divestiture, you mentioned the issue of load pockets as an example where you may have a problem with market power and concentration. If we limited your ability to look at divestiture of generation to where load pockets exist, would that be an appropriate limitation?

Mr. SMITH. It would be hard to write that legislation, because "load pockets" isn't a very precise term, and I think the notion of having authority where there is market power in essence takes into account the definition of the market itself. So if you have a little geographic market with few players, you are more likely to find market power. If you had a big market and a lot of players, you would be very unlikely to find market power.

Mr. PICKERING. Thank you, Mr. Chairman.

Mr. STEARNS. The gentleman's time has expired.

Mr. Sawyer, do you have a brief comment?

Mr. SAWYER. Just a brief comment.

Mr. STEARNS. Sure.

Mr. SAWYER. I want to return to Chairman Barton's question about the sufficiency of who could repeal with safeguards. It seems to me that PUHCA's central role today is the product of, now, 60 years of policy and practice and law on both Federal and State levels that interact in very complex ways.

And, Commissioner Hunt, your answer to the chairman in that PUHCA repeal with sufficient safeguards could stand alone, I take it is largely from the SEC point of view and not from the point of view of the way in which PUHCA, over the last 60 days, has been interwoven with a lot of other precedent practice law and so forth on every level?

Mr. HUNT. Well, Congressman Sawyer, we think that first, yes, that is the SEC's position growing out of our 60 years of administering the statute. But, I think what we have found in the last 10, 15 years in administering the statute is that, with the change in the industry and the way the power can be generated and transmitted now, some of the definitions in the statute no longer make no sense, such as the definition of an "integrated power system."

So those things lead to some difficult interpretation on the part of our staff in terms of how we administer the statute in light of the present facts and circumstances.

Again, what we are trying to do is administer the act so that the regulated holding companies, and there are about 19 of them, can compete on a level playing field with the nonregulated, mostly interstate holding companies, in the area of new activities and new acquisitions.

Mr. SAWYER. Thank you very much.

Mr. STEARNS. I thank my colleagues. And I thank very much the first panel got the time and the energy. We appreciate very much your bearing with all of our questions and now we will call up the second panel.

Mr. STEARNS. Good morning and—afternoon now. May I have your attention? We are going to start the second panel. Before we do, of course, I would like to welcome a member from the second panel, Mr. Michael Kurtz, General Manager of the Gainesville Regional Utilities, in Gainesville, Florida. I represented Gainesville in Congress for 4 years. And he, of course, is testifying as a representative of public power entities, particularly in northern Florida. And so I look forward to his testimony.

I want to welcome Mr. James Rogers, the Vice President and Chief—Vice Chairman and President and Chief Executive Officer, Mr. Chris King, Ms. Mary Elizabeth Tighe, Mr. Marty Kanner, Mr. Joshua Kahn, and Mr. Kenneth Rose and Mr. Kenneth Gordon.

I want to welcome all of you. And I appreciate your patience as we got through the first panel. So let me have all of you start with your opening statement, and we might just start with—the full statement will be part of a record. Since we have eight of you, we would appreciate if you would summarize what your opening statement is; then we can move forward with our questions.

Mr. Rogers, we will start with you.

STATEMENTS OF JAMES E. ROGERS, VICE CHAIRMAN, PRESIDENT AND CHIEF EXECUTIVE OFFICER, CINERGY CORPORATION; CHRIS KING, CHIEF EXECUTIVE OFFICER, UTILITY.COM; MICHAEL L. KURTZ, GENERAL MANAGER, GAINESVILLE REGIONAL UTILITIES; MARY ELIZABETH TIGHE, VICE PRESIDENT, STATOIL ENERGY, INC.; MARTY KANNER, COALITION COORDINATOR, CONSUMERS FOR FAIR COMPETITION; JOSHUA A. KAHN, KAHN MECHANICAL CONTRACTORS; KENNETH ROSE, SENIOR INSTITUTE ECONOMIST, NATIONAL REGULATORY INSTITUTE; AND KENNETH GORDON, SENIOR VICE PRESIDENT, NATIONAL ECONOMIC RESEARCH ASSOCIATES

Mr. ROGERS. Thank you very much. Good morning. Mr. Chairman and members of the subcommittee, I am Jim Rogers, President and CEO of Cinergy Corp., an investor-owned public utility holding company based in Cincinnati. We serve about 1.4 million electric and 450,000 gas customers in Indiana, Ohio and Kentucky. We are a wholesale marketer and trader of gas and electricity in the emerging national commodity markets for those commodities.

We are also one of the lowest-cost suppliers in the country, being the second lowest production cost of our generation, the 25 largest companies in the country. I want to thank you for giving me the opportunity to appear here today to share my views on issues concerning market power, mergers and the Public Utility Holding Company Act.

As you know, I have testified before this subcommittee on several occasions on the tremendous benefits that customer choice and competition will bring to the consumers of electric power in the U.S. Cinergy has been and is today an enthusiastic supporter of increased competition in the industry, and we look forward to the day when all consumers are free to pick their energy supplier.

We have been, as you all know, a pioneer in our advocacy and actions. We were one of the first companies in the country to voluntarily open up our transmission grid to give equal access to all who want to ship across it. And we have been an advocate for customer choice in our home States. I have lived in Texas long enough to know and learn the west Texas rule, and that is where pioneers get the areas, often the settlers get the land.

And so I am here today to testify to make sure that all people in this industry and new entrants have an equal opportunity to get the land. Although my testimony addresses all issues, I am only going to focus on the Public Utility Holding Company Act.

But a quick note on market power. We are an advocate of ISOs. We are a member of the Midwest ISO. We believe that regional transmission organizations facilitate robust, efficient, reliable wholesale markets and are critical to the robustness of those markets. And it is very consistent with the goals of the Energy Policy Act of 1992, and in my judgment will alleviate most of the market power concerns if all companies are participating in RTOs in this country.

Now, let me quickly turn to PUHCA. It was enacted 64 years ago when the utility industry was in its infancy. Congress sought to reform the industry by limiting registered holding companies to integrated systems. The Chairman of the SEC—and I think his words

say it best—noted that, except in time of war, the Federal Government has never imposed such total control over any industry as that imposed on the electric utilities by PUHCA.

As you all heard this morning from SEC Commissioner Hunt, the SEC completed its review of PUHCA in 1981, and it conducted a second study of the statute in 1995. Both of these studies found that the statute had become obsolete, and recommended to Congress that PUHCA be repealed. These are bipartisan conclusions that PUHCA is duplicative of existing State and Federal protection for investors, as well as consumers.

The bottom line is that PUHCA has not only outlived its usefulness, but also imposes unnecessary delays in decisionmaking, increases operating costs, limits competition, and prevents utilities from offering new products and services to the market. In other words, it is both anticonsumer and antishareholder. Those are strong words.

Those are strong words, and there is certainly no ambiguity in that statement, but let me say it is based on my experience as a former consumer advocate at the State level and a former Federal regulator and my past 10 years' experience as a CEO of a Fortune 500 energy company. It is anticonsumer and antishareholder.

The most urgent reason for repeal of PUHCA in my opinion is the inherent impediment and outright prohibition of new competitors into the emerging energy markets in stark contrast with the Policy Act of 1992. Let me give you three quick examples.

PUHCA's retained earnings limitations have impeded Cinergy's ability to bid on generation.

Mr. STEARNS. We just have eight people, so I need you to keep within the 5 minutes. If you'd be so kind just to summarize your remaining statement.

Mr. ROGERS. I will be delighted to do that. I have been around long enough to know how to follow instructions. In conclusion, Cinergy supports a legislative clarification of the FERC's authority to promote RTOs as a means to alleviate market power.

We also call on you to repeal PUHCA. We believe it should either be part of a comprehensive reform or a separate piece of legislation such as Senate Bill 313 which was reported out of the Senate Banking Committee of February on a bipartisan basis.

Clearly, companies like ours are precluded from participating in generation sales. We are precluded because of the limitations for participating in privatization efforts around the world. We are limited in our ability to increase shareholder value, and we are limited in our ability to grow.

I don't believe we can afford to wait indefinitely on moving any aspect of electric deregulation, however necessary and compelling it may be, until everyone agrees on all components of a comprehensive bill.

The Energy Policy Act of 1992 was a step in the right direction to a robust, wholesale market. It wasn't comprehensive. We should take the next step now to create competitive markets, and my only cautionary last remark would be, we should not let the quest for perfection become the enemy of progress in 1999.

Thank you.

[The prepared statement of James E. Rogers follows:]

PREPARED STATEMENT OF JAMES E. ROGERS, VICE CHAIRMAN, PRESIDENT AND CHIEF EXECUTIVE OFFICER, CINERGY CORP.

Chairman Barton and members of the Subcommittee, I am Jim Rogers, Vice Chairman, President, and Chief Executive Officer of Cinergy Corp., an investor-owned public utility holding company based in Cincinnati, serving about 1.4 million electric and 450,000 gas customers in Indiana, Ohio and Kentucky. I want to thank you for giving me the opportunity to appear here this morning to share my views on issues concerning market power, mergers, and the Public Utility Holding Company Act (PUHCA). As you know, I have testified before this Subcommittee on several occasions on the tremendous benefits that open competition will bring to the consumers of electric power in the United States. Cinergy is an enthusiastic supporter of increased competition in our industry and we look forward to the day when we can compete for retail customers everywhere in the country.

However, meaningful competition will require federal legislation in two key areas: (1) legislation to promote Regional Transmission Organizations (RTOs), which will alleviate most, if not all, market power concerns presented by the restructuring of the nation's electric industry; and (2) legislation to repeal PUHCA, which is a barrier to the efficient consolidation of the industry and otherwise a barrier to entry in the newly emerging merchant generation and marketing business. I will discuss each of these items in the context of addressing the issues you have raised today.

MARKET POWER

Mr. Chairman, three markets are affected by a traditionally vertically integrated electric utility: the generation of electricity, the transmission of electricity and the distribution of electricity to its ultimate consumer. Since the rates, terms and conditions of transmission will remain jurisdictional to the FERC, and distribution will remain under the jurisdiction of the state Public Utility Commissions, the potential for abuse of vertical market power (the ability to use dominance in one market to manipulate prices in a linked market) in a restructured electric industry is limited to the generation of electricity.

Mr. Chairman, the move to a more competitive wholesale and retail market in the generation of electricity will require a fundamental restructuring of the operation of traditional, vertically integrated utilities in this country. Specifically, to appropriately address legitimate concerns of vertical market power by incumbent utilities, regulatory policy must provide for separation of control of transmission of electricity from control of generation of electricity.

Separation of control of transmission from generation is effected when an incumbent utility's transmission assets are placed under the operation and control of an RTO. Cinergy is accomplishing this separation through the formation of, and its participation in, the Midwest ISO, which is the only FERC approved RTO in our region. While Cinergy recognizes that there may be a certain amount of disagreement among utilities on the appropriate structure of an RTO, we believe that the FERC is the appropriate forum to determine issues concerning interstate transmission of electricity. To the extent existing federal law leaves any uncertainty with respect to FERC's authority to promote the creation of RTOs, we urge Congress to act now to eliminate such uncertainty and to make it clear that FERC is authorized to take the necessary steps to facilitate creation of appropriate RTOs.

Cinergy does not believe that horizontal market power—the ability to control prices over a substantial period—exists with respect to the wholesale electric market in the Midwest. The substantial dollar losses suffered by some utilities last June constitute strong evidence that those utilities lacked the ability to control wholesale prices at that time. We further believe that the reduction of transmission rate pancaking, that will occur when appropriate RTOs are in place, will make the generation market even more competitive by improving the ability of many sources of generation to compete in areas now dominated by a single large utility. At this time, absent barriers to entry or an ability to sustain changes in pricing, Cinergy believes that efforts by the government to specifically allocate market shares would be premature.

Further, Cinergy supports measures taken at the FERC, and by many state commissions, to institute codes of conduct to ensure that market knowledge from the regulated operations are not used to unfairly advantage non-regulated affiliated marketing companies. Cinergy believes that these behavioral prohibitions, along with an aggressive FERC complaint procedure, can ensure a fair and open market for generation among all suppliers including utility affiliated marketing companies.

MERGERS/CONSOLIDATIONS

Cinergy's 1994 merger, which has been very beneficial to customers and shareholders alike, took approximately two years to receive all government approvals. How many other industries, regulated or otherwise, are delayed or prevented from achieving the synergies and cost benefits from consolidation because of such a cumbersome regulatory review process? As the industry is restructured, serious consideration must be given to removing some of the layers of duplicative merger reviews and allow a quicker, more streamlined process. To do otherwise is to deprive consumers and shareholders of the benefits of mergers and consolidations. As we discuss below, repeal of PUHCA can go a long way toward facilitating the more efficient development and consolidation of our industry.

REPEAL OF PUHCA

Mr. Chairman, as you know PUHCA was enacted 64 years ago when the utility industry, as we know it today, was in its infancy. Congress sought to reform the industry by limiting registered holding companies to "integrated" systems and by requiring holding companies to file extensive financial information with the SEC and secure Commission approval before engaging in a variety of transactions. In practice, the integration requirement limits registered holding companies to operating in geographically proximate states. The Chairman of the SEC, Arthur Levitt, has noted the observation that, except in time of war, the Federal government has never imposed such total control over any industry as that imposed on electric utilities by PUHCA.

Of course, much has changed in the financial structure, technology and capability of the electric utility industry since PUHCA was enacted over half a century ago. In the last 20 years, there have been a series of studies undertaken on PUHCA and its effects on both providers and customers in a rapidly evolving utility industry. In 1977, in response to an inquiry by the then Chairman of this Subcommittee, John Dingell, the General Accounting Office (GAO) found that the objectives of the statute had been achieved and that the financial problems associated with the structure of the utility industry had been rectified. The GAO recommended that the SEC undertake a more comprehensive examination of PUHCA to determine if Congress needed to reform the statute.

The SEC completed its review of PUHCA in 1981 and conducted a second study of the statute in 1995. Both of these studies found that the statute had become obsolete and recommended to Congress that PUHCA be repealed. The 1995 SEC Report found that the regulatory system imposed by PUHCA "imposes significant costs, in direct administrative charges and forgone economies of scale and scope, that often cannot be justified in terms of benefits to utility investors." The SEC concluded that the effects of PUHCA on the current electric utility system "are truly detrimental to both investors and consumers."

The bottom line is that PUHCA has not only outlived its usefulness, but also imposes unnecessary delay in decision-making, increases operating costs, limits competition, and prevents utilities from offering new products and services to the public. In other words, it is both anti-consumer and anti-shareholder.

Mr. Chairman, the most urgent reason for repeal of PUHCA is the inherent impediment and outright prohibition of new competitors into the emerging energy markets. Several concrete examples are worth noting.

First, as illustrated in the attached materials, PUHCA's retained earnings limitations have impeded Cinergy's ability to bid on generation opportunities that are priced beyond our retained earnings cap. Many states have authorized their utilities to sell off generation. The disaggregation of generation creates opportunities to bring in new market entrants, with increased competition and more choices for consumers in a commodity deregulation environment. This PUHCA restriction prevents consumers from receiving the lower prices which would result from increased competition in the newly emerging merchant generation business.

Second, as also illustrated in the attachment, many international acquisitions are beyond our reach because of the retained earnings cap. Missed investment opportunities include the ability for Cinergy to participate in the privatization of other country's energy markets. We believe this bar unfairly impacts on Cinergy because other companies are able to make these acquisitions. In addition, Cinergy is unable in some instances to promote the international energy development policies favored by the United States government.

Third, because of PUHCA's requirement that all registered holding companies operate in a close geographic proximity, Cinergy is limited in its ability to compete with foreign companies for domestic acquisitions. Consequently, while PUHCA's requirement would bar Cinergy from merging with, or acquiring, PacifiCorp, a foreign

company such as Scotish Power, not subject to PUHCA, could acquire PacifiCorp or even Cinergy without violating the PUHCA restrictions.

Finally, PUHCA restricts holding companies from many internal investments in generation, gas and electric transmission and distribution. Certainly, this is the only industry that so stifles global competition and investment under rules over 60 years old. Moreover, PUHCA also means regulated companies must spend an inordinate amount of money on paperwork and personnel to comply with the statute's burdensome provisions which the SEC has long ago determined to be outdated, ineffective, and unnecessary.

Over time the ongoing damage imposed on registered companies by PUHCA can affect their ability to compete in the market place and expand their business. For example, at the end of 1994, when Cincinnati Gas & Electric and PSI Energy merged to form Cinergy, the combined company had a market value of $3.6 billion while the top five energy companies had an average value of $9 billion. Four years later, Cinergy's value had grown to $5.8 billion while the big five's value had grown to an average of $17.4 billion. Despite our growth, the gap between Cinergy and the top five energy companies has gone from $5.4 billion to $11.2 billion.

One of the most enduring myths associated with PUHCA is that the statute somehow prevents utilities from exercising undue market power. However, in reality, PUHCA actually requires market concentration and thereby produces market power. The statute's integration requirements and geographic restrictions prevent utilities from entering other markets and competing against local utilities. FERC Chairman Hoecker has testified that "in some instances it (PUHCA) encourages the very concentrations of generation that are anathema to competitive power markets and discourages asset combinations that could be pro-competitive." The Administration's Statement which accompanied the release of its Comprehensive Electricity Competition Act last month agrees that many of PUHCA's requirements, such as the requirement that a holding company operate a single integrated system, "are not compatible with a more competitive electricity market."

It should be remembered that PUHCA essentially was created to address investor abuses and was never intended to provide rate protections for electric consumers. PUHCA cannot be realistically deemed a consumer protection statute for the utility industry when, out of approximately 3,000 electric and gas utilities, only 18 of these are registered holding companies subject to PUHCA. In today's electric utility market, a wide variety of other government entities such as the Federal Trade Commission, the Department of Justice Antitrust Division, the FERC's assessment of market power issues during its merger and acquisition review, as well as state public utility commission proceedings, are in place and have adequate power and authority to address any market power or anticompetitive concerns that may arise. The repeal of PUHCA merely removes an outdated and unnecessary statutory bar to certain mergers by registered holding companies and thus allows them to seek governmental approval for mergers on the same basis as other utilities.

CONCLUSION

In summary, Mr. Chairman, Cinergy supports a legislative clarification of the FERC's authority to promote RTOs as a means to alleviate market power concerns, as well as the repeal of PUHCA in a manner generally consistent with the SEC's 1995 recommendation. We believe this repeal should either be part of a comprehensive reform or a separate piece of legislation, such as S.313, as reported out of the Senate Banking Committee in February on a bipartisan basis.

As you know, Cinergy has long supported a choice of electricity suppliers for all consumers and we continue to do so. However, I don't believe we can afford to wait indefinitely on moving any aspect of electric deregulation, however necessary and compelling, until everyone agrees on all components of a comprehensive bill. We should not let the quest for perfection become the enemy of progress. Repeal of PUHCA, and clarification of FERC's authority to promote RTOs, should happen immediately.

Thank you for your consideration.

ATTACHMENTS

Largest Merchant Plant Acquisitions Have Been Beyond Cinergy's ''PUHCA Reach''

Acquirer/Developer	MW	Total Cost ($ millions)	Percent Equity	Retained Earnings ($ thousands)	Project Cost as a % of Retained Earnings
Edison Mission	1,896	$1,800	100	$2,882	62
Sithe	4,117	1,720	100	3,967	43
U.S. Gen Co. (PG&E)	4,009	1,590	100	2,531	63
PP&L	2,614	1,586	100	323	491
Enron	1,037	1,100	100	2,138	51
AES	1,424	950	100	798	119
FPL Group	1,185	846	100	2,116	40
Southern	3,065	801	100	4,164	19
AES	3,956	781	100	581	134
Keyspan	2,168	597	100	722	83

Largest Merchant Plant Acquisitions Have Been Beyond Cinergy's ''PUHCA Reach''

Acquirer/Developer	MW	Total Cost ($ millions)	Percent Equity	Retained Earnings ($ millions)	Project Cost as a % of Retained Earnings
Sithe	1,983	$536	100	$3,950	14
NRG (NSP subsidiary)	1,456	505	100	1,399	36
Duke	2,645	501	100	3,256	15
Southern	1,776	480	100	4,164	12
Southern	984	462	100	4,164	11
Dynergy (DYN & NRG JV)	951	356	50	106	168
NRG (DYN & NRG JV)	951	356	50	1,399	13
NRG	1,360	355	100	1,399	25

Largest Independent Power Projects Have Been Beyond Cinergy's PUHCA Reach

Developer/Project/Country	Project Cost ($ millions)	Percent Equity	Total Megawatts	1997 Credit Rating	1998 Credit Rating
GE Capital/Paiton/Indonesia	$2,600	13	1,230	.....	AAA
Edison Mission/Paiton/Indonesia	2,600	40	1,230	P1	P1
AES/Yangcheng/China	1,800	25	2,100	Baa3	Baa3
Siemens/Jawa Power/Indonesia	1,700	50	1,220	.....	AA1
CMS/Ennore/India	1,600	100	1,886	Ba3	Ba3
CMS/Jorf Lasfar/Turkey	1,500	50	696	Ba3	Ba3
Southern/Pilillipines	1,400	92	1,200	Baa1	Baa1
Enron/Sarlux/Italy	1,350	45	551	Baa2	Baa2
Southern/Hin Krut/Thailand	1,300	28	1,400	Baa1	Baa1
Edison Mission/SAB Energy/Sicily	1,300	49	512	P1	P1
Sithe/San Roque/Phillipines	1,100	43	345	.....	.....
Siemens/Hanfebg/China	1,050	40	1320	.....	AA1
Sithe Energies/Everett, MA/USA	1,000	100	2,800	.....	.....
InterGen/Mauben/Phillipines	812	46	812	.....	.....
Edison Mission/Bo Nok/Thailand	800	40	367	P1	P1
Entergy/Saltend/UK	800	100	1,175	Baa3	Baa3
InterGen/Meizhou Wan/China	755	70	724	.....	.....
Texaco Global Gas & Power/API Energia/Italy	750	24	276	.....	.....
AES/Puerto Rico	700	100	454	Baa3	Baa3
AES/India	633	100	420	Baa3	Baa3
Constellation Power (BGE)/High Desert/U.S. (Cal.)	600	50	700	A1	A1

Electric T&D Privatization—Largest International Acquisitions By U.S. Utilities—All Beyond Cinergy's Reach

Acquirer/Project/Country	Yr. Acq.	Cost ($ billions)	Ownership Percentage	Equity Paid	Rating—year of Purchase	Most Recent Rating
GPU/Midlands/UK	1996	2.6	50	$500M	Baa2	Baa2
Cinergy/Midlands/UK	1996	2.6	50	$500M	Baa2	Baa2
CSW/SEEBOARD/UK	1996	2.5	100	$827M	P2	P2
AEP/Yorkshire Elec./UK	1997	2.4	50	$360M	P2	Baa2
PSC Colorado/Yorkshire Electricity/UK	1997	2.4	50	$360M	A3	A3
Dominion Resources/East Midlands/UK	1996	2.2	100	.....	(P)Baa1	(P)Baa1
Entergy/London Electricity/UK	1997	2.1	100	$400M	.....	Baa2
Reliant (H.I.)/Electropaulo Metropolitana/Brazil	1998	1.8	11.75	$245M	A3	Baa1
AES/Electropaulo Metropolitana/Brazil	1998	1.8	11.37	.....	Baa3	Baa3
Southern/SWEB/UK	1995	1.7	49	.....	Baa1	Baa1
PacifiCorp/PowerCor/Australia	1995	1.6	100	.....	A2	A2
Texas Utilities/Eastern Energy/Australia	1995	1.6	100	$500-600M	P1	P(Ba1)
PSEG/Rio Grande Energia/Brazil	1997	1.5	33	$498M	A3	Baa2
Reliant (H.I.)/Corelca/Columbia	1998	1.3	32.5	$146M	A3	Baa1
Enron/Elektro Elec./Brazil	1998	1.27	100	.....	Baa2	Baa1
Entergy/Citipower/Australia	1996	1.2	100	$294M	Baa2	Baa2
Southern/BEWAG/Germany	1997	1.2	26	$335M	Baa1	Baa1
Utilicorp/United Energy/Australia	1995	1.2	50	.....	Baa3	Baa3

Mr. STEARNS. Thank you. Mr. King, you are recognized for 5 minutes.

STATEMENT OF CHRIS KING

Mr. KING. Thank you. Good morning, Mr. Chairman and committee Members. My name is Chris King. I am CEO of a new company in California called Utility.com. I'd like to introduce you to it briefly.

We are the first utility company based entirely on the Internet and we are formed in a partnership with idealab which started eToys. We offer deregulated power at a discount of up to 15 percent to about 10 million residents and small businesses in California today, advertizing and signing them up, providing customer service and everything else over the Internet. Customers can do their bills there. They can pick the day of the month they get their bill. They can pay electronically with e-mail and other innovations.

I appreciate your invitation today. First, I would like to urge you to do what you can to promote the availability of Americans throughout the country to choose their electric company. Energy is typically the third highest household expense, and other than water, the only one remaining where consumers can't choose their provider. According to the Federal reserve, every day we delay electric competition costs Americans over $100 million.

Before we can count those savings, we need to address some of these market power issues. Just as we have an unusual perspective on how to sell power, we have some unique perspectives on market power. I am not going to talk about transmission, for example, but I would like to talk briefly about two other forms.

The first is the power of incumbency. The reason this issue is important because consumers won't see the projected savings and other benefits of competition if competition doesn't happen. The success of our economy comes from the crucible of competition, and

in that truly competitive environment, any company that doesn't use every opportunity at its means to reduce cost or improve importance each and every day is at real risk of losing customers. If you don't have that risk of customer loss, you're not going to make those changes.

The other market power issue is that of one group market participants over another. This is like a cartel where, for example, oil producing countries withhold production that causes gasoline prices to rise. In electricity, power producers in partially competitive markets have this power over end consumers. This occurs during the peak hours of the summer and raises prices to as much as a hundred times their normal summer level.

The reason is simple. Typical consumers pay the same price for power no matter when they use it. So producers can raise the price as high as they want during those system peaks. That is because existing electricity meters record only total use. Consumers then have to pay the average rates, including those high prices, whether they use that peak energy or not.

In concluding, I would like to propose two solutions to these two issues. Regarding the first, the power of incumbency, it is essential that policymakers create an absolutely level playing field. Consumers have to have total freedom of choice, and no company should be permitted to use regulated assets to compete for providing competitive services.

The second, regarding the cartel power of generators, is a solution that clearly lies in technology. Via the Internet, companies like ourselves can provide technological tools that enable consumers rather than generators to set electricity prices, even at those times of system peak.

They can offer new electronic meters, replacing those that were originally designed about the same time PUHCA was originally enacted, and there are other technologies coming out, including one we offer which is a thermostat that customers can control over the Internet to deal with those peak prices.

This is important. The California Power Exchange did a recent study where they found that if consumers reduce peak energy use by only 3 percent on the hottest days of the summer they would save over $8 million a day.

So to sum up, we would urge you to promote the availability of electric choice; second, to propose model rules for an absolutely level, competitive playing field; and, third, ensure that consumers have unfettered access to new technologies to take advantage of the benefits of this market.

Thank you.

[The prepared statement of Chris King follows:]

PREPARED STATEMENT OF CHRIS KING, CHIEF EXECUTIVE OFFICER, UTILITY.COM

Utility.com is pleased to offer the following testimony regarding market power issues in restructuring of the electric industry. Our testimony focuses on defining market power, the risks to consumers inherent in market power, mitigation steps the States have taken, the role of the Federal Government in preventing the abuse of market power, and, of particular note, the capabilities of modern technologies, including the Internet and advanced metering, and how those technologies are a critical tool for consumers in their ability to combat market power.

Background

Utility.com is an Energy Service Provider registered with the California Public Utilities Commission. The company is one of only three competitive providers actively marketing to small business and residential consumers throughout California. It is also the first company to apply for licensing in Nevada's competitive electricity market. Utility.com has been an active participant in regulatory proceedings throughout the U.S., contributing expertise on technical and economic issues associated with providing meaningful electricity choices to small consumers.

To begin, Utility.com strongly supports the principle of customer choice. Customer choice will result in consumer savings that have been projected to be as high as 40 percent (U.S. Federal Reserve and Citizens for a Sound Economy Foundation), as well as consumer access to a host of new and innovative energy-related products and services.

I. DEFINING MARKET POWER

Market power, generally, is that situation in which market participants are able to earn "excess profits" as a result of market inefficiencies. Two generic types of market power occur in the electric industry: vertical and horizontal. A third type, similar to that enjoyed by a commodity cartel, is caused by the limitations of today's installed information technology; this type allows power generators, as a class of market participants, to earn excess profits at times of system peaks by taking advantage of the lack of demand response by consumers—which, in turn, is a result of the lack of information. The information consumers need to exercise the demand side of the supply and demand equation is greater detail on usage—such as how much is during peak times—and on pricing—such as how much more expensive is power at those times.

Vertical market power results when a single participant, generally the incumbent utility, controls all or most elements of the electricity value chain in a way that prevents economically efficient consumer decisions. This value chain starts with power production, extends through transmission and distribution, and concludes with revenue cycle services, including billing, metering, and customer service. By owning all elements of the value chain, a single market participant can raise prices above competitive levels. That participant can also exert market power by controlling a single, scarce element, such as transmission or distribution wires, or even detailed energy usage information.

Horizontal market power results from the geographical or breadth of services scope of a market participant that provides that participant with certain competitive advantages. A common example is leveraging resources deployed for one service to reduce the costs of entry for another. In electricity, for example, a utility could use its service trucks and personnel to support services similar to but unrelated to the distribution of electricity, such as appliance maintenance. Since other companies do not have the same opportunity—i.e. an appliance repair company cannot use its trucks and personnel to perform electricity system maintenance—the utility's horizontal market power gives it a competitive advantage.

Cartel-like market power differs from vertical and horizontal market power in the sense that, instead of being a situation in which a single company has market power, it is one in which a group of companies have market power as compared to consumers. Electricity is unique in two respects that result in this cartel-like market power. First, power cannot be stored; with few meaningful exceptions [1], power production and use must be balanced every four seconds. Accordingly, during the peak hours of the year, almost all the power plants in an area are running, and very few plants are available to serve the last few kilowatts of demand. Second, even though this lack of producers results in very high power costs, consumers have no reason to reduce their usage, since they pay a price that is averaged over the year. Thus, generators can charge as much as 75 times the normal rate for energy.[2] Moreover, all producers are paid these high, marginal clearing prices in those markets, such as California or the U.K., where most (California) or all (U.K.) power must flow through the officially-approved exchange.[3]

---

[1] Power can be stored in very limited amounts in batteries and in a small number of "pumped-storage" hydroelectric facilities; together, these account for less than one percent of U.S. electricity requirements.

[2] According to the *Staff Report to the Federal Energy Regulatory Commission on the Causes of Wholesale Electric Pricing Abnormalities in the Midwest During June 1998,* prices reached $7,500 per MWh in summer 1998, compared to typical peak hour prices of $100 per MWh.

[3] In California, all power served by the regulated utilities must be purchased from the California Power Exchange, which now accounts for approximately 88 percent of all power used in

Economics professors Frank Wolak of Stanford University and Robert Patrick of Rutgers University studied such market power in the U.K. and found that the lack of price signaling to power users enables generators to manipulate market prices for energy and capacity, resulting in excess profits.[4] They found that the lack of price signals provided via time-of-use or hourly (half-hourly in the U.K.) metering has resulted in serious market inefficiencies in the U.K., including forcing consumers to pay high market prices—sometimes exceeding $1,500 per MWh —during peak periods:

> One of the problems in the United Kingdom is that most electricity consumers, including all residential customers, pay a price for electricity to their retailer that does not change in response to half-hourly variations in the market-clearing price of electricity. Consequently, under the current system a very high market price brings about little, if any, demand reduction, because the final consumer of electricity does not pay this price for its electricity.[5]

II. CONSUMER RISKS RESULTING FROM MARKET POWER

Throughout human history, open competitive markets have consistently delivered lower prices and greater innovation than regulated monopolies. The success of such markets motivates the current trend in the States toward adopting retail electricity competition. Market power, if not mitigated, presents two dangers. First, in the absence of effective competition, the desired price and innovation benefits of competition will not materialize. Consumers will not exercise choice, or their choices will not be economically efficient. Second, with the restraints of regulation removed, companies with market power could charge even higher prices and earn excess profits if consumers have no effective tools to combat that market power.

Three examples of market power in electric competition are of particular import. The first is the vertical market power of companies who own all the major elements of the electricity value chain in a limited geographic region, including generation, transmission, distribution, and revenue cycle services. Such vertical market power has been addressed extensively in electric restructuring proceedings in the States and at the Federal level, with consensus that generation, transmission, and distribution must be unbundled from one another, with or without divestiture requirements. Without equal and non-discriminatory access to transmission and distribution systems, the jurisdictions have agreed, there can be no effective competition between power generators.

The second important example is horizontal market power in which regulated and competitive utility functions are cross-subsidized, intentionally or not, and which results in anti-competitive effects. One such situation is the provision of standard offer or default service where some or all of the costs, such as revenue cycle services, are embedded in regulated distribution rates. In this situation, competitive suppliers are at a major disadvantage; they must recover all of their revenue cycle service costs from competitively provided services, while the competitively provided energy—standard offer service—does not include those costs.

Another such situation of horizontal market power is the sale of competitive services such as advanced metering or any other competitive service, where the sale uses the regulated utility's name. In this case, the brand equity inherent in the name, and the association of that name with electricity services, reduces the company's cost of acquiring a new customer or selling a new service to an existing customer. Because the customer places a value on this brand equity, the customer is willing to pay more for service. For example, in Pennsylvania, all small businesses and residential customers would save 10 percent on their electricity by switching to a wide range of competitive suppliers, yet over 80 percent of these customers have not switched suppliers. On average, these non-switching customers are paying approximately $100 per year for name brand and other incumbency equity. Naturally, customers should be allowed to choose freely to pay extra for brand equity and do so in almost all competitive markets. The difference is that, in those other markets, customers are not required, by government-regulated monopoly, to take a portion of their service (electricity distribution and, so far, at least some revenue cycle services) from the named entity.

---

the service areas of the regulated utilities; in the U.K., all power must flow through the Electricity Pool of England and Wales ("the Pool").

[4] *The Impact of Market Rules and Market Structure on the Price Determination Process in the England and Wales Electricity Market*, Frank Wolak and Robert H. Patrick, June 1996

[5] Press Statement, Stanford Center for Economic Policy Research, Professor Frank Wolak, January 17, 1997.

One actual customer story illustrates the strength of this brand equity. A friend of utility.com suggested to his brother-in-law that the latter sign up for service from utility.com to obtain savings on his electric bill. By way of background, the brother-in-law is very bright; in fact, he was a Rhodes scholar and was well aware of the California Public Utility Commission's educational efforts regarding deregulation. The friend explained that, under the rules of electric competition, the regulated utility is still responsible for repairing service after outages and ensuring reliability. Nevertheless, the Rhodes scholar mistakenly believed that his service might somehow be less reliable if he switched to utility.com.

The States have developed varying approaches to mitigating such horizontal market power of incumbency and brand equity. One approach is to allow utilities to use their names for unregulated competitive affiliates, provided they disclose clearly that those affiliates are not the same as the regulated utility, operate completely independently, keep entirely separate accounts, and obtain no financial benefits from the regulated entity, including credit—a key requirement in wholesale electricity markets. In the spirit of compromise, utility.com does not oppose the ability of utilities to continue to use their names under these conditions.

Utility.com believes the more important issue is to prevent any cross subsidies and ensure meaningful customer choice. Simply put, 100 percent of the costs of any competitive service provided by a regulated utility should be allocated to that competitive service and, conversely, to the extent a customer chooses not to take a competitive service from the regulated utility—for example standard offer service—that customer should not have to pay any of the costs associated with providing that service, including all power acquisition costs and all revenue cycle service costs (to the extent the competitive supplier provides any revenue cycle services). The principle is straightforward: customers should pay for all of what they buy from a regulated utility and should not have to pay for anything they do not buy from a regulated utility. In addition, to the extent possible, customers need to be educated that the reliability of their service will be exactly the same, regardless of their electricity provider.

The third important example of market power is that of the cartel-like market power of power generators. In this case, during times of system peak, consumers are forced to pay excess prices because there is no demand response in spite of excessive wholesale power prices. This occurs because, except for the less than one percent of customers that have time-of-use or hourly meters, consumers have no awareness that wholesale prices are so high. These small consumers simply pay the same, averaged price throughout the year—including the very high costs incurred during the system peak hours. A similar effect occurs with respect to the cost of reliability, which is the price that grid operators must pay for backup reserve energy and other ancillary services (functions regulated by the FERC). As with electric competition as a whole, where more offerings are made to large electricity users, small consumers are the ones who suffer from not having the advanced metering that allows them to respond to price signals and—if they so choose—to avoid paying the high costs of on-peak power.

The result of this lack of price signals is that consumers pay very high prices for very inefficient use of capital invested in power plants. Electric generating plants are among the least efficiently-used capital in the country, operating on average only 46 percent of the time.[6] This low figure compares to average industrial capacity utilization in the U.S. of about 83 percent. Improving this efficiency represents one of the most important sources of savings in the deregulated electric industry. History shows that price signals will accomplish this result. For example, following deregulation the U.S. airline industry increased its capacity use from 48 percent to 73 percent, over a 50 percent improvement.[7]

III. MITIGATING MARKET POWER THROUGH NEW TECHNOLOGY

Fortunately, new technology enables competitive electricity suppliers such as utility.com to deliver, and consumers to take advantage of, capabilities that can help combat market power. The first of these, the Internet, enables very low cost information sharing and data exchange. The second, low cost advanced metering, enables consumers to respond to high peak power costs and, should they choose, just say no to paying for those costs by reducing energy consumption at those times.

Internet: Utility.com has pioneered the use of the Internet in retail electricity sales and customer service. Via the Internet, utility.com can recruit, sign up, serve,

---

[6] *Financial Statistics of Investor-Owned Utilities,* Energy Information Administration, 1996.

[7] *Statistical Yearbooks, 1980 and 1996,* U.S. Department of Commerce, supplemented by data from *InsideFlyer* magazine, a periodical focused on airline frequent flier programs.

bill, and support customers at costs that are as much as 90 percent lower than traditional utility customer service costs. Utility.com collects information that enables it to forecast peak power consumption and offer savings commensurate with those estimates. Via its website, utility.com educates its customers regarding the use of energy and peak energy and how those customers can reduce such usage.

Innovative metering: Utility.com also works with CellNet Data Systems, Inc. ("CellNet") in offering innovative metering technology to its customers. CellNet is a wireless data services company with facilities in several states. CellNet provides metering and communications services using wireless and other networks in eight states to all sizes of utility customer. At a cost as low as one to two dollars per month, CellNet's advanced metering services are affordable to even the smallest energy users.

Wireless technology also enables many other data services, including smart, communicating thermostats. These devices are the homeowner's equivalent of a building energy management system, but at a cost and level of simplicity suited for the small consumer.

This technology exists and is being deployed in scale today. Over two million residential, commercial, and industrial energy users now have their meters read remotely via radio technology as often as every five minutes. With their meters on line, these customers now have the technology in place to receive several new services, some of which are already being offered to them by utility.com.

These energy consumers can now receive detailed energy usage information to help them better manage their bills. Utility.com gives them the choice of which day of the month they receive their bills, perhaps the first of the month for Social Security recipients. They could receive an energy budget, updated daily. In some cases, they no longer have to call the utility to report an outage—and, after an outage, the utility knows for sure that the customer's power is back on. Utility.com customers receive off-peak discounts for charging electric vehicles and just to use energy more efficiently. Utility.com even prepares an analysis that shows them how much energy each of their major appliances uses.

Utility.com believes that mitigating market power and making new technologies available are two of the most important ways for customers to realize the full benefits of competition. It enables customers to reduce costs and increases the number of choices utility.com can offer them. For example, utility.com's "ModernMeterTM" records consumption by time-of-use and collects additional information.

Savings: Utility.com's ModernMeter enables customers to respond to changing power market prices and to reduce costs by shifting load. This important opportunity to realize savings is not available to customers who do not have time-of-use or hourly meters. Even though market energy prices change hourly, those customers without ModernMeters are charged the same price per kilowatthour regardless of their time of use. The customer whose usage peaks at 6:00 a.m. pay the same price as the customer whose usage peaks at 6:00 p.m. However, with ModernMeters, utility.com customers are saving as much as several hundred dollars per year (typical savings are approximately $100 per year).

Choice: ModernMeters enable utility.com's customers to take advantage of innovative rate options, such as time-of-use pricing. Indeed, choice of pricing scheme is one of the few meaningful choices—increasing customer savings by up to 15 percent as compared to averaged rate pricing. Unlike with other products, electricity customers are not able to choose based on product quality or performance. The ability to choose a pricing scheme that best suits their pattern of use is one of the most useful choices a customer has. Without advanced metering, these choices are not available.

IV. MITIGATING MARKET POWER THROUGH DEMAND RESPONSE

Consumer demand response has great potential as a tool to mitigate wholesale price spikes. Such spikes typically occur during critical peak times when systems reserve margins are reduced. Regarding the Midwest wholesale price spikes in June 1998, a demand reduction of "as little as five percent could have reduced wholesale prices by 80 to 90 percent."[8] California's competitive wholesale market, the Power Exchange ("PX"), has exhibited similar price responsiveness to customer demand; on July 28, 1998, for example, wholesale prices increased by 83 percent from noon to 1 p.m., even though demand increased by less than two percent.[9] In an internal

[8] Robert Levin, Senior Vice President, New York Mercantile Exchange; testimony before the House Commerce Energy and Power Subcommittee, July 15, 1998.

[9] California Power Exchange, Historical Hourly Energy Prices, www.calpx.com, July 28, 1998.

study, the PX found that as little as a three percent reduction in peak demand could save almost $8 million per *day* during the summer critical peak period.[10]

Significantly, wholesale price spikes—in the absence of demand response—are not an isolated problem confined to events in the Midwest; deregulating markets around the world, including the United Kingdom and Australia, have experienced such wholesale price spikes.[11] Importantly, such price spikes are not any different from the regulated past; they simply allocate the cost of the peaking power plants—many are used less than 100 hours per year—to the hours in which they are used (under regulation, those costs are averaged over the year and paid by all customers, regardless of whether they are using energy at times of system peak). Moreover, every customer benefits from reductions in hourly wholesale prices, even though the peak demand reductions are provided by only a subset of customers.

Demand response has great potential to mitigate price spikes in the ancillary services markets as well. In California, such prices have reached $9,999 per MWh.[12] Utilities have always called on customer load reductions during critical peak times through curtailable and interruptible rates, resulting in thousands of megawatts of additional peaking power in the U.S.[13] Until recently regulators have placed little emphasis on demand-side bidding for ancillary services. However, the Office of Electricity Regulation ("OFFER") in the U.K. recently introduced proposed market changes that include making it easier for customers to bid ancillary services into the wholesale market. OFFER found that such bidding could improve market efficiency. Similarly, the Market Surveillance Committee of California's Independent System Operator has called for increased ability for market participants to bid into the ancillary services market;[14] demand-side bidding would be a simple and cost-effective source of ancillary services bidders.

Federal agencies have already called for further emphasis on demand-side activities as an important tool to mitigate market power. For example, the Deparment of Justice and Federal Trade Commission advocate time-of-use rates as one of the two most important ways of combating anti-trust issues and market power—the other being open transmission access.[15]

Customer Response to Price Signals: In contrast to some common beliefs, customers do change their demand for electricity depending on its price, just as they do for other products—making it an effective tool to mitigate the cartel-like market power of generators. Such price responses have been documented in a wide range of studies going back to the early 1980's. For example, Pacific Gas & Electric ("PG&E") conducted a series of studies of customer load shifting under voluntary time-of-use rates for all customer classes over several years beginning in 1983. All of these studies demonstrated significant load reductions during peak periods. Of particular note is the study of such rates for residential customers, where PG&E found an average 21 percent reduction in peak use among program participants.[16] This reduction is much larger than the amounts needed to influence significantly wholesale price spikes, which usage must be in the two to five percent price range to yield significant savings. EPRI surveyed scores of time-of-use pricing studies conducted during the 1980's; these studies found consistently that customers shift load to off-peak time periods in response to higher peak prices, with *residential* customers having the greatest inclination to shift load.[17] Now, with retail competition, competitive suppliers such as utility.com have the opportunity to promote such pricing to consumers.[18]

---

[10] *Analysis of Prices on August 3, 1998,* internal study by the California Power Exchange, March 1999.

[11] *The Impact of Market Rules and Market Structure on the Price Determination Process in the England and Wales Electricity Market,* Frank Wolak and Robert H. Patrick, June 1996

[12] *Preliminary Report On the Operation of the Ancillary Services Markets of the California,* Independent System Operator (ISO), Market Surveillance Committee of the California ISO, August 19, 1998.

[13] *Impact of Demand-Side Management on Future Customer Electricity Demand: An Update,* Electric Power Research Institute, September 1990.

[14] *Op. cit.,* Executive Summary Recommendations.

[15] Statement of A. Douglas Melamed, Principal Deputy Assistant Attorney General, Antitrust Division, U.S. Department of Justice, before Judiciary Committee, U.S. House of Representatives, June 4, 1996; Comments of the Federal Trade Commission, Texas Public Utilities Commissions, Summer 1998.

[16] *Load Shifting Under Voluntary Residential Time-of-Use Rates,* Douglas Caves et al., *The Energy Journal,* October 1989, p. 84.

[17] *Op. cit.*

[18] Many utilities have offered time-of-use prices to consumers, but the utilities have had little or no incentive to sign-up such customers as their profits were not affected either way. Retail competitors have the profit motive to seek out and educate customers.

Studies of real-time pricing have revealed similar and equally compelling results. Studies of large commerical and industrial customers found price elasticities as high as 0.35 (that is, a 3.5 percent decrease in consumption for every 10 percent increase in price).[19] Virginia Power found in its study that large commercial and industrial customers, "reduced their on-peak load during the 'critical' days by approximately 40%"![20]

As noted above, residential customers are especially price sensitive. Fewer, but some, real-time pricing studies have been conducted on these customers. The results are consistent with studies of time-of-use pricing for residential customers and real-time pricing for commercial customers. An example is American Electric Power's ("AEP") study. AEP used technology that automatically responded to price signals, making it as simple as possible for customers to benefit from real-time prices. An example is automatic adjustment of the thermostat in summer: 72 degrees for low electricity prices, 74 for medium, 76 for high, and 80 for critical peak prices. Peak demand reductions were dramatic: between 50 and 60 percent during peak times—and savings even more so: customers in the program saw bill savings of approximately $175 per year.[21]

VI. FEDERAL ROLE IN MITIGATING MARKET POWER

Regarding the role of the Federal government, utility.com supports a balanced approach. The States have made a good start in implementing retail competition. It is in the national interest, and therefore appropriate for Federal intervention, to ensure that all Americans have access to choice of electric supplier and that such choice is available in a free and open market; that there is a level competitive playing field. To balance the roles of the States and Federal government, utility.com supports the following:

1) Allow the States to continue to exercise local jurisdiction regarding the implementation of retail competition.
2) Provide the States with guidance regarding market power and other issues, including "model regulations" that ensure the mitigation outcomes described above. Even without legislation, the Federal Energy Regulatory Commission ("FERC") should develop model regulations for the separation of utility functions, the proper allocation of costs between competitive and regulated functions, low-cost and open access to detailed usage and pricing information by consumers, and adequate consumer protections, which model regulations the States could then use in their own deliberations.
3) Immediately address one of the critical cost barriers faced by competitive suppliers, which is the high transaction costs that are caused by the use of differing data formats and data transport mechanisms in each distribution utility service area. The States are already beginning to converge on the use of the Electronic Data Interchange formats of the Utility Industry Group. By adopting these formats, the FERC would provide additional leadership in achieving nationwide standards and, thus, reducing transaction costs. This would be similar to the leadership FERC showed in adopting the Gas Industry Standards Board ("GISB") and Open Access Same-time Information System ("OASIS") standards. Adopting such standards would also result in greater access to information by consumers.
4) Encourage the States through financial and other incentives to, first, provide consumers with the ability to choose their electric suppler and to, second, adopt regulations that mitigate market power and ensure a level competitive playing field. One such incentive would be a reciprocity rule for participation by regulated entities in the competitive markets of other states. Another would be preferred access to Federal renewable energy and energy research funding for those states allowing competition and implementing "level playing field" competition rules.

VII. CONCLUSION

Electric deregulation has great promise, as it has in other industries, for reducing prices and unleashing markets to develop innovative products and services. Market power—vertical, horizontal, and the cartel-like market power of power generators in

---

[19] *Customer Response to Real-Time Pricing in Great Britain,* Kathy King and Peter Shatrawka.

[20] *Variable Pricing Simplified,* John F. Caskey and Kurt W. Swanson, *Proceedings of the Annual International Distribution Automation/Demand Side Management Conference,* January 1992.

[21] *AEP Giving the Customer Control of the Meter, Quad Report,* Consumer Energy Council of America Research Foundation, April/May 1994.

the absence of demand response—threatens to reduce or eliminate the great potential for the benefits of competition. Utility.com urges the Federal Government to work closely with the states on model regulations, the promotion of advanced metering, and other methods to combat and mitigate market power.

Utility.com greatly appreciates the opportunity to comment.

Mr. STEARNS. Thank you, gentleman. Mr. Kurtz, welcome.

STATEMENT OF MICHAEL L. KURTZ

Mr. KURTZ. Mr. Chairman, thank you very much for your kind comments today. For the other Members of the committee, I am Michael Kurtz. I am the general manager for Gainesville Regional Utilities in Gainesville, Florida, a municipally owned utility.

I am here today on behalf of the American Public Power Association, representing the interests of over 2,000 public power systems serving one out of every seven electric consumers in the United States.

My remarks today summarize what is contained in our written testimony that has been submitted for the record. A discussion about market power is really a discussion of how to develop an effectively competitive marketplace.

As public power utilities purchase nearly 70 percent of the power to serve their ultimate customers, which is roughly 40 million people in the United States, the competitive future of the electric power industry is critical to us.

The conditions for competition in any market include the existence of many buyers and many sellers, freedom of entry and exit for competitors and access to available market information. However, when market power exists, none of these criteria can be fulfilled; and it will be difficult, if not impossible, to develop vigorous, competitive markets sustained over time. Yet high levels of market power are exactly what we have in our industry today.

The electric utility industry in the United States is dominated by private, vertically integrated, regulated monopolies with approximately 80 percent of the Nation's generation resources controlled by incumbent utilities and their affiliates. These same investor-owned utilities also own about 70 percent of the high voltage transmission lines for transmitting power throughout the United States.

Some have said that Congress and regulators should let the market determine the future structure. What these folks really mean when they say this is let the monopolies determine the market structure. We disagree. Competitive markets do not require heavy regulatory or antitrust scrutiny. But electricity is not a competitive market, at least not yet.

Some States that have taken steps toward addressing market power within their borders by requiring divestiture of generation by vertically integrated, industrial-owned utilities for example. While such actions are very important, there is still a clear Federal role in fostering competition that extends far beyond what individual States can accomplish.

Congress should address issues that are necessary for retail competition to work but which cannot be completely resolved by a single State or even a group of States. We need new, federally implemented market power protections because we are talking about transforming an industry made up of monopolies into an industry with many competing sellers and buyers.

In the case of electricity, the monopoly exists now, and the first requirement we have is to eliminate the monopoly structure to creation of a competitive market.

Addressing market power issues in this industry presents unique challenges. We believe FERC is best positioned to deal with these challenges. The first step that must be taken is to strengthen FERC's merger review process.

We believe mergers are a defense against the advent of competition, and today's merger mania is a direct conflict with the objective of creating competitive generation markets out of a highly concentrated industry.

If competition is the goal, then mergers need to be considered in a way that prevents them from setting back the emergence of competition. Newly proposed mergers should be denied unless the benefits to consumers can be shown to outweigh the adverse impact of eliminating a potential competitor from the marketplace.

Enhanced merger review authority would address further concentration of control of the Nation's generation resources. However, much must be done to address the existing market power problems that we have today. Those who control the market today will seek to maintain their control at the expense of potential competitors. That is why there must be strong structural remedies to guard against both new and existing market concentration. This includes FERC authority to intervene on their own initiative where market power develops and requires the divestiture of generation facilities when essential to address the abuse of existing market power.

In addition, FERC should be able to prevent increased concentration in power markets when generators are sold by one utility and acquired by another.

Controlling transmission market power is equally important. Private utilities that control vast amounts of the Nation's transmission systems have a long history of anticompetitive practices, despite congressional and regulatory actions to open up the Nation's transmission grid and produce a competitive bulk power supply market by the transmission owners to instill exercise control over their facilities in a way that favors their own generation resources, placing power generators and bulk power purchasers at a competitive disadvantage.

The only way to ensure that the Nation's transmission assets are managed in a way that facilitates the development of retail competition——

Mr. STEARNS. Mr. Kurtz, we just need you to wrap it up, if you would.

Mr. KURTZ. Yes, Mr. Chairman—facilitates the development of retail competition is to insure that the entire transmission system is in the hands of truly neutral entities that will treat all competitors the same.

It is important to understand that public power utilities will be restricted from participation in future independent transmission organizations, which we believe are important to have, unless Congress enacts legislation to address private use restrictions.

The Bond Fairness and Protection Act, a bill introduced in the House as H.R. 721 by Representatives Hayworth and Matsui, and

in the Senate, Senate 386, by Senators Gorton and Kerrey, is a fair and reasonable solution to the private use problem.

While this is not an issue within the committee's jurisdiction, we would welcome your support in seeing that it is resolved in a way that is fair to industry participants.

Mr. STEARNS. All the written statements will be part of the record, so I just urge the witnesses just to summarize if they could.

Mr. KURTZ. Mr. Chairman, I guess as a final comment, based on prior discussion, I do want to make sure that I state that APPA does support the North American Electrical Reliability Council consensus legislative language on reliability and urge Congress to incorporate that language in any restructuring package.

Thank you.

[The prepared statement of Michael L. Kurtz follows:]

PREPARED STATEMENT OF MICHAEL L. KURTZ, GENERAL MANAGER, GAINESVILLE REGIONAL UTILITIES ON BEHALF OF THE AMERICAN PUBLIC POWER ASSOCIATION

Introduction

Good Morning, Mr. Chairman and members of the subcommittee, I am Michael Kurtz, General Manager of Gainesville Regional Utilities in Gainesville, Florida.

Gainesville Regional Utilities, or GRU, is a municipal utility located in north central Florida. As a multi-service utility owned by the City of Gainesville, GRU offers electric, natural gas, water, wastewater, and telecommunications services to over 75,000 customers. We have 750 employees and an annual operating budget of over $180 million.

I am here today on behalf of the American Public Power Association (APPA). APPA is the national service organization representing the interests of over 2,000 municipal and other state and local government-owned utilities throughout the U.S. While APPA member utilities include state public power agencies, and serve many of the nation's largest cities, the majority of our members are located in small and medium-sized communities in every state except Hawaii. APPA members serve about fourteen percent of all kilowatt-hour sales to ultimate consumers in the U.S.

Market Power Policies Are the Foundation of Competition

Our association greatly appreciates the opportunity to testify before the subcommittee today regarding market power—an issue that is at the very heart of the debate over electricity industry restructuring. A discussion about market power policy is really a discussion of how to develop an effectively competitive marketplace. As public power utilities purchase nearly 70% of the power used to serve their ultimate customers—nearly 40 million people in the U.S.—the competitive future of the electric power industry is critical to us.

The key ingredients for effective competition in any market include the existence of many buyers and sellers, freedom of entry and exit for competitors, and access to available market information. However, the presence of market power and concentration means that none of these criteria can be fully achieved. In fact, true competition can be defined as the absence of market power, for when a competitor can also set the rules for the game, you cannot have true competition.

Yet, high levels of market power are exactly what we have in our industry today. The electric utility industry in the United States is dominated by private, vertically-integrated, regulated monopolies, with approximately 80% of our nation's generation resources controlled by incumbent utilities and their affiliates. These same investor-owned utilities also own about 70% of transmission lines of 138 KV or greater. Since such levels of market power and concentration are antithetical to competition, it is evident that we have a long way to go from where we are today to achieve structural competition in this industry.

Some have said that Congress and regulators should let the market determine its future structure. What they really mean is: let the monopolists determine the market's structure. APPA disagrees. Competitive markets do not require heavy regulatory or anti-trust scrutiny—but electricity is not a competitive market, at least not yet.

A transition from today's industry to a workably competitive marketplace will not just happen with the stroke of a pen signing state or federal restructuring legislation. As Federal Energy Regulatory Commission (FERC) Chairman James Hoecker has said, "Good markets don't just happen, they are developed, structured, created."

If we want to change the structure of this industry from monopoly to competition, the regulatory regime implemented by the federal government and the states must change as well. Not only do we need to guard against increased market dominance by today's incumbents, but it is also vitally important that we work to eliminate *existing* levels of market power that are certain to limit or inhibit the development of competition. A successful transition will require strong protections against market power abuses for consumers as well as rigorous oversight and enforcement that can transform the highly concentrated industry we have today into a vigorously competitive marketplace that offers meaningful benefits to electricity customers.

A Challenge for Congress

Some states have taken steps toward addressing market power within their borders. For example, the State of Texas is considering restructuring legislation that takes an important step toward addressing generation market power by mandating that a power generation company cannot own and control more than 20 percent of the installed generation capacity within a qualifying power region. While such actions, alone, are very important, there is still a clear federal role in fostering competition that extends far beyond what individual states can accomplish.

Ultimately, the role of federal legislation should be to facilitate state decisions to implement retail competition by addressing issues that are necessary for retail competition to work, but which cannot be completely resolved by a single state or even a group of states. Transmission in interstate commerce, for example, has been regulated by the federal government for decades. Regional generation markets extend far beyond state boundaries. As a practical matter, an individual state cannot regionalize the transmission grid and make it independent from generation, nor can states effectively address the generation market power of large multi-state or multi-national utilities. It is clear that these issues fall squarely within the purview of federal legislation.

Antitrust Laws Alone Are Not Enough

Why do we need new federally-implemented market power protections at all? Because we are talking about transforming an industry made up of state-sanctioned monopolies into an industry with many competing sellers. Existing antitrust laws are insufficient to support this market transformation. The antitrust laws focus on the correction of abuses of a competitive market structure by those who would attempt to create a monopoly. In the case of electricity, the monopoly has existed and been sanctioned by the state, and the first need is to eliminate the monopoly structure through *creation* of a competitive market. Since today's vertically-integrated utility companies will bring much of their existing market dominance into the restructured electricity industry of the future, there will need to be a regulatory agency that can detect and deal with abuses expeditiously in order to create and maintain an environment where competition can develop.

The problem of moving from a monopoly structure to a competitive market is made more complex by the importance and unique characteristics of electricity. Electricity, because of its unique public service element and pervasive nature is not like other infrastructure industries that have been deregulated. First, electricity is an essential service for which there is no substitute. Consumers need electricity at virtually all times for health and safety and to enable businesses to operate. Second, the provision of electric service is a "real time" business. With minor exceptions, electricity cannot be purchased in times of surplus and stored for times of potential shortage. This fact substantially increases opportunities for market manipulation. Third, the generation and transmission aspects of this industry are highly interdependent. The way in which generation facilities are operated can significantly affect the capacity of transmission lines to allow electricity to be imported into an area.

These factors—the lack of substitute products for many, the real-time nature of the business, and the interdependence of transmission and generation—combine to create numerous and difficult-to-detect opportunities to exercise market power at particular locations, during particular seasons or times of day. The fact that the transmission system is often controlled by the same vertically integrated utilities that also control substantial amounts of generation makes manipulation of the system virtually inevitable.

For these reasons, addressing market power issues in the electricity industry presents unique challenges related to recognizing and addressing market power abuses that we believe FERC is best positioned to deal with in a new competitive environment. To succeed, however, FERC's authority under the Federal Power Act must be expanded. While the antitrust laws should remain in effect to allow for longer-term

review, FERC also needs augmented authority to prevent anticompetitive activities from occurring, and to deal with them as they develop.

In the past, FERC has focused on regulating the prices of monopoly providers of wholesale electric service to protect consumers. This oversight was necessary because vigorous competition has not existed to control prices. For deregulation to work and consumers to benefit, we must be sure that competitive pressures will, in fact, exist. As we move to competitive markets, FERC's mission must change from setting reasonable rates to a responsibility to establish and maintain workably competitive electricity markets. This major change in focus will require clarifying the authority of FERC to take a number of actions to eliminate existing market power, to prevent the development of increased market power, and to act swiftly to prevent market power abuses.

Strengthened Merger Review—Consideration of the Effects on Emerging Competition

One important area where consumers need more protection relates to the merger review process. Rather than streamlining filing requirements, we should expand the scope of merger standards to ensure that today's mergers do not thwart tomorrow's competitive markets.

Concentration in ownership of electric resources in this country is increasing at an unprecedented rate as today's utilities engage in mergers to assure themselves a strong position in a competitive marketplace. The rapid pace of this trend toward consolidation is clear—since 1997, 33 mergers were proposed, and 22 completed. In contrast, only *nine* were proposed during the three years prior to that, 1994-1996.

Mergers are a defense against the advent of competition, and today's mergermania is in direct conflict with the objective of creating competitive generation markets out of a highly concentrated industry. If competition is the goal, then mergers need to be considered in a way that prevents them from setting back the emergence of competition. Toward that end, newly proposed mergers should thus be denied, unless the benefits for consumers not otherwise obtainable through other means are shown to outweigh the adverse impact of eliminating a potential competitor from the marketplace. Where significant concentration in ownership of generation already exists without a merger, FERC should have authority to require divestiture or to solve the problem by other means.

Early last year, Joel Klein, Assistant Attorney General for the Antitrust Division of the U.S. Department of Justice, addressed concerns about the impact of the increasing trend toward mergers in a presentation before FERC. He noted that, "...utilities may see this as a time when they have a window of opportunity in which to consummate mergers. Mergers with little immediate anticompetitive effect can nonetheless frustrate the emergence of competition. For example, incumbent dominant firms could pick off competitors in their infancy, or even before they become competitors...Missed opportunities for the emergence of competition at the outset of the transition are forever lost, with potentially substantial social costs."

These considerations have been echoed by FERC Chairman James Hoecker, who has explained, "While the Commission has aggressively encouraged a more competitive industry...it must ensure that mergers are not a vehicle to enhance market power."

Perhaps the best and most visible example of how today's merger proposals can lead to anti-competitive future market dominance is the proposed merger of American Electric Power Company (AEP) and Central and Southwest Corporation (CSW). The combination of these companies would create one private utility serving 4.6 million customers across eleven states, from Virginia and Michigan to Oklahoma and Texas, in a swath nearly spanning the entire Eastern Interconnection. It is no understatement to say that this merger would have far-reaching structural effects on bulk power markets. The merged company would control 38,000 MW of generating capacity, *an amount equivalent to nearly half of public power's entire installed capacity nationwide.* Moreover, if approved, it may well set off a chain reaction of new electric utility mega-mergers as smaller competitors seek to merge to match or exceed the size of the AEP-CSW combined company.

Such proposed mergers, if approved, will have the effect of predetermining the structure of the industry before state and federal regulators can implement a coordinated strategy to foster and enhance competition in the electric industry at the wholesale and retail levels. FERC and other regulatory agencies will have little power to turn back the clock to ensure a competitive environment, and the available options for defining and protecting the public interest will then be limited.

Because it is difficult at times to project what the impacts of today's decisions will be on an unknown and still-developing future market structure, APPA has suggested that a temporary moratorium on the largest electric mergers may be in order. In the absence of such a moratorium, it is important at a minimum to recog-

nize that today's merger decisions are integrally related to the goal of competitive markets-and that FERC's merger review process must begin to take this fact into account by fully examining the effect of proposed mergers on competition.

Continued Concentration in Generation Markets Will Prevent the Emergence of Competition

Enhanced merger review authority is designed to address further concentration of control of the nation's electric generation resources. However, much must be done to address the existing control over generation that is now largely in the hands of a relatively small number of privately-owned utilities.

State policies that restrict the amount of generation that can be owned by a single corporate entity are a very important step in the right direction—but the next step has to be to ensure that the company that purchases the generation, a company located over state lines for example—does not then exercise the generation market power that the state statute was designed to guard against. Simply transferring ownership from one entity to another does not do enough to achieve the goal of a less concentrated market that is more conducive to effective competition. Because electricity markets are regional, state restrictions on the ownership of generation can go a long way. Yet, unless each state throughout the entire region enacts the same type of policy, ownership of generation in that market will remain highly concentrated, and consumers throughout that region will face limited choices and pay higher prices for power.

For those who control generation now, you can be sure that the incentives exist to maintain this control as we move into a more competitive marketplace. Florida is seeing this first-hand as Florida Power & Light Company (FP&L) has launched a campaign to undermine potential competitors through strident opposition to the development of a new 500 MW wholesale plant that is to be jointly built by Duke Power Company and one of our members, New Smyrna Beach Utilities Commission. This plant meets widely-recognized power supply needs, was originally proposed back in 1997, and has been approved by the Florida Public Service Commission. FP&L's response to the potential competition has been to launch a legal strategy designed to bring the plant to a halt on the grounds that the power generated by the project is not needed. But while they are protesting that additional capacity is not needed, they just announced plans to expand their *own* generation capabilities by 20 percent—or 5,600 MW—over the next decade to meet projected future energy needs.

In this case, we have a state commission that has acknowledged a need for additional capacity to meet growing needs. We have a new power project proposed over two years ago that has been approved by the state commission. Then, the incumbent came out with its own plan to add new generation capacity in recognition of these growing demands. It then undertook a legal strategy designed to kill a potential competitor's plan to build a much-needed new plant that will help advance the competitiveness of the wholesale market, and bring prices down for consumers by providing a much-needed alternative source of power.

Clearly, as in this case, those who control the market today will seek to maintain their control at the expense of potential competitors. If our goal is a truly competitive marketplace, the face of today's monopolistic industry has to change. That is why there must be strong structural remedies to guard against both new *and existing* market concentration. This includes FERC authority to intervene where market power develops, and if needed, cause the corporate separation of generation from transmission when necessary to effectively address the abuse of market power. In addition, FERC should be able to prevent increased concentration in power markets when generators are sold by one utility and acquired by another. Without rigorous oversight— and divestiture authority as a last resort—market power abuses will choke competition before it can get a toehold in this industry. Again, because these markets are regional in nature, *federal* regulatory involvement is needed to protect consumers from the anticompetitive effects of market concentration throughout each region.

Market Power Resulting From Vertical Integration: Transmission Facilities Must Be Managed by Truly Neutral Entities

Private utilities that control vast amounts of the nation's transmission systems have a long history of denying municipal utilities access to their systems, or providing access at highly discriminatory rates and unfair terms. Despite congressional and regulatory actions to open up the nation's transmission grid and produce a competitive bulk power market through enactment of the Energy Policy Act of 1992 and the issuance of FERC Orders 888 and 889, private transmission owners continue to control essential transmission facilities in ways designed to prevent competition.

They are able to exercise control over these facilities to favor their own generation resources, placing power generators and bulk power purchasers, including public and consumer-owned utilities, at a competitive disadvantage.

One of the lessons of the Energy Policy Act is that the only way to ensure that the nations' transmission assets are managed in a way that facilitates the development of retail competition is to ensure that the entire transmission system is in the hands of truly neutral entities that will treat all competitors the same. Achieving this end will require enabling FERC to mandate that all transmission owners participate in an independent Regional Transmission Organization, and beyond that, to mandate divestiture of transmission from generation if necessary to prevent abuses. In fact, the Federal Trade Commission has proposed the latter to FERC, suggesting that transmission operations be separated from ownership of generating plants in order to eliminate the incentives that exist for transmission owners to favor their own economic interests and evade regulatory constraints.

An important example of recent transmission market power abuse occurred in the State of Wisconsin where Wisconsin Public Service Corporation and Wisconsin Power and Light Company used their control of significant transmission resources in the area to prevent one of our members, Wisconsin Public Power Incorporated (WPPI) and other smaller utilities from importing low-cost power from outside the state. In doing so, Wisconsin Power and Light even disregarded an earlier FERC directive to more equitably recalculate its available transmission capacity. In the end, not only did WPPI have to incur significant costs to gain access to the grid, but these private utilities enjoyed the benefits of their unfair actions for over a year before a FERC ruling brought these blatantly anticompetitive practices to an end.

Further evidence of abusive transmission practices can be seen in the June, 1998 price spikes in the Midwest, which caused spot market prices for electricity to soar from their normal level of about $25 per megawatt-hour to as much as $7,500 per MWh. In response, FERC Chairman James Hoecker later said that part of the answer to the kind of market confusion that occurred in the Midwest is the creation of independent system operators. This finding was amplified in the Ohio state regulators' report on this topic issued on November 19, 1998. The Ohio regulators contend that such price spikes are likely to recur unless institutions essential to a fair and competitive market are put in place. Large independent regional transmission organizations (RTOs), and separate independent power exchanges to provide real-time price information are the essential ingredients, they go on to explain.

In the end, some of the clearest evidence of such abuses can be seen in my own State of Florida. While the Energy Policy Act and Order 888 require that all transmission owners provide the same transmission service to their competitors that they provide to themselves, FP&L has tried to undermine wholesale competition and FERC's comparability requirements by refusing to provide network access to the Florida Municipal Power Agency, which represents 27 municipally-owned electric utilities in the state. Network transmission is a type of transmission service that provides greater flexibility than point to point service—and is a service that FP&L has always provided for itself. In response, FERC ruled that FP&L, under Order 888, was prohibited from refusing this service, and an antitrust lawsuit is now pending.

In terms of our transmission system, Florida is virtually an island unto itself with very little access to transmission capacity from outside the state. The majority of the transmission in our state is controlled by FP&L, which has been leading the opposition to statewide efforts to create an independent transmission administrator. Without FERC authority to mandate participation in independent transmission organizations, those who stand to gain from the status quo will continue to resist efforts to implement pro-competitive changes to allow for neutral transmission management.

The transmission solution most in the public interest is the creation of truly independent system operators or other institutions that are controlled by the public and operated on a not-for-profit basis. Such entities will not just be independent from market participants, but just as importantly, will be responsive to the concerns of all stakeholder groups. Such institutions, whether they simply control the transmission grid or own the transmission facilities, would enjoy the trust and confidence of the public, act in the public interest to pursue the most cost-effective solutions to deal with transmission constraints, and provide the lowest cost for consumers.

It is important to note that APPA does not support the development of private, investor-owned utility (IOU) affiliated or controlled Transcos as an answer to these problems. Despite the arguments advanced for private, for-profit, Transcos either affiliated or otherwise controlled by IOU generators, they will not achieve the desired end of a truly competitive, economically efficient, lower cost, fair and open transmission grid, and should be rejected. They will not be truly competitive because they

will lack the requisite independence from the parent corporation. They will not be economically efficient because they will not encompass a sufficiently broad geographic area. And, they will not produce a fair and open transmission grid because they will not incorporate the transmission facilities of publicly-owned and consumer-owned utilities. Higher costs will occur because the IOU owners of transmission hope to spin off their transmission facilities to newly created Transco companies at market value, not at book value. The owners of these facilities would reap windfall profits from such transactions that would be paid for by all electric consumers.

While not the optimal solution, APPA has not rejected the concept that large, private, for profit Transcos that have no affiliation—absolutely none—with generation and marketing interests could resolve transmission access and use problems in a fair and impartial manner. However, even these truly independent Transcos would be natural monopolies that must be overseen by FERC to prevent transmission market power abuses.

For all of these reasons, APPA strongly supports amendment of the Federal Power Act to make explicit the Commission's authority to mandate participation by transmitting utilities in properly structured RTOs. Once formed, it is equally essential that FERC have the authority and budgetary resources to oversee the conduct of these RTOs, and where necessary, modify their governance, structure and geographic scope to foster and sustain open, fair and competitive electric power markets.

In addition, it is important to note that public power utilities will be restricted from participation in future independent transmission organizations unless Congress enacts legislation to address the private use restrictions on our bonds. Municipal electric utilities that have issued tax-exempt bonds to finance their facilities under the old regulated monopoly framework face tough and potentially costly options for operating in the new restructured legal environment. If municipal utilities enter the competitive arena and violate the private use restrictions, tax-exempt bond financing on facilities utilized by private parties becomes retroactively taxable, leading to immediate bondholder lawsuits. The Bond Fairness and Protection Act, a bill introduced in the House as H.R. 721 by Representatives Hayworth (R-AZ) and Matsui (D-CA), and in the Senate as S. 386 by Senators Gorton (R-WA) and Kerrey (D-NE), is a compromise solution to the private use problem. If enacted, this legislation will accomplish two objectives: 1) Clarify existing tax laws and regulations regarding the private use rules so that they will work in a new competitive marketplace, and; 2) Provide encouragement for public power utilities to open their transmission or distribution systems, thereby providing choice to more consumers. These bipartisan bills have gained strong support in Congress, garnering 25 co-sponsors in the House and 15 co-sponsors in the Senate since introduction earlier this year. Congressional action in this area is urgently needed—particularly to address the needs of municipal systems in states that have already adopted restructuring plans.

Opposition to Stand-Alone PUHCA Repeal

APPA strongly believes that future repeal of the Public Utility Holding Company Act (PUHCA) must take place only in the context of a comprehensive electricity industry restructuring bill. PUHCA was enacted as a companion to the Federal Power Act in 1935 to, among other things, plug regulatory gaps created by multi-state holding companies that had—and still have—the ability and incentive to manipulate their books. Because of the interrelatedness of these statutes-any legislation regarding PUHCA should be fully coordinated with changes in the Federal Power Act to protect consumers.

Stand-alone repeal of the consumer protections afforded by PUHCA will unleash today's vast multi-state holding companies from public accountability before the structure of a competitive market is developed. It will enable today's monopolies to garner even greater amounts of market power through mergers and widespread diversification, and the existence of such significant concentrations of market power is sure to inhibit, if not prevent, the advent of structural competition in the electricity industry.

In addition, stand-alone PUHCA repeal presents unacceptable risks for captive electric consumers who do not have alternative service options if their utility's diversification efforts fail, or worse, non-regulated ventures are subsidized with captive ratepayer funds, and they are left to pay the price.

While many argue that PUHCA is an imperfect and perhaps outdated statute that is in need of reform, it is clear that the statute's goals of preventing market power abuses and harmful utility interaffiliate and diversification activities have great relevance to developing markets today. Even though the statute is ineffectively enforced by the Securities and Exchange Commission (SEC), it still provides valuable passive restraints on the formation of holding companies that extend the effect of

the law far beyond the 15 multi-state holding companies that now fall under its direct purview.

Far from being irrelevant, PUHCA has recently provided channels through which to challenge the anti-competitive and anti-consumer effects of the proposed AEP/CSW merger. APPA and the National Rural Electric Cooperative Association have filed a Motion to Intervene with the SEC regarding the proposed merger on the grounds that it has failed to meet three important tests of PUHCA, which require that the merged company, 1) have its assets physically interconnected or capable of physical interconnection; 2) be confined in its operations to a single area or region, and; 3) not be so large as to impair the advantages of localized management, efficient operation and the effectiveness of regulation. These requirements have helped bring to light meaningful questions about the market dominance the merger would create, and its potentially devastating effects on the emergence of competition across several regions of the country.

Reliability

The reliability of the integrated and interdependent electric system is extremely important to health and safety and the viability of our economy. In the monopoly paradigm of the past, reliability has been protected by mutual back-up arrangements among utilities, and a regional reliability council structure. However, this system of cooperation and mutual assistance lacks both clearly enforceable rules and sanctions and competitively neutral entities to determine and enforce the rules on a non-discriminatory basis. This voluntary approach to reliability will not work in an increasingly competitive market. Reliability rules and their enforcement can have significant competitive impacts, and it is essential that reliability be maintained and enhanced in the transition to competitive markets.

APPA supports the North American Electric Reliability Council's (NERC's) consensus legislative language on reliability, which will create a self-regulating reliability organization that would be overseen by FERC. The mission of this new organization would be to ensure that reliability rules are applied equally to all electricity providers. APPA urges Congress to incorporate this language in any future restructuring package.

Market Information

Restructuring legislation must also account for the importance of market information in a competitive marketplace. Private utilities' efforts to maintain confidential rate agreements threaten to place serious restrictions on the availability of market information in the electricity industry. Market information is necessary to guard against abuse of market power in the form of predatory pricing, and to ensure that retail customers do not pay disproportionate rates due to deals made to secure lucrative commercial or industrial contracts. Informed consumer choices depend on the availability of market information—it is a vital component of any competitive market.

Protections Against Anti-Competitive Affiliate Transactions

Another role for FERC in protecting consumers should involve the prevention of preferential transactions between affiliates, including discriminatory access to essential information, below cost transfer pricing, or other anticompetitive arrangements.

If there is any doubt that anti-competitive affiliate deals will occur with seriously anti-competitive results, consider a recent case where a utility instructed its power marketing affiliate to check its OASIS Web site the following day at a certain time. At the appointed time, the utility posted an offer to sell a certain quantity of installed capacity and energy for a specified term at a particular price. The utility posted the offer for thirty minutes, and its affiliate requested all of the megawatts posted. In response, FERC issued a clarification on its rules barring affiliate favoritism, and said, "Such a tip is market information that a utility cannot selectively disclose to an affiliate."

New competitors will not stand a chance in a restructured electricity industry if the relationships between utilities and their affiliates are not guarded carefully.

Conclusion

In the end, market power policy is comprised of the many elements that are required to create the market structure upon which competition can be developed and sustained. Without strengthening merger review, prohibiting undue concentration in the ownership of generation, providing for neutral management of our nation's transmission resources, ensuring that reliability rules are enforced fairly, ensuring the availability of market information, and preventing harmful interaffiliate transactions, we believe that federal legislation to provide for competition in this industry

is certain to fail. The consequences to consumers will be severe—and the overriding goal of providing lower costs and more choices in the electricity industry will never be realized.

APPA is a member of a broad coalition that includes organizations representing large and small utility consumers, small business and environmental interests that has been working to educate policymakers about the importance of market power issues in the debate over electricity industry restructuring. Our coalition, the Consumers for Fair Competition, represented here on the panel today, has developed a detailed proposal related to many of the issues I have raised today that we would be glad to share with you, Mr. Chairman, as your subcommittee proceeds with its review of market power issues.

Again, thank you for the opportunity to testify before you here today, and allowing us to share our view that market power policy is the key to a successful transition to effective competition in the electricity industry.

Mr. STEARNS. Okay. I thank the gentleman.

Ms. Mary Elizabeth Tighe, your opening statement for 5 minutes.

STATEMENT OF MARY ELIZABETH TIGHE

Ms. TIGHE. Yes, sir. Good afternoon, Mr. Chairman and members of the subcommittee. I am Mary Beth Tighe, vice-president of regulatory affairs for Statoil Energy. Statoil Energy is one of the largest independent power marketers in the United States.

We have ownership interests in existing and planned generating plants, and as the first company licensed to sell competitive electricity in the State of Pennsylvania, we serve retail customers in both Pennsylvania and New York.

Statoil Energy is also a board member of the Electric Power Supply Association, a trade association that represents competitive power suppliers, both power marketers and developers of competitive power plants. While I am here today representing Statoil Energy, my statement reflects the consensus views of the EPSA membership.

First, let me propose a definition: I would define a market as consisting of many sellers and many buyers who are trading a commodity that has a value to the participants. If you accept my definition, then you are likely to accept my proposition that a market does not exist if there are few sellers. Therein lies my biggest concern.

If we allow unbridled market power to be exercised by any participant in these marketplaces, we will have created not a market, but rather an unregulated monopoly.

Congressional action is critical to the development of truly competitive markets. If the progress toward competitive markets is generated by piecemeal restructuring with inconsistent policies and guidance, the possibility of market power abuses increases, and with it, the need for direct and intrusive regulation.

If Congress helps create a sound framework for a competitive, national marketplace, you limit the likelihood of anticompetitive abuses and the long-term need for intensive regulatory intervention, and you will increase the ability of the market to benefit all consumers.

In the electric power industry, market power flows from the electric utilities' historic position as a regulated monopoly with an exclusive franchise territory. The advantages of incumbency accrue at all levels in the chain through a control of key physical assets and

products, control of relationships with customers and control of entry by new competitors.

Some concerns will surface within the marketplace traditionally regulated by the FERC such as interstate transmission rates and access, and other issues will be confined to the markets that have historically come under the auspices of the State.

Areas where concerns about market power are likely include first transmission access. Notwithstanding FERC's commitment to competitive markets, the incumbent utility monopolies have in many cases superior access terms and conditions of use of the transmission system than their competitors.

The second area where market power exists is in the relationship between power generation and retail sales. In many States, the traditional patterns of ownership which have concentrated generation assets in a relatively few companies, many of which also continue to be the holders of critical transmission assets. This traditional pattern remains unchanged, and this affects the ability of competitive wholesale and retail marketers to secure power supplies for their customers.

A third area where market power is manifest is in brand names and customer information. During the decades that government policy excluded competitors, the incumbent utility has had a unique opportunity to build brand name identity and goodwill with customers.

Market power can also impact competitive generation services and retail sales. Competitive services related to the sale of electricity, including metering, billing, and customer care, are essential to establishing customer relationships and offering innovative services and products. These services have been and continue in many States to be the exclusive domain of the incumbent utility.

The exercise of market power in any of these areas denies consumers the benefits of competition. Any effective response to market power must recognize the split jurisdiction of power, of power markets.

FERC must have the authority to investigate and remedy possible market power abuses. In addition, the commission needs to be empowered to assist the States in circumstances where the States are unable to address these issues either because of statutory limitations or due to the fact that the root causes of these concerns may be interstate.

Elements of an effective strategy at the Federal and State level include, first, to separate competitive and noncompetitive services. It is not unusual to encounter a utility transmission company with its competitive wholesale power supplier, regulated retail utility, and unregulated retail marketer operating from the same offices and using the same operating personnel and customer information systems.

Appropriate separation and meaningful standards of conduct governing the relations and transactions between the monopoly and its competitive affiliates should be adopted and enforced.

Second, equip the regulators with the tools to detect and eliminate market power. Market power does not advertize itself. Detection requires monitoring and monitoring requires access to data. Regulators should have the authority to prohibit participation in

the market by those with market power and impose limitations on ownership or use of essential resources.

Third, develop a transmission grid built around the principles of transparency, comparability, and independence. The management of the transmission system and the question of comparable access are critical to the development of competitive markets in the mitigation of market power.

Fourth, conduct careful analysis of the impacts of mergers on the marketplace, including the effects on retail markets and the emerging markets.

Fifth, provide incentives to encourage divestiture. While we do not advocate mandatory divestiture of generation assets, we do recognize that divestiture of some or all of the utility's generation assets may have benefits, and these have been listed in detail in my written testimony.

We encourage the subcommittee to craft language that focuses on market power. We note that the administration proposal includes legislation specifically targeted at market power.

I am wrapping up, sir.

Mr. STEARNS. Okay.

Ms. TIGHE. This language represents a strong starting point, and we commend it to the committee. It is, however, impossible to divorce this part of the legislation from other decisions taken with respect to restructuring. We need to deal with the issues related to transmission grid and reliability.

We need to continue to believe that a competitive national marketplace, driven by a date certain, is a central element to the most effective strategy to remedy market concerns. Giving consumers a choice of their electricity supplier is the most effective and ultimate consumer protection and will go a long ways to dealing with market power abuses.

Thank you.

[The prepared statement of Mary Elizabeth Tighe follows:]

PREPARED STATEMENT OF MARY ELIZABETH TIGHE, VICE PRESIDENT, REGULATORY AFFAIRS, STATOIL ENERGY, INC.

Good morning, Mr. Chairman and members of the Subcommittee. I thank you for your kind invitation to speak to you today. My name is Mary Elizabeth Tighe and I am Vice President of Regulatory Affairs for Statoil Energy, an integrated energy company engaged in the production and sale of natural gas and electricity-based products and services throughout the United States. Through its two FERC-licensed power marketing subsidiaries, Statoil Energy Trading, Inc. and Statoil Energy Services, Inc., Statoil Energy is one of the largest wholesale power marketers in the United States. Statoil Energy also has ownership interests in existing and proposed electric generation projects. Statoil Energy was the first Electric Generation Supplier licensed to competitively sell electricity in Pennsylvania. The company serves retail electric customers in Pennsylvania and New York.

Statoil Energy is also a board member company of the Electric Power Supply Association (EPSA), a trade association that represents competitive power suppliers, both marketers and developers of competitive power projects. While I am here today representing Statoil Energy, my statement reflects the consensus views held by the EPSA membership.

OVERVIEW

There is no competition without competitors. To smooth the way to customer choice and competitive markets, lawmakers and regulators must address several key transition issues. Competitive markets won't "just happen." They demand effort and oversight. Creating effective competition requires regulators to be vigilant on

mergers and on affiliate codes of conduct, and to consider incentives to encourage divestiture.

Congressional action will be critical to the development of truly competitive markets. If the progress towards competitive markets is driven by piecemeal restructuring with inconsistent policies and guidance, the possibility of market power abuse increases, and with it, the need for direct and intrusive regulation. If the Congress assists the creation of a sound framework for a competitive national marketplace, you limit the likelihood of anti-competitive activities and the long-term need for intensive regulatory intervention.

ADDRESSING INCUMBENTS' MARKET POWER

Beginning in the 1980s, as a result of the Public Utility Regulatory Policies Act (PURPA), a new generation of power plant developers began competing to win the right to build generating facilities and supply electricity to utilities. This began the process of restructuring the electric utility industry, culminating today in the evolution of competition and more customer choice.

The benefits of competition are simple: replacing the monopoly with multiple competing sellers will lower costs and increase innovation. But merely authorizing competition does not produce effective competition. Decades of government protection have given utilities the advantages of incumbency. If these advantages have the effect of excluding or discouraging competitors, the utilities will continue to have market power, or the ability to skew market prices.

Introduction to Market Power

Market power exists when a firm (or a group of firms acting together) can control the price of its product or service for a sustained period, undercutting potential competitors or increasing profits without experiencing an unacceptable loss of sales. Courts often define market power as the ability to control prices or to exclude competition.[1] Evidence of market power is evidence of too few competitors.

There are two types of market power—vertical and horizontal.

Vertical market power: Traditional utilities are the only "vertically integrated" members of the electricity industry. This means they are involved in every aspect of the industry: generation, transmission, distribution and aggregation. Because two of these functions, transmission and distribution, remain monopolies, there is the risk that utilities can leverage their control over monopoly assets to gain advantages in competitive markets. For example, utilities that control the transmission and distribution highways can grant special access to their own competitive products to the detriment of others. This practice is known as the exercise of "vertical market power," because it is facilitated by the utility's vertically integrated status.

Horizontal market power: A separate problem is that in any one industry sector, such as generation or transmission, the utility might play a dominant role. In a given region, for example, a utility might own 80 percent of all the generation assets able to operate during a particular hour. This dominance might exist for innocent reasons; for example, the utility has had a historical obligation to build sufficient generation to meet its load. However, it can be detrimental to competition for one company to control a large share of the market. This control is known as "horizontal market power" and can enable the generation owner to keep prices above normal, competitive levels. Some people argue that, in time, the incumbent's share of the market might diminish as other entrants build power plants. Yet, because construction takes several years and the success of entry attempts is hard to predict, there is cause for concern.

In the Electric Utility Industry, Market Power Flows from the Utility's Historic, Regulated Advantages

The advantages of incumbency accrue at all levels: control of key physical assets and products, relationships with customers and entry barriers facing competitors.

Transmission-derived market power: Some people argue that transmission owners no longer can favor their own generation facilities because FERC rules now require owners to share their facilities with competitors on a nondiscriminatory basis. This is an oversimplification that too often has been proven untrue. For example, the transmission system was designed to support generation facilities currently owned by utilities, rather than subsequent facilities built by generation competitors. Similarly, transmission facilities serving an area may be limited so that the entity controlling generation facilities within the constrained area (or load pocket) will have market power.

---

[1] See, e.g., *United States v. E.I. du Pont de Nemours & Co.*, 351 U.S. 377, 39192 (1956).

Notwithstanding FERC's commitment to competitive markets, comparable access to the transmission grid by all market participants has yet to be achieved. Today, the incumbent utility monopolies have, in many cases, superior access, terms and conditions of use of the transmission system. With few exceptions, the utilities or their agents determine who gets access to the transmission system. The transmission owner can utilize the system on a more advantageous basis than their competitors, affording themselves greater flexibility and profitability. For example, the transmission utility decides who will be curtailed and for how long when it determines such action is needed for reliability. Transmission utilities determine the terms and conditions on which new generators may connect to the transmission grid.

Power-generation and retail sales: If newcomers to the retail electricity sales market cannot build generation rapidly or obtain a contractual right to generation owned by others, they cannot compete in a retail market. Building plants may take a few years and will involve practical obstacles, such as limited access to generation sites and time-consuming siting requirements. During this interim period, the incumbent could strengthen its hold on the market.

Regulators will have to remain wary about the concentration of generation ownership and the possibility of price manipulation, especially during periods of peak demand. In a number of states, competitive restructuring has been accompanied by the divestiture of generation assets, which has generally broadened the base of ownership. In many states, however, the traditional patterns of ownership, which have concentrated the ownership of generation assets in relatively few companies (many of which continue to hold the critical transmission assets), remain unchanged. In these circumstances, it will be essential for the federal and state regulators to reduce barriers to entry and guarantee comparable access to the grid for new market participants.

Brand names and customer information: The risks of market power are not confined to the control of physical facilities. During the decades that government policy excluded competitors, the incumbent utility had an opportunity to build *brand name identity* and *goodwill* with customers. Moreover, the incumbent utility has acquired over the years an unmatched knowledge of its customers' consumption patterns.

Competitive generation services and retail sales: Competitive services related to the sale of electricity (including metering, billing and customer care) are essential to establishing customer relationships and offering innovative products and services. If the incumbent utility controls access to the customer through monopoly provision of these services, the retail market cannot develop.

SOLUTIONS TO THE MARKET POWER PROBLEM

It's not enough to declare that electricity markets are open and that certain functions such as generation are competitive. The new markets must be structured with rules that will assure that competition will be robust and work to the benefit of consumers. Solutions to market power are simply an effort to create, preserve or strengthen competition. Key solutions include:

1) Separating competitive and noncompetitive services: In each market, the incumbent utility has built-in advantages. To prevent these built-in advantages from distorting future competition, the following conditions, at a minimum, should prevail:

- competitive services must be provided by an affiliate that is separate from the provider of noncompetitive services, with no opportunity for preferential treatment of the affiliate;
- the noncompetitive affiliate (such as the transmission or distribution company) should not share essential resources (e.g., personnel or equipment) with its competitive affiliate; and
- the appropriate standards of conduct governing the relations and transactions between the monopoly and its competitive affiliates should be adopted and enforced.

In particular, a utility should not be able to share with its affiliate any customer information—gathered during the decades of utility monopoly—unless the information is made available to all (with the customer's permission) on the same terms.

2) Equipping the regulators with the tools to detect and eliminate market power: Like any improper activity, market power does not advertise itself. Detection requires monitoring, and monitoring requires access to data. For example, to guard against the manipulation of commodity prices and availability, regulators might require market participants to supply, on a confidential basis, information on transmission and generation availability during all hours of the year, on hourly and

seasonal prices, or on buyers' bids and sellers' offering prices. As is the case with stock and commodity exchanges, this information must be readily available at a low cost to regulators and, where appropriate, members of the public. Finally, regulators should have authority to prohibit participation in the market by those with market power and impose limitations on ownership or use of essential resources.

3) Developing a transmission grid built around the principles of transparency, comparability and independence: On April 22, this Subcommittee held a hearing on the issues of transmission management and reliability. As we have already stated, the management of the transmission system and the question of comparable access are critical to the development of competitive markets and the mitigation of possible market power. During the hearing two weeks ago, Trudy Utter from Tenaska Power Marketing, Inc., testified on the need for federal legislation and remedies to ensure full and true comparability. Rather than to repeat this testimony here, we commend and endorse the views represented by Tenaska, which is also an EPSA member, power marketer and competitive power plant developer.

4) Employing a careful analysis of mergers: Once rare, utility mergers are becoming increasingly popular strategies to position for retail competition. Yet, their effect on retail competition is not well understood. What we do know, however, is that mergers can provide a unique opportunity to assess the competitive implications of industry consolidation on retail competition. Federal and state regulators must ensure that their approval of utility mergers enhances, rather than dampens, emerging markets.

Regulators must pay special attention to the effect of mergers on new retail markets, such as the markets for retail sales, metering and customer service. Some mergers may result in innovative products, such as combined electricity, gas and telecommunications products. Regulators must ensure, however, that merged companies are not allowed to exercise the rights to government-created benefits, such as control of needed transmission or distribution rights-of-way, to the detriment of other market participants.

5) Considering incentives to encourage divestiture of key assets: Divestiture means selling off some portion of a utility's assets to a third-party buyer. Discussions of divestiture center on separating the utility's competitive and noncompetitive services so that the utility cannot use its control of its noncompetitive assets, such as the transmission system, to gain undue advantages for its competitive assets, such as its power plants. The most intense scrutiny has focused on generation divestiture, in which the utility sells some or all of its generating assets but remains in the transmission, distribution and aggregation businesses. Alternatively, if a utility wants to be a generation services company, it would divest its transmission and distribution assets.

The ownership of generation assets going forward is a key decision in the process of restructuring. Some states are considering an "in between" approach, in which a utility's generating plants are deregulated but not sold or transferred to an independent party. In this instance, if the utility is not restructured to separate competitive from non-competitive services, the utility retains a generating monopoly, only now one that is no longer regulated.

While EPSA does not advocate mandatory divestiture of generation assets, it does recognize that divestiture, or the spin-off of some or all of a utility's generation assets, can offer important benefits. These include:

- elimination of vertical market power;
- reduction in horizontal market power by replacing a single generation monopoly with multiple competing generators;
- accurate establishment of a market value for the generation assets for purposes of calculating stranded costs; and
- potential collection of a sale price in excess of net book value, thereby lowering stranded costs, reducing the transition period and improving the customer's ability to obtain lower prices for electricity services in a competitive marketplace.

State and federal policymakers should consider the implementation of appropriate incentives to encourage divestiture. In addition, it may be appropriate to give FERC the authority to order partial asset divestiture as a response to the illicit exercising of market power.

A COMMENT ON THE REPEAL OF PUHCA

In addition to the questions of market power and merger policy, the Subcommittee requested input with respect to the possible repeal or reform of the Public Utility Holding Company Act (PUHCA). Many allege, and we generally agree, that PUHCA is an ineffective response to the threat of market power from large electricity hold-

ing companies and that the law unnecessarily complicates the financial management and opportunities of a number of companies. This Subcommittee is currently considering a comprehensive effort to restructure the electric power industry. Clearly, such a bill will present an opportunity to update and improve the regulatory tools that ensure competitive markets. In such a bill, we would recommend the adoption of language that would reform PUHCA.

While we agree that PUHCA reform is necessary, we do have concerns that reform legislation may create an unintended burden on a number of companies that are today largely unaffected by PUHCA's regulatory structure. It is important that the "reform" of PUHCA not inadvertently ensnare new companies and market participants in a web of unnecessary regulatory oversight. As this Subcommittee develops legislation, we would like the opportunity to work with you to prevent this outcome.

LEGISLATIVE RECOMMENDATIONS

As our testimony makes clear, concern over the possible abuse of market power is not confined to one sector of the industry or one aspect of the marketplace. These issues can surface at many points in the market path from generator to consumer. Some concerns will surface within the marketplace traditionally regulated by FERC (e.g., interstate transmission rates and access). Other issues will be confined to aspects of the market that have historically come under the control and scrutiny of the states.

Any effective response to market power must recognize this jurisdictional split. FERC must have the authority to investigate and remedy possible market power abuses. The commission, in addition, needs to be empowered to assist the states in circumstances where the states are unable to address these issues, either because of statutory limitations or due to the fact that the root causes of these concerns may be interstate. The Administration proposal, unveiled last week, includes legislation specifically targeted at market power that follows this model. This language represents a strong starting point and we recommend it to the Subcommittee.

While we encourage the Subcommittee to craft language that focuses on market power, it is impossible to divorce this proposal from other decisions taken with respect to industry structure. As mentioned earlier and discussed during hearing two weeks ago, reforms in the management of the transmission grid and grid reliability are important. In addition, we continue to believe that a competitive national market for electricity, driven by a federally authorized "date certain," is a central element of the most effective strategy to remedy concerns about market power abuse. As long as there are captive customers, cross-subsidization and cost-shifting can occur. Give consumers a broad right to choose their power supplier and a whole host of problems are solved.

We appreciate this opportunity to testify before the Subcommittee on policies related to market power, mergers and PUHCA. We look forward to working with the Subcommittee as you craft legislation that can create a robust, competitive national marketplace for electricity.

Mr. STEARNS. I thank the lady.

Mr. Kanner, your opening statement for 5 minutes.

STATEMENT OF MARTY KANNER

Mr. KANNER. Thank you, Congressman Stearns. I'd like to commend Chairman Barton and Chairman Bliley for their vision in recognizing the importance of these issues and scheduling today's subcommittee hearing.

The potential benefits, both economic and consumer benefits, of vibrant competition in the electric utility industry are real and substantial, but those benefits won't be realized if the issues raised today are not addressed in Federal restructuring legislation.

I would urge the members of the subcommittee to remember that the goal of restructuring legislation is not deregulation for its own sake but, rather, the advancement and achievement of effective competition. If we address the market power issues, then consumers can realize those benefits.

If this were an infant industry, market forces alone might be sufficient to discipline anticompetitive practices, and I can envision that in-State where market forces are the sufficient check on potential anticompetitive practices, but it is important to remember the starting point.

Incumbent utilities have significant advantages that accrue as a result of the historic regulatory system. If this were a race, when the starting gun sounds, we can't allow for some parties to start that race at the 80-yard line in a hundred-yard sprint while others are told to start at the beginning and run the high hurdles.

Concerns about market power are not hypothetical. The problems are real and the problems are substantial. Congressman Burr, you asked what quantifies a dominant player in the electric utility industry. I will tell you that the economists for California's investor-owned utilities determined that those companies would possess undue market power even after divesting themselves of 50 percent of their thermal generation within the State. So it depends on the level of concentration and the size of the market.

Similarly, regulators in Ohio determined that last summer's price spikes in the Midwest were exacerbated by the lack of effective competition and tools to respond immediately to demonstrated anticompetitive behavior.

While States can take steps to reduce the opportunities for market power abuses, States cannot address these issues on their own because power markets are regional in scope and much of the utilities' assets and operations are outside the scope of a single State review.

If competition is the objective of restructuring legislation, then we must address the significant potential for anticompetitive practices and consumer abuses in the transition to a fully competitive market.

All utility mergers should be screened for their impact on the emerging market. Tools must be established to mitigate undue market concentration. Operation of the transmission grid should be vested with independent bodies that have clear authority to control, maintain, and upgrade the system. Rules must be established to prevent utilities from unduly favoring and underwriting their unregulated affiliates, and the liability concerns should not be exploitable for commercial gain.

On repeal of the Public Utility Holding Company Act, we do not believe that repeal can occur on a stand-alone basis because it runs counter to the agenda for restructuring legislation. Stand-alone repeal will have substantial anticompetitive and anticonsumer repercussions and retard the development of a vibrantly competitive market.

However, PUHCA could be repealed in a restructuring bill if coupled with the market power protections that we have outlined in our testimony.

The Consumers for Fair Competition has assembled provisions to address these concerns, and these provisions were assembled from previously introduced legislation. We look forward to working with the members of the subcommittee in incorporating these provisions in any restructuring bill that you move through the Congress.

Thank you, Congressman Stearns, for this opportunity to testify.

[The prepared statement of Marty Kanner follows:]

PREPARED STATEMENT OF MARTY KANNER ON BEHALF OF CONSUMERS FOR FAIR COMPETITION

Mr. Chairman, members of the Subcommittee, I am Marty Kanner. I am testifying today on behalf of the Consumers for Fair Competition, a coalition of small business interests, power marketers, consumer and investor owned utilities, small and large electric consumer representatives, and environmentalists.[1] While the interests of these organizations in the broader restructuring debate are diverse, we are unified in the belief that consumers must be afforded protections against anti-competitive behavior during the transition to a competitive marketplace. Moreover, it is clear that effective competition will not emerge and be sustainable if market power issues are not adequately addressed.

Consumers for Fair Competition (CFC) was formed to advance policies necessary to promote effective competition and to provide the intended consumer benefits of lower rates, increases in efficiencies and innovation, and diversity of supply options. The coalition believes that the intended benefits of competition will not reach consumers if steps are not taken to address the market dominance of incumbent utilities. The coalition commends you, Mr. Chairman, for recognizing the importance of these issues and scheduling today's subcommittee hearing.

Since its inception, the coalition has focused only on market power issues. CFC developed a core set of market power principles by which the group would judge any restructuring proposal (the principles are attached as Appendix A). In addition, CFC has mobilized support against stand-alone repeal of the Public Utility Holding Company Act (PUHCA), testified before the Senate on PUHCA repealed, and worked with members of Congress to craft solutions to potential market power abuse.

Over the past six months, members of CFC have worked to assemble model legislation on market power issues. The coalition turned to existing legislation for the many good solutions to market power problems that are already in the public domain. I have attached this model legislation to my testimony, and encourage its consideration by the subcommittee.

Fostering Competition

Some in the restructuring debate argue that any action to address market power concerns is unneeded and inappropriate—that you shouldn't re-regulate in deregulation legislation. They assert that market power problems do not exist in the electric utility, or that market forces will resolve them if they do exist.

First, it should be remembered that, given the continued monopoly status of transmission and distribution, continue regulation is necessary. Second, I would urge you to remember that the goal of restructuring legislation is not deregulation, but rather effective competition. Market forces cannot mitigate anti-competitive practices if a dominant player can block or discriminate against new market entrants. Competition in the electric utility industry will not occur simply by declaration. As noted by Federal Energy Regulatory Commission (FERC) Chairman Hoecker: "Good markets don't just happen, they are developed, structured, created."

Incumbent utilities did not earn their market advantages through innovation, efficiency and market savvy. Rather, these advantages are an outgrowth of the historic regulatory system. As you know, historically the vertically integrated industry was considered a natural monopoly and regulated as such. Consequently, levels of market concentration and corporate behavior that would raise concerns in other industries were accepted as outgrowths of this "natural monopoly." Utilities received exclusive retail monopoly franchises, and vertical integration—with a single company serving as the sole provider of all three functions of the electric utility industry (generation, transmission and distribution)—was accepted and encouraged.

If this were an infant industry, market forces alone might be sufficient to discipline anti-competitive practices. However, the starting point is vitally important. The historic structure of the electric utility industry provides incumbent electric

[1] American Public Power Association, Electricity Consumers Resource Council (ELCON), Enron, Friends of the Earth, Madison Gas & Electric, Missouri River Energy Services, National Association of State Utility Consumer Advocates (NASUCA), Northern California Power Agency, Ohio Municipal Electric Association, Transmission Access Policy Study Group (TAPS), Wisconsin Public Power Inc., National Alliance for Fair Competition (members include: Air Conditioning Contractors of America, Air Conditioning & Refrigeration Wholesalers Association, Associated Builders and Contractors, Independent Electrical Contractors, Petroleum Marketers Association of America, Plumbing, Heating and Cooling Contractors—National Association, National Electrical Contractors Association, Sheet Metal and Air Conditioning Contractors National Association)

utilities with unearned advantages that are inconsistent with, and contrary to, the creation and continuation of an effectively competitive market. If competition is the objective of restructuring, then any restructuring legislation must address the significant potential for anti-competitive practices and consumer abuses in the transition to a fully competitive market.

As noted economist Alfred Kahn put it: "what is the best possible mix of inevitably imperfect regulation and inevitably imperfect competition?"

Anti-Competitive Impacts of Market Power

Given the structure and operations of the electric utility industry, the opportunities for market power abuse are pervasive—and often subtle.

In the electric generation market, market boundaries are determined largely by transmission constraints—physical limitations on transfer capabilities. Within these boundaries, it is common for an incumbent utility to own more than 40 percent of the generating capacity—a concentration level at which economists assume an ability of a dominant firm to set and control prices above what would occur in a truly competitive market.

It is not simply total installed generation capacity that is important. Because of the physical nature of system operations, some generation assets hold disproportionate strategic value—their operation may increase the carrying capacity of a vital transmission link, provide peaking capacity that largely sets market prices, or provide "high-value" ancillary services. Ownership of these facilities provides opportunities for anti-competitive behavior in a sub-market of the industry. Thus, while a generating company may possess a small percentage of total generation in a given geographic market, it may dominate a particular product sub-market within the region.

Despite a significant increase over the past few years in the construction of non-utility generation, such facilities still represent a comparatively small fraction of total generation. Moreover, potential developers of such facilities often face a diverse set of entry barriers. Frequently, incumbent utilities own the prime real estate for plant location (often adjacent to existing plants). In addition, in many states, only utilities themselves can request and receive the necessary regulatory permits.

The vertical integration of most utilities provides another set of opportunities for anti-competitive practices. Despite enactment of the Energy Policy Act of 1992 and subsequent issuance of FERC Orders 888 and 889, incumbent utilities can manipulate their ownership and control of transmission facilities to favor their own generation, block power sales by other entities, reduce total supply of generation (and thereby increase prices) and even block development of new generation. This becomes particularly acute at the growing number of constrained transmission interfaces.

Incumbent utilities are also able to leverage their regulated operations to advantage their unregulated affiliates. Proprietary information on customer load patterns and energy needs can be transferred exclusively to affiliate power suppliers. Similarly, utilities can refer customers to their affiliates for installation and maintenance of HVAC equipment and other demand-side measures. Finally, utilities can cross-subsidize their unregulated affiliates through the market value of using the utility's name, logo or personnel, or by misallocating overhead expenses from the affiliate to the regulated utility.

These are not hypothetical concerns. The problems are real and pervasive:

- Economists for California's investor-owned utilities determined that those companies would possess undue market power even after divesting 50 percent of their thermal generation within the state.
- Last summer's price spikes in the Midwest were exacerbated by the lack of effective competition and the lack of tools available for immediate response to demonstrated anti-competitive behavior, according to a study done by the Public Utility Commission of Ohio.
- Price spikes of 3500% in California's ancillary services market were caused by undue market power according to filings by two California investor-owned utilities.
- Rules for the PJM-ISO on governing how power plants tie into the grid discriminate against new market entrants, include unreasonable delays and are seen as a significant barrier to entry.
- ISO-New England's congestion management system was approved by a governance structure that the FERC has rejected as inequitable.
- The independent governing board for the PJM-ISO complained to FERC that the utility-controlled operating committee was allowing the transmission system to be manipulated for anti-competitive purposes.

- Utilities have been cited for disclosing critical market information to affiliates—in violation of "Chinese walls" required by FERC.
- Utility commissions, small businesses and new market entrants have uncovered instances in which utilities have unfairly cross-subsidized their affiliates.
- Power marketers, new market entrants, utilities and others argue that transmission owners have gained competitive advantages by withholding transmission capacity for the stated purpose of native load service or reliability.

Some cite the public disclosure of such abuses as "proof" that the current regulatory system adequately policies the market. However, many market participants and observers believe these instances are simply the, albeit sizable, tip of the iceberg—with multiple undetected anti-competitive practices occurring for each uncovered or acknowledged infraction.

States Cannot Adequately Address Market Power Issues

If it is accepted that steps are needed to assure the transition to a competitive market, it is important to ask: Can these problems be addressed by state regulators?

CFC believes that a thorough analysis of this question concludes that state action alone is not adequate to assure the development and continuation of a competitive market.

While states can play an important role in addressing potential anti-competitive and anti-consumer behavior, states alone cannot prevent competitive abuses:

- Power markets are regional in scope. The party engaging in anti-competitive actions in state X, may be located in state Y—outside the legal authority of state X's regulatory commission.
- States that have adopted retail competition have generally relinquished regulatory control over generation within the state. If problems later emerge in the operation of in-state generation, the commission may have no authority to address the problem.
- Many utility operations span multiple states. Often state regulators have limited access to the books and records of out-of-state operations of these utilities.
- Control and operation of the nation's transmission network is largely outside the scope of state regulation. While states can mandate or encourage in-state utilities to join regional transmission organizations, states cannot approve or oversee such entities—only FERC can.
- Several states have encouraged utility divestiture of generation, but such action is usually done as a means of valuing assets for stranded cost determinations—not for market power mitigation (in fact, such divestitures have largely left intact the same level of generation market power). Once divested, the state has no control over the operation of the divested generation.
- States can have a parochial interest in protecting an in-state company—even if such action is contrary to the interests of a competitive regional market.

As you know, the restructuring bill pending in Texas includes several provisions intended to address market power. However, while that action is noteworthy, the situation in Texas is unique—because of ERCOT—and cannot be easily replicated in other states for the reasons cited above.

Federal Action Needed to Facilitate Competitive Markets

Concluding that state authorities are insufficient to address market abuses does not in itself justify *new* federal authorities. An affirmative answer to that question must be based on a rigorous assessment of existing federal statutes.

First, it must be remembered that the current federal regulatory structure—like state utility regulation—was established for the old regulated monopoly framework. Actions are needed to adapt that system to the desired competitive end-state.

Today, FERC can deny a merger request or market-based rate application, or find that a utility fails to meet the "just and reasonable" test. However, the conditions that FERC can impose are not expressly delineated. Moreover, the Commission does not have clear policy guidance—other than vague "public interest" language—in determining what outcomes and objectives should be promoted.

Consumers for Fair Competition has identified several areas where FERC's regulatory mission and authorities must be altered to promote effective competition.

1. Mergers—As you know, utilities are merging at an unprecedented rate. Since the mid-1990's, 24 utility mergers have been completed, and 12 additional mergers are pending at FERC. While mergers can bring efficiencies of size and scope, improved efficiencies and reduced rates are frequently *not* the result. According to a recent report by Anderson Consulting, less than half of the energy utility mergers over a 10 year period were profitable for shareholders. More troubling for the future of the competitive market, these mergers are often a mechanism for further consolidation of resources that potentially increases anti-competitive opportunities.

Under the Federal Power Act, FERC has clear authority to review and condition proposed utility mergers. In addition, the Department of Justice and Federal Trade Commission can review utility mergers under the anti-trust statutes. However, these agencies have largely deferred to the FERC in reviewing mergers.

CFC does not believe that FERC merger review authority should be eliminated, with utility mergers left exclusively to Justice and FTC. The complexities of the electric utility industry argue for merger review by a regulatory organization intimately familiar with the industry. If FERC review were eliminated, that expertise (and staffing) would need to be added to the anti-trust agencies. Second, mergers often include conditions that require on-going regulatory oversight. The anti-trust agencies are not regulators capable of such on-going review.

For these reasons, CFC believes that, along with FTC and Department of Justice authorities left intact, continued FERC merger review is essential. Moreover, CFC believes that FERC's merger authority should be revised in several ways. First, the FERC standard for reviewing mergers should be expressly expanded to make competitive impacts the primary "screen." If a merger advances competition—either on its own or through FERC-imposed conditions—it should be approved; if it potentially frustrates competition, it should be rejected. Second, certain types of utility mergers and acquisitions—"convergence" mergers between electric and gas utilities and mergers between utility holding companies—can be structured to escape FERC review. These regulatory gaps should be closed. Third, mergers should be scrutinized to ensure that they will produce continuing net consumer benefits, not simply advance company empires and egos.

CFC has coupled provisions from the Bumpers-Gorton and Administration bills to accomplish these objectives.

2. Market Concentration—As noted above, as a result of the regulatory structure of the past, some incumbent utilities unduly dominate their regional energy market. But this problem goes beyond "incumbent" utilities. As a result of some utility asset divestiture plans, some non-utilities have acquired the market dominance once held by the utilities. In New England, a non-utility acquired all the generation assets of the largest regional utility. The price spikes in California cited above were due to market power exerted by the new owners of the incumbent utilities' divested assets. While the general energy market in California may not be unduly concentrated, many of these sub-markets—which in turn set the price for the general energy market—are overly concentrated.

If the market is unduly concentrated, market discipline cannot check anti-competitive behavior, the dominant market player can exact excessive profits, and consumers will suffer.

Economists have long established that regulation is needed as a substitute where competition does not or cannot exist. The question is what form of regulation is most appropriate to redress undue market concentration and restore competitive equilibrium?

Some have argued that continued application of the anti-trust laws is sufficient. Consumers for Fair Competition disagrees. While continued application of the anti-trust laws is appropriate, the short-comings of this approach must be recognized:

- Anti-trust laws address explicit anti-competitive behavior; not existing structures that are inconsistent with competition
- Anti-trust actions occur after competitive harm has occurred,
- Actions under the anti-trust laws are time-consuming and costly. For new market entrants, the delay of relief can be a prescription for business failure.

We cannot wait for market failure to take the steps needed to foster competition.

Various policy options exist to address undue market concentration. Consumers for Fair Competition supports the approach taken last Congress by Representatives DeLay and Markey. In that legislation, FERC is given the authority and direction to mitigate undue market power. When FERC finds such anti-competitive concentration, it is authorized in clear terms to reimpose rate regulation and deny the dominant market player the use of market-based rates. FERC is also authorized to require the entity to participate in a regional transmission organization that will eliminate vertical market power. Only if these tools are inadequate to combat the market dominance is FERC authorized to order asset divestiture. As a practical matter, we do not believe that FERC will likely need to exercise its divestiture authority, but having this ultimate sanction—the club in the closet—ensures that the less intrusive steps proposed in the DeLay-Markey bill function properly.

The denial of market rates is the central feature of this provision. First, it is proper economic practice. Market-based rates can only produce efficiencies and competitive pressure to lower costs if there is, in fact, a competitive market. In the absence of such competition—when one entity or group of entities dominant a market—then market rates will simply produce monopoly profits. Second, the denial of market-

based rates will compel utilities to submit their own market power mitigation plans in order to regain market-based rates. It should be noted that this same doctrine was used in deregulating the rail industry under the Staggers Act, where rate regulation is imposed on any shipper that dominates a market.

3. Transmission Operation—The vertical control of the electric utility industry is largely incompatible with the needs of the competitive market. Despite the progress that has been made as a result of the Energy Policy Act and FERC Orders 888 and 889, the nation's transmission grid fails to operate on a non-discriminatory and comparatively neutral basis and fails to fully promote or support a competitive generation market.

Today, each utility's transmission network, despite a certain amount of reliability coordination, is operated largely as if it were an isolated island. This unnecessarily constrains and contracts markets. By acting in its own self-interest, owners can:

- reserve the majority of transmission capacity for its own use (which use is not effectively subject to FERC comparability standards),
- operate the system to favor its own (or affiliates) generation or retail marketing operation,
- utilize reliability objectives—such as congestion management and emergency curtailment procedures—in a discriminatory and anti-competitive manner, and
- fail to make transmission investments that would alleviate congestion and promote the competitive market.

CFC believes that ownership and control of the nation's transmission system must be transferred to truly independent regional bodies with strong authority to operate, plan, maintain and expand the transmission system. Such action will:

- ensure all market participants have equal and nondiscriminatory access to transmission services;
- facilitate competition by eliminating rate pancaking and expanding the physical scope of markets;
- eliminate opportunities for the exercise of vertical market power,
- reduce horizontal market power in generation by expanding the size of the power market (and thereby reducing the comparative generation ownership of each regional participant), and
- insure that transmission additions occur to eliminate bottle-necks, improve reliability and facilitate construction of new generation.

CFC believes that the language contained in the DeLay-Markey bill can be refined to achieve these aims.

4. Utility Affiliate Transactions—The former monopoly status of utilities (and continued monopoly operation of distribution systems) provides anti-competitive opportunities in the ways that utilities and their unregulated affiliates interact. Utilities can:

- provide affiliates with preferential and discriminatory access to important information on power and non-power sales opportunities;
- purchase goods or services from affiliates at above-market rates;
- provide affiliates with goods or services at below-market rates;
- perform various administrative services for the affiliate that are charged to the parent company or regulated utility; and
- provide the affiliate, at no cost, with the considerable market value associated with the company name and logo.

Such actions harm consumers by having captive distribution system ratepayers cross-subsidize the utilities unregulated affiliate venture. Such actions also harm competitors by providing utility affiliates with an unearned and anti-competitive advantage.

Congress recognized these concerns and adopted several provisions in the Telecommunications Act of 1996 to ensure proper affiliate relations. These provisions establish ground rules for inter-affiliate relations and establish an enforcement mechanism. CFC urges adoption of parallel provisions in any electric utility restructuring bill.

5. Reliability—As long as parties with a commercial commodity interest retain exclusive control of system reliability, opportunities will exist to manipulate legitimate reliability objectives for commercial advantage.

Establishment of FERC oversight of mandatory reliability requirements (and the security coordinators that do the implementation) will both promote a reliable electric system and competitively neutral reliability standards. The members of CFC support the consensus proposal developed by the North American Electric Reliability Council (NERC) and urge its adoption.

Stand-Alone PUHCA Repeal

You will hear assertions that the Public Utility Holding Company Act (PUHCA) is no more than an out-dated statute intended to protect investors from fraudulent securities practices. Don't be misled. Congress enacted PUHCA as a sister statute to the Federal Power Act. PUHCA establishes passive restraints on the structure of the electric utility industry in order to mitigate the formation and exercise of market power, preclude practices abusive to captive consumers and competitors, and facilitate effective regulation.

Rather than ushering in competition as repeal proponents would have you believe, stand-alone repeal will have substantial anti-competitive repercussions and retard the development of a vibrantly competitive market.

The members of CFC recognize that the current administration of PUHCA has clear limitations. However, its underlying purposes—the mitigation of market power and prevention of anti-competitive and anti-consumer utility diversifications—remain relevant today. CFC believes that PUHCA could and should only be repealed as part of a broad electric restructuring bill that contains the market power provisions outlined above.

Conclusion

Effective, sustainable competition will not automatically emerge in the absence of regulation. Regulation can—and should—be relaxed for those markets and products that are subject to effective competition. However, given the historical operation and structure of the electric utility industry, competition in all sectors and regions will not occur simply by legislative declaration.

To promote the transition to competitive electric markets, steps must be taken to remove the vestiges of the former regulatory system and its accumulated opportunities to exercise market power. Once done, the transition to competition can occur and the need for active regulation will subside.

Mr. STEARNS. I thank the gentleman.

Mr. Kahn, you are recognized for 5 minutes for your opening statement.

STATEMENT OF JOSHUA A. KAHN

Mr. KAHN. Thank you. Good morning, Mr. Chairman, members of the subcommittee. My name is Joshua Kahn, and I am vice-president for service and control systems of Kahn Mechanical Contractors, a family owned and operated heating, ventilation and air conditioning contractor located in Dallas, Texas.

On behalf of our company, its 21 employees and the primarily small and medium-sized businesses that make up the heating, ventilation and air conditioning, or HVAC, contracting industry across this country, I would like to thank you for calling this hearing. The issue of market power, and in particular, the impact of market power abuses on small business, is of vital important to my industry.

I appear before you today as a member of the Air Conditioning Contractors of America, ACCA, a nonprofit trade association representing firms that design, install, service and repair HVAC equipment for residential, commerical, and industrial customers.

With roots dating back to the turn of the century, ACCA is the largest organization of HVAC contractors in the Nation. ACCA represents more than 9,000 member-companies through national membership, as well as local members through 68 State and local chapters.

For the past several years, ACCA and its members have taken every available opportunity to speak to Members of Congress, their staffs, State regulators and others regarding the need to address the potential for market power abuses in Federal legislation.

We have been joined in this effort by many other building trade associations in our industry and related industries through the National Alliance for Fair Competition. I would also wish to express ACCA's support for the testimony being offered by the Consumers for Fair Competition, a larger, more diverse coalition, of which ACCA also participates.

Initially, let me say that ACCA and its members are foursquare behind congressional efforts to enact comprehensive Federal legislation, to open retail electricity markets to competition. We believe in competition and the lower costs and innovation it brings, but I am also here to caution you that in order for the benefits of competition to be realized, Congress must act to prevent cross-subsidization and other forms of anticompetitive conduct.

While I am neither a lawyer nor economist, I am glad to have this opportunity to share my views on why cross-subsidization, preferential deals for utility affiliates, and other anticompetitive conduct harm HVAC contractors, other small businesses, and eventually, the consumer.

Cross-subsidization and other anticompetitive conduct harms competition in small business. As the electric power industry is restructured, utilities will operate in a range of regulated and unregulated businesses. In my home State of Texas, there are numerous examples of utilities entering unregulated businesses, such as HVAC contracting. To gain market share, they often resort to uneconomic strategies.

In one instance, the utility affiliate was selling consumer service contracts at 20 to 30 percent below market rates. While ACCA is not opposed to utility diversification, without appropriate safeguards there are increased incentives to cross-subsidize regulated and unregulated activities. This will harm captive consumers, as well as the promises of open competition.

Therefore, it is critical that appropriate safeguards be in place to prevent utilities from using their regulated operations to unfairly create economic advantages for their unregulated lines of business.

One of the greatest challenges we face is the absence of sufficient safeguards to prevent utilities from using assets paid for by the rate payers to cross-subsidize unregulated affiliates through the use of service tools, trucks, personnel, and overhead that is misallocated from the affiliate to the regulated business. Transactions between the affiliate and the regulated business that are not conducted at arms length provide additional opportunities to shift resources.

Another significant problem is the shared use of the utility's name and logo by the unregulated affiliates. This strategy transfers significant marketing value to the unregulated affiliate by creating an incentive to overinvest in the brand name of the regulated business. This overinvestment enhances the marketing power of the unregulated affiliate at the rate payers' expense. The Federal Trade Commission economic staff has noted this problem repeatedly in comments to State regulators.

Finally, marketing leads, load patterns, preferential referrals to utility affiliates and other information acquired due to monopoly status are being provided to unregulated affiliates on a preferential

basis. This use of the last vestiges of monopoly power works to the severe disadvantage of fair competition.

This threatens competition and is particularly harmful to small business in two ways. First, the ability to cross-subsidize and provide other unfair competitive advantages to unregulated affiliates means that the affiliate is not bearing its own costs of providing service.

Because the affiliate is not carrying its own weight, it can provide service at less than the cost of an otherwise equally efficient and often more experienced competitor. While this may initially lower costs for consumers, it inevitably results in driving independent competitors from the market.

When this happens, prices will start to rise again, as there is no longer any choice for competitive price pressure to keep the costs down. Less choice and higher prices are exactly the problems that increased competition is supposed to prevent. As I said earlier, I am not an economist, but I do know that subsidies are bad for competition.

Second, while cross-subsidization and other anticompetitive practices are bad for everyone up and down the food chain, the impact will be greater for small business. Absent safeguards to prevent anticompetitive conduct, small businesses lack the resources to fight unfair competition and will be among the first to suffer.

Let me be clear. Small business does not need, nor do we seek, special protection from competition. We stand ready to compete and do so every day in a highly competitive industry of large and small companies. What we do ask, however, is that the utilities do not subsidize their affiliates with resources paid for by the rate payer.

One quick sum comment about this. Many members have asked about the application of existing antitrust law. I am not a lawyer, but I do understand that the existing laws do not cover the new fact patterns that give rise to the competitive abuses encountered by small business.

More importantly, Congress needs to be mindful that the aggrieved parties are small businesses which invariably lack the necessary resources to prosecute an antitrust action which will last for several years. Utilities have deep pockets and can prolong such suits until the meager resources of affected small businesses are exhausted.

One very final comment to drive my point home. How would you feel as a Congressman if you were required to make a monthly contribution to a candidate seeking to take your place in Congress? That is exactly how I feel when I pay my utility bill, knowing that these dollars can be used to compete unfairly against me.

[The prepared statement of Joshua A. Kahn follows:]

PREPARED STATEMENT OF JOSHUA A. KAHN ON BEHALF OF THE AIR CONDITIONING CONTRACTORS OF AMERICA

Good morning Mr. Chairman and members of the Subcommittee. My name is Joshua Kahn, and I am Vice President for Service and Control Systems of Kahn Mechanical Contractors, a family owned and operated heating, ventilation and air conditioning ("HVAC") contractor located in Dallas, Texas. On behalf of our company, its 21 employees and the primarily small and medium-sized businesses that make up the heating, ventilation and air conditioning ("HVAC") contracting industry across this country, I would like to thank you for calling this hearing. The issue of market power, and in particular the impact of market power abuses on small busi-

ness, is of vital importance to my industry as the Congress considers federal legislation to restructure the electric power industry.

I appear before you today as a member of the Air Conditioning Contractors of America ("ACCA"), a nonprofit trade association representing firms that design, install, service and repair heating, ventilation, air conditioning and refrigeration (HVACR) equipment for residential, commercial and industrial customers. With roots dating back to the turn of the century, ACCA is the largest organization of HVACR contractors in the nation, representing more than 9,000 member companies through national membership as well as local members served through 68 state and local chapters. For the past several years, ACCA and its members have taken every available opportunity to speak to Members of Congress, their staffs, the Administration, state regulators and others regarding the need to address the potential for market power abuses in federal legislation to restructure the electric power industry. We have been joined in this effort by many other building trade associations in our industry and related industries through the National Alliance for Fair Competition. I also wish to express ACCA's support for the testimony being offered today by the Consumers for Fair Competition, a larger, more diverse coalition in which ACCA also participates.

Initially, let me say that ACCA and its members are foursquare behind congressional efforts to enact comprehensive federal legislation to open retail electricity markets to competition. We believe in competition and the lower costs and innovation it brings. But, I am also here to caution you that the benefits of competition will not be realized if Congress does not act to prevent cross-subsidization and other forms of anti-competitive conduct. While I am neither a lawyer nor economist, I am glad to have this opportunity to share my views on why cross-subsidization, preferential deals for utility affiliates, and other anti-competitive conduct harm HVACR contractors, other small businesses, and eventually, the consumer.

Cross-subsidization and Other Anticompetitive Conduct Harms Competition and Small Business

As the electric power industry is restructured, utilities will operate in a range of regulated and unregulated businesses. In my home state of Texas, there are numerous examples of utilities entering unregulated businesses such as HVACR contracting. To gain market share, they often resort to uneconomic strategies. In one instance, the utility affiliate was selling consumer service contracts at $15 to $40 below market rates. While ACCA is not opposed to utility diversification, without appropriate safeguards there are increased incentives to cross-subsidize regulated and unregulated activities in ways that harm to captive consumers as well as the promises of open competition. Therefore, it is critical that appropriate safeguards be in place to prevent utilities from using their regulated operations to unfairly create economic advantages for their unregulated lines of business.

One of our greatest challenges we face is the absence of sufficient safeguards to prevent utilities from using assets paid for by the ratepayer to cross-subsidize unregulated affiliates through the use of service tools, trucks, personnel or overhead that is misallocated from the affiliate to the regulated business. Transactions between the affiliate and the regulated business that are not conducted at arms length provide additional opportunities to shift resources.

Another significant problem is the shared use of the utility's name and logo by the unregulated affiliates. This strategy transfers significant marketing value to the unregulated affiliate and, as the Federal Trade Commission economics staff stated, creates an incentive to cross-subsidize by over-investing in the brand name of the regulated business in order to enhance the marketing power of the unregulated affiliate.

Finally, marketing leads, load patterns, preferential referrals to utility affiliates and other information acquired due to monopoly status are being provided to unregulated affiliates on a preferential basis. This use of the last vestiges of monopoly power works to the severe disadvantage of fair competition.

This threatens competition and is particularly harmful to small business because:

Bad for Competition: The ability to cross-subsidize and provide other unfair competitive advantages to unregulated affiliates means that the affiliate is not bearing its own costs of providing service. Because the affiliate is not "carrying its own weight," it can provide service at less than the cost of an otherwise equally efficient and often more experienced competitor. While this may initially lower costs for consumers, it inevitably results in driving independent competitors from the market. When this happens, prices will start to rise again, as there is no longer any choice or competitive price pressure to keep the costs down. Less choice and higher prices are exactly the problems that increased competi-

tion is supposed to *prevent*. As I said earlier, I am not an economist, but I do know that subsidies are bad for competition.

Bad for Small Business: While cross-subsidization and other anti-competitive practices are bad for everyone up and down the food chain, the impact will be greater for small businesses. Absent safeguards to prevent anti-competitive conduct, small businesses lack the resources to fight unfair competition and will be among the first to suffer. Let me be clear, however. Small business does not need nor do we seek special protection from competition. We stand ready to compete, and do so every day in a highly competitive industry of large and small companies. What we do ask, however, is that the utilities do not subsidize their affiliates with resources paid for by the ratepayer who, I might add, includes us.

Federal Legislation is Essential to Address Market Power Abuses

Although some states have enacted affiliate transaction rules through their state public utility commissions ("PUC's") to address cross-subsidization and other forms of anti-competitive conduct, we need help from you.

First, federal legislation to restructure the electric power market will accelerate the development of unregulated affiliates in several states. In many instances, the authority of state commissions to access the books and records of out-of-state affiliates is quite limited. Access to books and records of both regulated and unregulated businesses are essential to identify cross-subsidization. Yet, statutory limits on the authority of state PUC's to audit and sanction companies engaged in anti-competitive practices is hampering effective enforcement. Such authority must be granted at the federal level.

Second, the regulation of anti-competitive conduct in interstate commerce has long been the role of the federal government. While antitrust laws should certainly continue to be applied, additional federal authority is necessary to create an environment in which competition can prosper. As a small businessman, I can tell you that the antitrust laws alone will not get the job done. Very few small businesses can afford the time or tremendous cost to bring an antitrust case against a major corporation. Congress recognized this reality as recently as 1996 in the Telecommunications Act that included provisions to address concerns about market power and anti-competitive practices by the Bell companies.

Finally, ACCA believes that there is an important federal interest in having uniformity in this area. It has frequently been said that electricity doesn't stop at state borders. Neither will the competitive practices of multi-state utility holding companies that will have an even greater multi-state presence than they do today. Federal legislation must recognize this fact if it is to be meaningful in curbing anti-competitive conduct.

Addressing Anti-competitive Conduct in Federal Legislation

This brings me to my final point—what should Congress do to ensure effective competition and the unintended consequences to small businesses?

ACCA endorses the approach put forward by Consumers for Fair Competition that includes the essential ingredients for promoting competition and safeguarding against anti-competitive conduct. Comprehensive federal legislation should include: (1) separation of unregulated affiliates or subsidiaries; (2) a requirement to maintain separate books and records with proper cost allocation mechanisms and public access to such records; (3) require arms length transactions between utilities and their affiliates; (4) prohibit preferential treatment of affiliates, including marketing leads; (5) prohibit transfers of tangible and intangible assets that are not fully compensated; and (6) prohibit cross-subsidization. Of course, these provisions must be joined with effective an enforcement mechanism, either through FERC, another federal agency or by empowering the states.

Conclusion

As Congress contemplates the framework for competition that would be established through comprehensive federal legislation, I urge the members of this Subcommittee to enact appropriate safeguards to govern affiliate transactions. With these safeguards, the best competitors—whether large or small—will flourish, and consumers will benefit.

I thank you again for allowing me to appear before you today and would be happy to answer any questions you may have.

Mr. STEARNS. I thank the gentleman.

And Mr. Rose, you are recognized for 5 minutes for your opening statement.

STATEMENT OF KENNETH ROSE

Mr. ROSE. Thank you, Mr. Chairman. My name is Kenneth Rose. I am with the National Regulatory Research Institute at Ohio State University.

I should state most of our funding comes from the public utility commissions around the country, and I do not speak for any of those commissions or the National Association of Regulatory Commissioners or Ohio State University. I am speaking for myself today.

What I would like to concentrate on is the definition of market power. Basically, if you want to have to sum it up in one line, it is what every supplier wants, but won't admit it to you.

It is something that anybody wants, and in fact, that is the great genius of Adam Smith's book 200 years ago was to recognize that everybody was after that, but that there was a self-correcting process that prevented anybody from being able to acquire market power and charge something other than what was the market price.

The problem market power comes in is when something goes wrong with that self-correcting process. The invisible hand isn't working anymore, to use Adam Smith's term. Actually, I thought we were all going to have to swear on the wealth of Nations when I was watching earlier proceedings.

If you have to sum it up in one sentence—I have this in my testimony—is that market power in the electric supply industry is the ability of suppliers or a group of suppliers to raise and maintain the price that is significantly above a competitive level.

There are two words I would like to just point out there: one is, maintain it. You have to be able to do it for an appreciable amount of time before it really rises to a level that somebody ought to get concerned about. Also, it has to be significant. There are probably many players in many markets today that have some level of market power, but we are not too concerned about it because it is relatively small and the overall impact on the economy is relatively small. We don't bring the full force and weight of the Federal Government on every small amount of market power.

We also say, I actually wasn't going to bring this analogy up because I thought it may not be polite to raise it, but since the Chairman raised it about the definition of pornography, I would just like to posit it. It is probably actually the opposite.

Market power is probably the opposite of that old saw about pornography. Pornography is something you can't define, but everyone knows it when they see it or it is the eyes of the beholder, I suppose.

Market power is just the opposite. I can define it fairly specifically. I can give you a formula to tell you what it is. It is P minus MC divided by P, with P being the price, MC being the marginal cost, basically meaning it is a percentage that you can mark up above marginal cost.

But the problem is I am not always sure if you are actually looking at it when you see it. That is the problem. It is almost the opposite of that. It would be very precisely defined. Every intermediate textbook has a fairly precise definition of what market

power or monopoly power is, but it is very, very hard to look at that and tell you exactly what it is.

Part of the problem is how do you define the market. How big is the market; what product is it that you are looking at; what is the marginal cost; do we have the information to be able to do that. All those questions come into play when you are trying to decide whether or not there actually is a presence of market power.

Now, there are two different types of market power that you heard a lot about, of course. There is the vertical market power which is basically transmission and distribution. We have heard a lot about transmission, but I probably come more from a State perspective. So I would like to just add that distribution is also a problem, but when they are actually not allowing fair access to their systems and horizontal being within the same market, say in generation, for example.

Because entry is so important, I would just like to give two examples of where entry may be an important consideration here then. Well, two examples I should say, but we can't go into a lot of detail. One is really a Federal issue at the transmission level, a State issue at the distribution level, and that is access that you have heard a lot about already today. Independence and access to transmission and distribution is key. It is critical in this; and everybody, even utilities, will recognize this.

Let me just point out, though, that having an RTO that allows access isn't the whole thing. It is also having access back to the retail customers, really is what the concern is; and that is really the key.

What I see is what FERC has been doing is an evolving process, going from monopolies being the worst case down through the functional unbundling of 888, down to the RTOs of transferring the operation to somebody else who doesn't have an interest in the commodity and then perhaps eventually even some utilities talking about a fully independent transmission system.

I will skip the horizontal market power. I realize I am going to get the cane in a second here. So let me just say that——

Mr. STEARNS. I just appreciate the gentleman would summarize.

Mr. ROSE. Yes. At the State level all that really matters from a market power perspective is that the States are not forgotten, that they play a key role in working with the Federal regulators in order to be able to monitor the markets and take action if they view anything; and I would argue also that any comprehensive reform at the Federal level that you do that you get the structure of the market correct. That is key.

[The prepared statement of Kenneth Rose follows:]

PREPARED STATEMENT OF KENNETH ROSE,[1] THE NATIONAL REGULATORY RESEARCH INSTITUTE, OHIO STATE UNIVERSITY

Due to a combination of technological change that makes competitive generation possible and belief that competition is a better regulator than government, state and federal authorities have been moving toward allowing competitive generation markets to develop. However, competitive markets do not spontaneously erupt out of

[1] The views and opinions expressed here are the author's and do not necessarily state or reflect the views, opinions, or policies of The National Regulatory Research Institute (NRRI), Ohio State University, the National Association of Regulatory Utility Commissioners (NARUC), or funding organizations of the NRRI.

nothing, nor can they develop or thrive if significant impediments exist. Markets develop through the complex influence of necessity, desire, technological feasibility, a desire to improve the human condition, imagination, and the social and institutional rules that govern the behavior of the market participants. This last influence is where states and federal legislators and regulators are crucial. They are today laying the foundation that a competitive market is, hopefully, being built on. The reason that market power is a critical issue is because it forms the foundation on which the competitive markets will develop, or fail.

What is Market Power?

Market power in the electric supply industry is the ability of a supplier or group of suppliers to raise *and maintain* a price that is *significantly* above a competitive level. This allows the supplier or suppliers to earn economic profits in the long run that, while perhaps beneficial to the firm or firms that possess market power, are socially inefficient. In order to obtain this market power and earn economic profit, the supplier or suppliers would have to prevent or discourage entry by other firms in the market. If there is relatively easy entry by other firms, then it is less likely that the firm will be able to maintain its market power. For this reason, market power can be thought of as a market structure issue.

The focus, therefore, must be on developing a market structure that permits reasonable entry into competitive markets by all qualified suppliers. Reasonable entry means fair access to customers without subsidies or special favors being given to any particular supplier, including incumbent utilities, alternative utility suppliers, or new entrants. It also means that potential barriers should be removed that prevent entry by the various suppliers so that no supplier has a special advantages in terms of access to customers. Whether a supplier chooses to enter a market is a function of the technology, investment costs, and potential barriers that may exist from incumbent firms and regulations. The rules and regulations governing structure and entry should allow suppliers to vie for customers based on their individual merit. In short, the objective is to "level the playing field," but not to give preferential treatment to any particular player.

There are basically two primary types of market power in the electric supply industry, vertical and horizontal market power. Vertical market power exists when a transmission or distribution owning company can favor itself or its own affiliate in the provision of a competitive service. This is a barrier to entry that prevents other suppliers from having fair access to customers. These barriers may be price, such as from an excessively high transmission fee, or non-price, such as from a burdensome and excessive amount of conditions and qualifications to use the transmission network. This vertical market power allows a single supplier or group of suppliers a significant strategic advantage in terms of access to customers that other suppliers simply will not be able to obtain.

The second primary type of market power occurs within the same competitive service, for example, generation service, and is referred to as horizontal market power. This can occur when a supplier or group of suppliers is able to influence the price of the competitive product. The most commonly cited example of this is when a firm has a large share of the market or is "dominate" and faces competition from much smaller or "fringe" firms. The problem with this simple example is that size of the firm or its market share alone is not an indicator of market power. A firm with a large share in a market that new entrants are able to enter and exit from with relative ease (that is, low or no sunk costs), will unlikely have market power. It is possible that a generation supplier could have considerable market share but little of no market power.[2]

Having said that size and market share alone are not synonymous with market power, it should be noted that it sure helps to be large and have significant market share to be able to exercise some degree of market power. In general, having a significant market share is a necessary but not sufficient condition for the presence of market power. It would be difficult for a relatively small player in a market to acquire a sufficient degree of market power to be of concern. For example, most travelers know that flying to or from cities with a single dominate carrier cost more than travel to or from a city that has several choices. It has been argued that the problem is not just that the carrier is large and has most of the market, but that the limited number of gates and airport access deter entry by other carriers. Obvi-

[2] Conversely, a supplier may have a relatively modest market share in the *overall* generation market but significant market power in some smaller market niche where it has a more significant market share, for example, peak capacity at certain times of the year. This illustrates the importance of properly defining the relevant market.

ously, the carrier has to be large enough to occupy the market and be able to get passengers to where they want to go.

In the developing competitive electric supply industry, many incumbent electric utilities will begin with considerable generation market share in what was their former service territory. However, the relevant market will, in most cases, be much larger than the former service territories of the incumbent firms (assuming vertical market power is minimized). Also, because of required or voluntary divestiture, the incumbent utility may have sold or spun-off its generation to an autonomous firm. As a result, the incumbent utility may not necessarily be the supplier with horizontal market power, but it could be the new owner of the generation assets, a much larger neighboring firm, or an entirely new entity. As will be discussed, the focus should be on removing or not creating entry barriers for alternative suppliers to challenge firms in a market, what ever their origin, to deter potential market power problems.

In summary, it is a basic assumption of economics that no single firm or group of firms is able to unilaterally affect the competitive market price. If they are able to use some means to control prices, then they have some amount of market power. As noted, they must be able to significantly affect the market price and be able to sustain it for an appreciable amount of time for it to rise to the level of a problem that warrants government intervention.

How Can Market Power be Detected?

While the definition of market power can be straightforward, detecting its presence is relatively more complicated. The commonly used measures by antitrust regulators and others are market concentration measures. The most common of these is the Herfindahl-Hirschman Index or HHI which is calculated as the sum of the squared market shares. Another commonly used method is derived from the definition of market power, that is, an estimate of the amount that prices exceed marginal cost. It is usually assumed that in a perfectly competitive market that price will approximate supplier marginal costs. The Lerner Index is simply the markup of price over marginal cost expressed as a percentage of the price. For example, if the Lerner Index equals 0.5, then there is a 50 percent price markup over marginal cost; if it equals 0.02, there is a two percent markup of price. If the Index equals 50 percent, it may indicate significant market power and require some action; if it is only two percent, it is unlike to raise any calls for government action.

Both the HHI and Lerner Index have particular estimation difficulties. To determine HHI, it must first be decided what products are in the market in question and which firms are in this market. For electric power this may be very complex, for example, is it base load capacity, peak, non-peak, spot market, etc.? An even more difficult question is what is the relevant geographic area? Is it the service territory, the state, or some broader to be determined region? The Lerner Index main estimation problem is determining marginal cost. While marginal cost can be easily explained in theory, in *practice* it is never "known" with certainty but estimated using a proxy variable. Moreover, as the industry becomes more competitive, reliable data will become more difficult to obtain. Already, while generation data on utilities is still available (albeit, generally with a two year lag), there is relatively little information on new entrants.

The HHI and Lerner Index by themselves are not sufficient to definitively indicate market power. In practice, these types of measures are used preliminarily as screening tools to decide if further investigation is needed.

Computer simulation models are another means to analyze potential market power problems. These models are commonly used in merger analysis to determine the effect on the market after the merger. They can also be used to simulate actual existing market conditions to predict behavior patterns. These models are promising, but are very complex and are only as good as the assumptions that are used to create the model and the data to derive results. Another promising means of analysis is experimental simulations. This usually involves a small group of "players" that are observed while they simulate various market conditions. While these experiments provide insights to policymakers of potential problems to be aware of or better market structures to use, they cannot hope to address all the complexities of an actual dynamic market.

Finally, empirical or econometric analysis are becoming more important in antitrust analysis. This involves collecting detailed data from actual market transactions from various distinct markets. These data are compared using statistical analysis to determine whether different market conditions (for example, number or presence of competitors) affect the price, holding other factors constant, such as transportation costs. In electric power supply markets, however, it may be some

years before there is sufficient data to analyze and for markets to have sufficiently evolved.

It is probably wise to not pin our hopes on one specific type of market analysis, but be prepared to use a battery of tests and measures with frequent market monitoring as competitive markets develop.

What Safeguards or Remedies are there for Limiting Market Power?

Most policymakers involved with this issue understand that it is much easier to create a structure that prevents market power while restructuring is occurring than trying to correct problems later on. The cited measurement problems can be avoided or at least mitigated through structural means to avoid market power problems in the first place. Antitrust regulators also understand this when they conduct merger reviews as a form of preventive measure. If a finding suggests that there is a significant probability that market power will likely result, a merger will either be rejected outright or approved on a condition that mitigation actions are taken first, such as divestiture. For this reason, most states that have passed restructuring legislation have tried to put into place a structure that avoids market power problems and fosters the development of competitive markets.

The question then becomes, what characteristics of a restructured electric supply industry would most likely provide the intended result of robust competitive markets that will bring about the expected benefits to consumers? The quick answer is to create a structure that allows fair entry by all suppliers. Two issues identified below are critical to the development of competitive markets and are being addressed by states and the Federal Energy Regulatory Commission (FERC).

1) Vertical Market Power Issue: Independence of the "Wires"—If suppliers are prevented from delivering their power to retail customers under reasonable terms and conditions, this results in a significant entry barrier. With respect to transmission, clearly the single most important aspect is independence of the operation and control of the transmission system. The clearer the separation of the selling of competitive services, or "merchant" function, is from the delivery, or "wires" function, the less likely there will be market power abuse. It is matter of degree how effective different ways of separating these two functions are. "Functional unbundling" of the sort that FERC required in its Order 888 and by some states is simply not as effective as divestiture of generation (or transmission and distribution) where the transmission company has no financial interest in selling power. FERC is currently investigating the use of "Regional Transmission Organizations' or RTOs to further its goal of more independent transmission systems.[3]

If independent system operators are the answer for transmission, then the same is probably true for distribution. Some states will have complete or nearly complete divestiture of generation or at least non-nuclear generation. Will these states have better results than those that continue to have vertically integrated companies? Only time will tell, but it stands to reason that what FERC has learned concerning transmission independence is transferrable to distribution. The states that do not have complete divestiture will have to rely on open distribution rules and functional separation. Not only is this more complex, but may not be as effective at preventing abuse as is divestiture.

The problem, which I have no solution for, is how to achieve a goal of real independence. FERC probably cannot order it and it is not clear if states have the authority either. Even if it were clear that a state had the authority, actually passing legislation would be another matter. Legislation with this requirement would probably receive considerable political opposition from companies that did not want to divest. The states that passed legislation with divestiture of some or all generation were able to bargain for it on other details of the restructuring package, primarily stranded costs. Of course, it is too late for FERC and some other states that already passed legislation without it to use stranded cost as an incentive.

In a recently published article, Commissioner William Massey of the FERC stated well the dilemma FERC and the states face on the issue of independence:

> ...we want to mitigate the vertical market power that mere functional unbundling has not reached. A transmission owner that owns generation has the financial incentive to use its transmission facilities to favor sales of its own generation. This is a strong economic incentive, and some utilities will not want to give up the opportunities to exercise vertical market power. Thus, they will attempt to test our commitment to the concept of independence.[4]

---

[3] FERC, Docket No. RM-99-2-000.

[4] William L. Massey, "Policy on Regional Transmission Organizations: Five Pitfalls FERC Must Avoid," *The Electricity Journal*, March 1999, p. 14.

2) Horizontal Market Power Issue: Incumbent Utility Advantages—Barriers to entry may also result from strategic advantages that incumbent firms, when they remain the principal supplier in a market, will have simply because they are the incumbent. This provides the incumbent firm with an advantage relative to others in the market. If the incumbent firm is able to charge a higher price for essentially the same competitive service, this may a case of horizontal market power—*may* be, since it is a fair question as to whether a company, with a name that is very recognizable to most customers because it was or is related to the company that was the regulated monopoly for many years, should be able to capitalize on its name recognition. It may become a problem when for-profit, unregulated affiliates advertize or send material using a similar name and maybe the same logo to entice customers to switch to them (at the same time customers are still receiving bills from the regulated distribution company with the similar name and logo). Some states have adopted codes of conduct to address this affiliate relationships and issued rules concerning the use of the corporate name and logo.

As long as there is a reasonable distinction between the regulated company and unregulated affiliate, this "branding" issue is not a major obstacle to competitive market development. States need to be able to address this issue in a manner that makes sense in their state. Over time, this brand recognition advantage will wear off as other suppliers become more familiar to customers.

Another potential advantage incumbents may have depends on what a state decides to do with customers that do not make a specific choice of suppler.[5] It has been observed that, for various reasons, most customers do not make *any* choice. Even the natural gas and electric choice programs with the highest rates of choosing customers still have seventy percent or more customers that have not yet made a choice. Is this a problem? The answer depends on who you ask. Obviously incumbent utilities believe that these customers should be assigned to them or their generation affiliate. Competing suppliers believe that they should have a fair shot at serving these customers at market prices. These customers obviously have to be assigned to some supplier, nobody wants them to be unserved. Also, most impartial observers would agree that these customers should not be denied the benefits of a competitive market.

The reason that this is a market power issue is because of the pricing that these non-choosing customers may receive. These customers, in the absence of any provisions being made for them, may be charged a higher price for the same service. The incumbent firm, fully aware that a large segment of customers will make no specific choice, will continue to charge these customers a price above the competitive level. The fact that the incumbent firm can charge above market prices for essentially the same service and maintain a significant market share restates the very definition of market power discussed earlier; that is, market power is the ability of a supplier or group of suppliers to raise and maintain a price that is significantly above a competitive level.

There are three choices states face when deciding what to do about non-choosing customers. First, they can be assigned to the incumbent firm. If the incumbent is still a vertically integrated firm with its own generation, that company may continue to serve the non-choosing customers as it did in the past. If the former utility divested its generation, then either the distribution company contracts for the supply or the customers are given to the new owner of the generation or the generation affiliate of the distribution company (usually the former utility). The price may be a standard offer that is determined by the commission (Massachusetts for example) and may be adjusted based on market conditions or the price may be based directly on some market indicator (California during the transition period is an example).

When a state decides that it does not want to just assign non-choosing customers to the incumbent or its affiliate, it may consider a second alternative, random assignment. The Federal Communication Commission (FCC) faced a similar problem after the breakup of AT&T when there was a large proportion of non-choosing customers for long distance service. The FCC assigned customers based on the market share each provider had among the customers that did choose. Georgia will soon use this method to select natural gas suppliers for non-choosing customers in the implementation of the state's gas deregulation.[6] In Georgia, the number of retail non-choosing customers assigned to a particular gas marketer is based on that market-

[5] These non-choosing customers have been referred to by several different names in different states. These terms include default, standard offer, or last resort customers.

[6] Georgia Public Service Commission, Rules of Georgia Public Service Commission, 515-7 Gas Utilities, Chapter 515-7-4, "Random Assignment of Customers," December 30, 1997. This is the Commission's rule issued under authority from "The Georgia Natural Gas Competition and Deregulation Act of 1997."

er's share of the total market served by all marketers. Under this type of program, customers are warned that they would be assigned a provider if they did not make a choice (which usually encourages customers to make a choice) and, of course, customers are not forced to stay with that company if they wanted a different provider. The logic is that customers are assigned according to those that did or are choosing. This also creates an incentive for the various market participants to work very hard to convince customers to choose them, since they will then have a higher portion of the non-choosing customers in the assignment allocation.[7]

Another alternative to simply giving the customers to the incumbent, a third option for non-choosing customers, is to conduct an auction to determine who will serve these customers. There are several ways to use auctions to select the supplier of these non-choosing customers. The Maine Public Utilities Commission plans to conduct an auction to determine the "standard offer" supplier.[8] The plan is to conduct an auction to choose three or more retail suppliers to provide standard offer service in each utility's service territory in the state. The selected suppliers will be those with the lowest bid price. The marketing arm of each incumbent utility may serve no more than 20 percent of its service territory. Utilities will still have billing, collections, and enrollment responsibilities for the standard offer suppliers. Standard offer suppliers' names will be disclosed to customers, but will not interact directly with customers.

Ohio has had two auction proposals. A proposal made last year[9] would have divided the state's current utility service territories into Retail Marketing Areas (RMAs). At the beginning of retail competition, the Ohio Public Utilities Commission would conduct a bidding process to determine which suppliers serve non-choosing customers in each RMA. Winning suppliers would be based on the qualified suppliers that submitted the lowest price for each RMA. The current proposal in Ohio[10] divides the non-choosing load of each current utility service territory into equal ten blocks. Bidders would submit bids for one or more of these blocks of ten percent. The auction would be conducted by a third party selected and supervised by the Commission. Winners would be based on the lowest price and would be selected through a simultaneous, open auction. Customers would pay the average price of the winning bids and winning bidders would be paid their bid price. The winning suppliers would serve customers for one year The auction would not begin until after the transition period has ended when utilities are collecting transition costs and would terminate when the Commission determines that there is no longer a need for the auction, depending on the market's competitive status. The suppliers identities are not revealed to the customer (customers are informed of the price and that it was determined through an auction process). The customer simply continues to receive a bill from the distribution company.

Pennsylvania plans to use a combination of all three approaches, that is, incumbent assignment, random assignment, and an auction. In the case of PECO Energy Company,[11] the company (the incumbent utility) will be the "provider of last resort" for all customers in its service territory that do not choose an alternative supplier. However, beginning January 1, 2001, 20 percent of all of PECO's residential customers, determined at random, are to be assigned a supplier other than PECO. The supplier for this "Competitive Default Service" is to be selected based on a commission-approved energy and capacity market price bidding process. PECO and its affiliates cannot bid or be a part of another suppliers bid. The entire customer group will be a single bidding block and will be bid annually (unless changed by the commission). To qualify for this bidding process, a supplier will have to provide at least two percent of its energy supply from renewable resources and increase that amount in increments of 0.5 percent annually (the commission may lower the percentage if the renewable energy sources increase the cost of the entire block by more than two percent over the cost without the renewable energy sources). Bids cannot exceed the

---

[7] The base used to calculate the market share, either the share of choosing customers or share of all customers, can have a major impact on the suppliers' share of non-choosing customers. Obviously, basing in on all customers will tend to favor the incumbent more that basing it on customers that did choose if there is a high proportion of non-choosers.

[8] Maine Public Utilities Commission, Chapter 301—Standard Offer Service, rule adopted April 1998, amended February 1999.

[9] Companion bills were introduced in 1998 in both the Ohio House (H.B. 732) and Senate (S.B. 237). Both bills expired at the end of last year.

[10] Companion bills in the Ohio House (H.B. 5) and Senate (S.B. 3). Both are currently under consideration in House and Senate Committees.

[11] From the settlement between the company and the Pennsylvania Public Utility Commission, "Joint Petition for Full Settlement of PECO Energy Company's Restructuring Plan and Related Appeals and Application for a Qualified Rate Order and Application for Transfer of Generation Assets," Docket Nos. R-00973953 and P-00971265, April 1998.

generation rate cap for the transition period. For non-choosing customers still served by PECO that were not selected for the auction, PECO is required to price residential service between the auction price and monthly rate based on power pool prices. This price also cannot exceed the generation cap ("shopping credit").

In addition, there are market share thresholds in the PECO settlement that triggers a random assignment process. Beginning January 1, 2001, if less than 35 percent of all PECO residential and commercial customers have selected to receive generation service from the PECO affiliate or alternative suppliers (including customers assigned to the auction group), then for the number of customers necessary to reach a 35 percent target will have a supplier determined by random selection on a one-time basis. After January 1, 2003 the percent threshold is raised and a random assignment process is used until 50 percent of all residential and commercial customers are assigned to either the PECO affiliate or alternative supplier.

Other states, such as Nevada and Missouri, have also either proposed or are discussing an auction process for non-choosing customers. While many design questions need to be addressed, an auction has the advantage of actually determining a price through a competitive process (assuming, of course, that the auction is well designed). Through random assignment or through an auction process, both are more consistent with the goal of developing competitive markets than a simple bequest or donation of these customers to the incumbent firm because it is the incumbent.

Assigning non-choosing customers to suppliers other than the incumbent firms has come under heavy fire from, not surprisingly, incumbent firms. Their main argument is that selecting a supplier for these customers is taking a choice away from customers, that is, not choosing is the choice the customer made. Implicit in this argument is that all non-choosing customers are not making a choice because they are content with the incumbent firm. However, it is highly unlikely that all these customers fit this profile. Other reasons likely include not wanting to spend the time and expense to search for information and deciding on which supplier to select (transaction costs), confusion over the array of options, and the savings are (or are believed to be) too small to bother with. No choice is exactly what it looks like, no choice, and may occur for many reasons.

Another argument is that it is paternalistic or "government deciding what is best" for a customer to assign them to a supplier other than the incumbent. After all, the whole point of a retail choice program is to allow customers a choice. This assumes, however, that the state has no obligation to assist customers in the move from regulated monopolies to competition. These customers have to be assigned to a supplier, whether it is the incumbent or alternative. It should be kept in mind that with most competitive customer choice programs, customers are free to choose a supplier of their choice at any time. Also, if customers are to be assigned to a supplier, they are usually warned before the change is made and allowed some time to make a selection (including the incumbent supplier). No one is forced to purchase generation service from a particular supplier they do not want. In fact, having no choice is what the former system of regulated monopolists was about, where customers could only buy from the state sanctioned utility.

Simply put, customers did not pick the incumbent utility that is or originally served them, the state or municipality did. There is no compelling reason why the incumbent firm should inherit these customers simply by default. All suppliers should be required to compete with each other for the customers business, like firms in competitive markets usually do. This insures that no supplier, incumbent or alternative supplier, has an advantage in terms of access to customers.

Like brand name recognition, this reluctance of customers to make a choice will also wear off. It should be expected that, over time, an increasing proportion of retail customers will make a specific choice.[12] However, this may take several years and some customers may not choose after a decade or more. But the specific assignment of non-choosing customers probably does not need to be made for more than the first several years of a customer choice program.

State Role in Addressing Market Power

Two aspects of addressing market power are best done by state public service commissions and state attorneys general—retail market power assessment and market performance assessment. These are best done at the state level, because the state public service commissions have the legal authority to monitor and, if necessary, regulate retail markets. (FERC, of course, has jurisdiction of wholesale markets.) State public service commissions may, in some states, also have the authority

[12] As an example of how AT&T's market share declined since the breakup, see Zolnierek, James and Rangos, Katie, "Long Distance Market Shares, Third Quarter 1997," Federal Communications Commission, January 1998.

to address retail market power problems directly by ordering divestiture of generation from transmission or perhaps retail marketing from transmission and distribution. Where a state commission does not have this authority, it could be granted to them by their state legislature.

State public service commissions and state legislatures can, as part of a state restructuring statute, encourage or require utilities providing direct retail access to expand their geographic markets by joining an Independent System Operator or some other form of a Regional Transmission Organization. (FERC, again, has jurisdiction over the form and approval of these ISO or RTO.) State commissions can also help to reduce barriers to entry that might occur from the strategic advantages noted earlier that incumbent firms will have, such as codes of conduct to address affiliate relationships, rules concerning the use of the corporate logo, and assignment of non-choosing customers. States, through the public service commissions and siting agencies, can ease entry impediments to new suppliers through licensing and siting law reforms. Finally, a state commission can address market performance and consumer protection concerns by monitoring deceptive advertising claims and, if they wish to go even further, by providing a neutral source of comparative pricing and service information for retail customers.

What can the federal agencies do to assist the states in their role of monitoring competitive markets and competitive trade practices? There should be a clear recognition of the appropriate role of the states.[13] Also, there needs to be recognition that state agencies are, after implementation of the state's law, acting under clearly articulated pro-competitive state policies and are actively supervising retail markets. This deserves deference from federal agencies that are also involved, the Federal Energy Regulatory Commission, the Federal Trade Commission, and the Department of Justice. Indeed, ongoing cooperation is already developing among these groups.

Finally, Congress can provide state commissions with full and complete access to books and records of holding companies with both regulated and unregulated affiliates and subsidiaries. Without such access to books and records, state commissions cannot regulate affiliate transactions to prevent cross-subsidies from the regulated (that is, transmission and distribution) markets to the unregulated markets. Those utilities with captive customers would be able to transfer costs to those customers and unfairly leverage this advantage in competitive and unregulated markets.

Conclusion

Some may argue that if there is a competitive market, you don't have to worry about market power. However, minimizing potential market power is a prerequisite to the development of a competitive market. If a flawed structure is put in place, a structure that is being shaped today, we will not see the full benefits of competition. Also, if there are inadequate remedies available to state and federal regulators, then they will not be able to respond to future market power problem that may arise. This is restructuring not deregulation of the entire industry. Many aspects of the industry will remain regulated and others we are trying to back out of nearly a century of cost regulated monopolies. The competitive market that emerges will be the culmination of state and federal actions (or inactions). The structure of any market is guided by the rules and regulations that make it possible. If there are obstacles, market participants will look for ways, maybe even inefficient ways, to find a way around them. Clearly, like it or not, the future structure of the electric supply business is in your hands and those of state legislators and federal and state regulators.

Mr. STEARNS. I thank the gentleman.

And Mr. Gordon, you are recognized for your opening statement for 5 minutes.

STATEMENT OF KENNETH GORDON

Mr. GORDON. Thank you, Mr. Chairman. My name is Kenneth Gordon. I am a senior vice-president at National Economic Research Associates. I am a former chairman of the Massachusetts and the Maine Public Utility Commissions, and I am currently consulting on matters pertaining to these industries.

[13] The Federal Trade Commission and The National Regulatory Research Institute are holding a joint workshop on this topic this September in the offices of the FTC.

I have long been and I remain a strong advocate of wholesale and retail electric competition, and I took a leading role in efforts to introduce retail competition in Massachusetts while I was chairman there.

As you have heard many times, there are two broad areas of concern with respect to market power and the introduction of competition, horizontal and vertical. First, as to vertical.

The FERC's work on open transmission access already begun in orders 888, and related orders has paved the way for wholesale competition and toward efforts in the States to introduce retail competition. Regulatory assurance of an open, nondiscriminatory access to essential facilities for incumbents and new entrants alike is critical.

Once such access has been assured, in my view. The critical perquisite for competition is in place, and further efforts to manage the competitive process are as likely to subvert the goals of competition as to advance them.

Assuring independent control and nondiscriminatory access to transmission is critical, but it is the beginning, not the end, of the FERC's responsibilities in this area. Important tasks that are as yet uncompleted include deciding the proper role for ISOs and for private for-profit transmission companies and determining the relationship between them.

ISOs provide independent control and oversight and can be used to begin the process of regionalization. It is necessary to create a broad and open electricity market.

Transcos that cover a sufficiently broad market area have the potential to respond directly to economic signals for investment in transmission and to charge and respond to prices that reflect the cost of transmission use and transmission congestion.

However, the efficient evolution of the transmission organization over the longer term depends critically on the development of regulatory structures that properly reflect marginal costs of transmission and that provide appropriate investment incentives for transmission. The current embedded cost approach being used at the FERC is wholly inadequate to this task. In my view, this is a critical priority and should be the FERC's top assignment in fostering competition.

Now briefly with respect to horizontal market power. Policymakers are properly concerned that firms not be able to exercise market power where entry is not feasible and where there are too few firms, but it is important to state at the outset that market share does not equate to market power, especially in an industry with this regulated history.

Even with only a few firms, if entry is truly open, firms are unlikely to have market power for very long. The fact that market shares erode only over time and not instantly is certainly cause for watchfulness, but not for immediate intervention.

In my view, appropriate oversight of horizontal market power should come under the traditional antitrust agencies, DOJ, and the Federal Trade Commission. The attempt in restructuring is to reduce regulation in generation in marketing of electricity as competition becomes feasible.

FERC plays an important role with respect to transmission and, hence, entry conditions but should not be expanding its regulatory mandate into a market that is clearly becoming more competitive all the time, nor should policymakers attempt to jump start competition, i.e., lower concentration by forcing customers to make affirmative choices or explicit reaffirmations of their current choice or otherwise divvying up the market among the would-be competitors.

Arbitrarily assigning customers to a supplier amounts to regulatory slamming, something you have heard about in the telecommunications industry. It doesn't make customers very happy; but more fundamentally, such processes do not jump-start competition; rather, they short-circuit it. No one has to go through the process of winning customers through lower prices or better service. Regulators should not be dictating the industry structure as we begin the competitive process.

On other issues, I have testified in the past that PUHCA should be repealed. I still agree with that. I would add that for PURPA, and with these kinds of guidelines in mind, I think the move into a competitive marketplace should yield real benefits to consumers.

Thank you.

[The prepared statement of Kenneth Gordon follows:]

PREPARED STATEMENT OF KENNETH GORDON, SENIOR VICE PRESIDENT, NATIONAL ECONOMIC RESEARCH ASSOCIATES

I. INTRODUCTION

The Federal Energy Regulatory Commission's ("FERC's") efforts, particularly in response to the Energy Policy Act of 1992, to increase competition in generation markets on the wholesale level has "paved the way" for the states' introduction of retail competition by requiring open, nondiscriminatory access to transmission (in FERC Order No. 888) and by addressing issues surrounding Regional Transmission Operators—whether they are Independent System Operators ("ISOs") or Independent Transmission Companies ("Transcos"). Many states are now in the midst of a historic restructuring of their electricity industry to provide for retail competition in their state, which would allow consumers to choose their generation provider. Most other states are actively considering whether to embark on this restructuring process.

I have long been, and remain, an advocate of wholesale and retail electric competition and I took a leading role in the introduction of competition in Massachusetts when I was Chairman of the Department of Public Utilities. I applaud federal and state policy makers' and regulators' efforts in introducing competition in electricity markets.

Competition, properly introduced, impels inns to seek and adopt new and better ways of doing business, and also ensures that the resulting efficiency gains are passed through to customers in the form of lower prices and better service. What is needed is real people, making new investments, creating new organizations, introducing new products and services, and doing so in response to market forces, not regulatory imperatives. After all, the creation of new types of organizations and new products and processes—which wholesale and retail competition in electricity markets could provide—is the most powerful form of competition, and is much more important over time than textbook notions of price competition alone.

Retail competition can provide the important benefit of allowing consumers to make their own consumption decisions in electricity markets. No longer would utilities and regulators need to make these decisions on consumers' behalf. Consumers are well able to make many, many choices every time that they go to a grocery, hardware, or department store or when they buy a new house, car, or insurance. I see no reason why consumers should not be perfectly able to choose for themselves in electricity markets as well. I should add here that consumers can reasonably "choose not to choose" by deciding that they prefer to stay with their traditional provider. As long as prices are designed in ways that provide "competitive parity" and accounting, behavioral, and, if needed, structural safeguards are in place, consumers

should be completely free to choose for themselves whether they wish to switch providers.

The basic problem with attempts to administer in detail how competitive markets evolve is that the result of this "managed competition" may be to develop "markets"—by handing new entrants market share without requiring them to persuade customers that they have a better offering—that make no sense to anyone but the "central planner" that developed the "market." To obtain the maximum benefits of competition and reduce regulatory costs, market forces should substitute for, and not simply add to, regulation. Economic reasoning—as well as prudence and appropriate humility with respect to anyone's ability to discern the optimal future—suggests that policy makers at all levels should focus primarily on ensuring *openness* of entry and *choice* for consumers.

II. HORIZONTAL AND VERTICAL MARKET POWER

Policymakers are properly concerned that utilities wishing to operate in traditional or newly competitive markets not be able to exercise market power, regardless of how it arises. As I have already noted, regulators will continue to regulate the transmission and distribution systems.[1] For policies that support and promote efficient competition, it is critical to understand what market power is, and just as important, what it is not.

From the traditional economic perspective, market power is the ability of a single firm or a group of firms profitably to restrict output and raise prices above competitive levels for a significant period of time. The virtue of this definition is that it puts the focus of concern where it should be—on the consumer. Monopoly pricing in excess of cost (or competitive equilibrium prices) harms consumers: they are denied the benefits of consumption that would more than cover their opportunity costs. As a result, society's resources may not be allocated efficiently. Productive efficiency may suffer as well when firms are sheltered from full competition, and if so, the waste involved will ultimately be borne by consumers.

A. Horizontal Market Power

Horizontal market power concerns arise when there is only one (unregulated) firm, or when a few firms hold a large fraction of the market and where the competitive pressure arising from actual or potential entry by new firms is not sufficient to limit the firms' ability to profitably restrict output and raise the price. In electricity markets, horizontal market power issues concern whether competition in the generation market in a region will be effective—that is, will some firm or firms in the market have market power such that prices are higher than a frilly competitive result?

Market share is not equivalent to market power. If the incumbent cannot raise prices or restrict output without losing market share—because markets are open and choice is available to consumers—then there is no significant market power. Moreover, incumbency by itself does not necessarily confer market power. First, and critical to establishing market power is that competitors not be able to enter the market. Regulation of the essential transmission and distribution systems is aimed directly at making sure potential competitors can enter the market.

The most important consideration in assessing horizontal market power is the ease of entry (openness) of the market. Other criteria, such as market shares and concentration ratios, can be used to measure the results of the process but taken by themselves they give no indication of whether those entrants are more efficient than incumbents or whether consumers are better off. And, indeed, antitrust regulators use market share analysis only as a first step (or screening test) in deciding whether further market power analysis is merited. Market share is by no means a conclusive indicator of market power, and is likely to be a particularly misleading indicator of horizontal market power when applied to industries with a history of legal monopoly.

Market share analysis and similar criteria can be difficult to actually implement. When market boundaries are blurred, the analyst's decision about whether or not to include particular groups of competitors in the market power analysis can arbitrarily determine the outcome of the market structure investigation. In electricity

[1] These problems are special but not unique. The reform of the interstate natural gas market offers an interesting analogue to the opening of electricity markets to competition. For most of the gas industry's history, pipelines were regulated *transporters* and *sellers* of natural gas. A series of FERC orders in the 1980s and 1990s led interstate pipelines to unbundle their merchant and transportation functions and eventually to spin their merchant functions down into unregulated marketing affiliates. Many of these pipeline affiliates, such as Enron, have been quite successful.

markets the market boundaries are likely to be particularly difficult to draw and therefore the analysis of "effective competition" will be controversial. This is another practical reason for policy makers to focus primarily on openness and choice rather than attempting to prescribe how the market will evolve.

In a competitive generation market, competitors will be forced to compete strongly based on price and perhaps such features as "greenness" or other value-added services that the electricity is bundled with. Reliance on market forces and technological changes (more efficient generating unit technologies, increased availability of distribution generation, changing transmission technologies, etc.) can provide dynamic efficiencies that can benefit consumers. In addition, compared to the current regulatory model, competitors will be less able to use the regulatory process strategically to improve their competitive position or to raise rivals' costs.[2] Policy makers should reject calls for forced divestiture and other extreme measures, unless these calls are warranted by sound economic analysis.

Nevertheless, the appropriate antitrust authorities, the Department of Justice and the Federal Trade Commission, will need to carefully monitor electricity power markets and address horizontal market power issues in the generation business if and when they come up.

B. Vertical Market Power

Vertical control issues relate to the ownership and control over neighboring stages of production and distribution. Vertical market power, a leading concern in the regulation of utilities and their affiliates, refers to the possibility that a firm could exercise its horizontal market power at one stage of the production process (such as transmission or distribution) to influence price and output at another stage, such as generation and retail sales, or in new markets. This assumes that entry will not sufficiently police price-increasing behavior in those markets.

The principal vertical market power concern in the industry has been that integrated transmission and distribution owners would use their control of bottleneck facilities to favor sales of their own generation over sales of their competitors. Unless properly regulated, entities that own wires and retailing affiliates could use their control of the wires to favor their retail affiliates. At the federal level, this concern has been largely addressed by FERC Order Nos. 888 and 889, as well as by the continuing formation of ISOs and similar institutions. On the state level, policy makers and regulators have addressed these issues primarily by requiring functional unbundling or, in a few cases, by requiring or encouraging divestiture.

In the electric restructuring debate, policymakers and/or regulators must determine whether an ISO or Transco should own and operate transmission and must determine what accounting, behavioral, and structural safeguards are necessary. If a vertically integrated firm competes to market energy services in its service territory, policymakers would also determine whether codes of conduct are needed and would develop accounting procedures to address cost allocation issues.

Policymakers and regulators should balance the need for an effective boundary between regulated and competitive businesses with the need to allow all participants in the new markets to exploit as fully as possible whatever efficiencies they have. If efficiencies from vertical integration are lost, then consumers will ultimately be worse off. Incumbent utilities should be able to compete against new entrants during the current period of rapid change in the electric utility industry. In the short-term, however, there is a significant (demonstrated) risk that regulators will seek to micromanage incumbent utilities' activities by engaging in "command and-control" deregulation.

While it is understandable that regulators would want to "get the details right" given the scrutiny that they will be under as electric restructuring proceeds, the administrative costs of command-and-control deregulation are likely to be substantial. Much more importantly, adverse efficiency and competitive effects are also likely. Efficiency effects could include lost economies resulting from mistaken vertical disaggregation or the loss of scope economies through unnecessary limits on resource sharing. Competitive effects could include increased prices resulting from effectively foreclosing some efficient competitors (e.g., incumbent utilities) from competing fully in a market.

See Bruce M. Owen and Ronald Braeutigam, *The Regulation Game: Strategic Use Of The Administrative Process* (Cambridge, MA: Ballinger Publishing, 1978) and Thomas G. Krattenmaker and Steven C. Salop, "Anticompetitive Exclusion: Raising Rivals' Cost to Achieve Power Over Price," 96 *Yale Law Journal* 209 (1986).

C. Open Access to Essential Transmission and Distribution Facilities Is Needed

For the foreseeable future, the delivery or wires portion of the business is likely to remain an essential facility for most buyers and sellers of electricity.[3] If competition in the generation and marketing of electricity is to thrive, there must be open and nondiscriminatory access to the transmission and distribution wires. In implementing open access, nondiscriminatory transmission, regional transmission operators, whether they are organized and operated as ISOs or Transcos (private, profit-based companies), will play a critical role. For both ISOs and Transcos, federal (and state) policies should emphasize the role of *independence and regionalization.* An ISO or Transco with a high degree of independence, and the authority to operate the transmission grid as a unified network would help assure that the transmission network operates in a way that serves the users of the network, without unduly favoring the interests of any particular user. The ISO's or Transco's operations must be governed and operated as an independent stand-alone activity, which can be achieved through functional separation of transmission from the generation and distribution aspects of utilities' businesses and independent governance of the ISO or Transco. The size of the transmission organization should be large enough to exploit any available economies of scope or scale, and to allow the development of as wide a competitive marketplace for electricity as feasible. If the electricity market is balkanized, consumers will not enjoy the full benefits of competition.

While ISOs are viewed by many as more feasible and desirable to implement in the near term, some form of Transco may be more effective in operating and expanding the transmission system over time because, if regulated appropriately, the incentives facing these businesses may be more conducive to efficient operation of and investment in the transmission infrastructure.[4] In any event, the structure and governance of ISO's and Transco's are likely to adapt and change over time, in ways that cannot be completely anticipated up-front and therefore policy makers should expect that competition and deregulation will be a long term process and that changes and adaptations are likely in the area of transmission operation and governance.[5] Therefore, highly prescriptive solutions are inappropriate at this stage of the process.

For the state regulated distribution "wires" business, where ownership of the distribution wires remains part of the vertically-integrated utility business, the transmission and distribution systems will also have to be functionally separated from the operation of competitive generation and retail services. In particular, regulation must ensure that the competitive functions do not receive preferential treatment from the regulated functions. Under the traditional regulatory and industry structure, regulators have developed policies to address affiliate relations issues—and these approaches will need to be adapted in order to address functional unbundling issues as electric restructuring progresses.

III. COMMENTS ON PROPOSED BILLS

Some provisions of the proposed bills are quite sound and are likely to provide benefits for consumers. The focus of this testimony, however, is to discuss those aspects of the proposed bills, with an emphasis on the Administration's Comprehensive Electricity Competition Act ("CECA") and the Markey-DeLay Electric System Reliability Act of 1998 ("Markey-DeLay"), that could harm rather than help consumers. My point of departure is that policy makers should rely on markets to reveal consumer preferences and provide incentives to competitors. After all, a primary strength of markets (and the main reason for relying on them instead of regulation whenever and wherever possible) is their ability to efficiently discover what consumers want and effectively respond to consumer demand.

---

[3] An essential facility is an input to which all competitors must have access on reasonable terms if they are to be able to compete in the market.

[4] While ISOs will operate transmission systems, they would not own transmission assets and therefore may find the actual upgrade and expansion of the transmission network to be a challenging task.

[5] Clifford Winston insightfully points out that "Economic deregulation does not happen overnight. It takes time for lawmakers and regulators to dismantle regulatory regimes, and then it takes more time for the deregulated industries to adjust to their new competitive environment. . . . Deregulation is a long-term process from which society will continue to reap benefits as firms continue to adjust to free market competition and as more industries are more fully deregulated." Clifford Winston, "U.S. Industry Adjustment to Economic Deregulation," *Journal of Economic Perspectives,* Summer 1998, pp. 89-110.

A. Generation Should Be Treated Like Any Other Competitive Business Once Necessary Markets And Institutions Are In Place

Open markets should become the major source of protection for consumers except where monopoly arrangements are deliberately continued (*e.g.,* the wires portions of the business). Energy utility regulators should withdraw from detailed oversight once they have opened entry into formerly regulated markets because such regulatory oversight is likely to become unnecessary and even counterproductive as competition unfolds. The Administration's bill, for example, goes too far in authorizing FERC to remedy market power in wholesale and retail markets. FERC should focus on ensuring that open-access, nondiscriminatory transmission service is available so that actual or potential entry into generation markets can act as a check on the behavior of competitors in generation markets. Attempting to remedy market power may have been a part of FERC's historic *regulated* industry responsibilities, but the goal is to make the electricity marketplace more like that for other commodities and services. If intervention is necessary to address market power issues, the established agencies for the purpose should be relied upon.

The introduction of wholesale and retail competition for the electricity commodity is likely to increase efficiency in the production and sale of electricity—perhaps somewhat modestly in the short term, but much more substantially in the longer term-as market processes displace the heavily regulated, central planning oriented procedures used by utilities and most regulators until very recently. The evidence available from other industries to date suggests that as regulation's role recedes, innovation and dynamic efficiency get a significant boost. Ultimately, that is the long-term wellspring of customer benefits.

This view suggests that there will be a continuing—albeit changing—role for regulation of those aspects of the transmission and distribution businesses as long as they retain natural monopoly characteristics. But the generation business should become a competitive business, subject to the same oversight as other competitive businesses.

B. State Regulators Have (Properly) Relied Primarily on Functional Unbundling to Address Vertical Market Power Issues

The role of regulation will change as electric restructuring continues. An important ongoing role of regulation will be to oversee the conduct and performance of regulated firms, who may also compete in competitive markets, either directly or through affiliates. While the role of regulation will change as competitive electricity commodity markets emerge, experience in the telecommunications and natural gas industries indicates that a primary reliance on accounting and behavioral rules—supplemented, as needed on a case-by-case basis, by structural safeguards—can adequately address vertical market power concerns.

When a utility's energy marketing affiliate operates in the utility's service territory, there are two broad areas of legitimate regulatory concern. The first is the utility's control over the transmission system, to which potential competitors must have access if they are to reach their customers. Recognizing the key role of the transmission system, the FERC directed utilities to create open access tariffs in Order No. 888. Regulators, utilities and others are in the process of designing a framework for transmission that should offer effective means to remove utilities' opportunities to leverage their ownership of these facilities and to foreclose upstream rivals from downstream markets, while preserving reliability and a foundation for the development of an efficient competitive electricity market. Major federal issues, as yet unsolved, are how to price transmission so that it supports efficient and competitive markets, and second, how to ensure that the appropriate investments in transmission are made to provide a firm basis for future competition. The FERC is not without important problems to solve.

The second concern, access to the distribution system, is the province of state policy makers and regulators. Each state restructuring plan must address these issues through unbundling and related requirements. Particularly important for state regulators is overseeing the unbundling of rates. A final concern is that, without proper regulation, the utility might be able to shift costs from the unregulated portion into the regulated portion of its business, and recover those costs through regulated rates. Major issues in this process, yet unsolved, are how to price transmission so that it is used efficiently to support competitive markets, and second, how to ensure that appropriate investments in transmission are made to provide a firm basis for efficient competition in the future.

Appropriate accounting controls and codes of conduct to govern the relationship between the parent utility and its marketing affiliate are necessary. Such codes are being designed and implemented in many states. For example, in Order No. 888, FERC concluded

> In light of the competitive changes occurring in today's electric industry, we believe that the only effective remedy is non-discriminatory open access transmission, including functional unbundling and OASIS requirements, and that it is within our statutory authority to order that remedy. (P. 114)

However, in some jurisdictions, proposed affiliate rules are likely to do more harm than good, because they go too far. Many proposed policies will force consumers to bear the cost of increased regulation and to forego the benefits of scale and scope economies that the new regulations would sacrifice. Proposed regulations should be subjected to an incremental cost-benefit test. When contemplating the possibility of structural restrictions on top of codes of conduct and accounting controls, the proper comparison is whether the additional protection gained outweighs the foregone benefits of increased scale or scope economies. The fact that some regulation is necessary and beneficial does not mean that more regulation is always better. Indeed, a significant reason behind the shift to greater reliance on markets is that we have had overly extensive regulation of industry operations.

C. Policy Makers Should Not Dictate Industry Structure

An essential element of a competitive market is that any firm wishing to enter the market can do so bringing with it whatever special capabilities or resources it may apply to the task of serving customers. By this process the efficiencies associated with scope and scale are discovered and realized. Only by relying on markets in which inns are free to make decisions about what to produce will this discovery take place. The 1997 Economic Report of the President noted:

> An insufficiently appreciated property of markets is their ability to collect and distribute information on costs and benefits in a way that enables buyers and sellers to make effective, responsive decisions. As tastes, technology, and resource availability change, market prices will change in corresponding ways, to direct resources to the newly valued ends and away from obsolete means. It is simply impossible for governments to duplicate and utilize the massive amount of information exchanged and acted upon daily by the millions of participants in the marketplace. (p. 191)

Over-reliance on structural and behavioral restrictions short circuits that process, and thereby forces society to forego the benefits of the lower incremental costs that can be achieved through resource sharing. Where regulated inns are involved in these processes, regulations preventing anti-competitive behavior are necessary and protections for captive ratepayers remain appropriate. But the protection can and should be accomplished without unnecessarily sacrificing available economies.

D. PUHCA Should Be Repealed

Intensive regulation of public utility holding companies is no longer needed and therefore the Public Utility Holding Company Act of 1935 ("PUHCA") should be repealed. The legislation approved by the Senate Banking Committee, which is incorporated into the Administration's bill, provides a generally reasonable approach regarding the repeal of PUHCA. Repealing PUHCA is appropriate because it is no longer needed and is actually acting to slow the competitive transformation and recapitalization of the electric and gas industries.

As part of the repeal of PUHCA, CECA would expand FERC's and the states' access to the book and records of the holding company and its regulated utility affiliates. This approach is generally appropriate because FERC and the states can use this information to identify cross subsidization and cost shifting issues that would cause regulated utility customers to pay excessive rates for regulated services. I am concerned, however, that CECA's approach goes too far in giving FERC and the states access to the books and records of non-utility affiliates of the holding company that compete in competitive markets. I do note that CECA provides for "exemption authority" that the FERC could use to exempt certain non-utility affiliates from the "books and records" requirements, but am still concerned the FERC not be enabled to explore in non-regulated, competitive areas. Focusing on the books and records of the utility holding company and its regulated affiliates is clearly appropriate and CECA should reflect this principle.

E. Enabling Competition is Desirable, Creating it is Not.

Once consumers are able to choose their provider of electric generation services for themselves, consumers will have the opportunity to make choices that formerly were made by utilities and/or regulators. There is a limited but important role for government interventions aimed at reducing the search and information costs for consumers. Requiring information disclosure, such as the equivalent of product labeling, by identifying the fuel mix of the power that they are aggregating or generating is one example.

Policy makers should focus on information disclosure and essential facility pricing issues. This provides a basis for competitive markets to develop naturally. By contrast, regulators should avoid overly-prescriptive policies, such as "competitive auctions" of retail customers that "choose not to choose." While 'auction" or "competitive bidding" processes can very effectively identify the market price at a point in time, these processes are not necessarily effective in identifying a price that makes sense over a period of time. Thus, auction prices could quickly become substantially out of date if energy prices, inflation, or interest rates were to change. In contrast, setting the "shopping credit" based on wholesale electricity costs, adjusted to reflect the costs the utility avoids as a result of it no longer providing "aggregation" services to customers that shop, could reflect dynamic changes in market conditions. This, in essence, is the approach that California uses and is preferable to "competitive auction" processes or administratively determining the "shopping credit."

F. PURPA Should Be Repealed and Renewable Standards May Not Be Needed.

I favor repealing the Public Utility Regulatory Policies Act of 1978 ("PURPA"), especially with respect to the "must-buy" provisions of Section 210. While PURPA surely played an important role by providing a "gateway to entry" for some non-utility generators during a period when the barriers to entry into the generation market were high, this "leg up" carried a very high price tag and is no longer needed. Therefore those provisions of PURPA should be repealed. Of course, this should not affect existing contracts.

I also recommend caution when considering CECA's federal renewable portfolio standard. In a competitive market, some proportion of consumers are likely to prefer purchasing "green" electricity (*e.g.,* electricity generated from solar, wind, geothermal, or biomass sources). Some early evidence in Massachusetts, where retail choice has generally been stalled due to mispricing, is encouraging in this respect. In several pilot programs, green power has been selected by a significant number of customers. Given the potential attractiveness of electricity generated from renewables, I see no reason to artificially skew the choices available to consumers by mandating their use. I would also caution that it will be difficult to establish a renewable standard on a national basis given the considerable differences among regions; for example, a particular renewable standard might be relatively easy for some states (say, Maine, where I live) to meet, while the same standard could be difficult and costly to meet in other parts of this country.

G. Competitive Parity Among Market Participants

It is very important that all utilities and new entrants should be treated in as symmetrical a manner as practicable. Efficient competition requires that all incumbent and prospective firms be given equal opportunities to compete for customers. This means that new entrants should have the same opportunities as incumbents to succeed while, at the same time, incumbents are not unduly restricted in their market activities.

As formerly regulated utility markets become competitive, it will become increasingly important that all utilities, regardless of ownership form and tax status, compete on a level playing field. Going forward, it will also be very important that all utilities, whether they be investor-owned, municipally or publicly owned, or cooperatives, be able to compete with all other competitors on an equal-opportunity basis. The Administration's bill begins the process of moving toward competitive parity and symmetry among different types of utilities. For example, CECA would: (1) amend the IRS codes to prohibit municipalities from issuing tax exempt bonds for transmission and generation; and (2) extend FERC transmission jurisdiction to currently non-regulated utilities. Thus, CECA provides a good starting point in leveling the playing field among different types of electric utilities.

IV. POLICY OBJECTIVES IN ELECTRIC INDUSTRY RESTRUCTURING

The main public policy reason for restructuring the electricity industry and allowing the entry of competitive providers of generation is to enhance consumers' welfare. The criterion for evaluating restructuring policies should be the impact that these policies have on consumers. Unfortunately, it is all too easy to lose sight of consumers in the policy making process. There can arise a point at which policies become "pro-competitor" rather than "proconsumer." The assumption that what is good for competitors (read: new entrants) is good for consumers is a common error, but it is a bad principle on which to make policy. Policy makers should formulate their electric restructuring based on the following objectives:

A. Consumer Benefits Should Be the Primary Criterion for Judging Competition Policies

The appropriate test for competition policies is whether or not they lead to benefits (lower prices, better quality, service innovation, etc.) to consumers, and not whether one or another competitor benefits from their adoption. As a former regulator, I would emphasize that the focus should always be on the consumer and whether or not consumers experience real economic benefits from a particular policy.

B. Policy Makers Should Focus on Providing Openness for New Competitors and Enable Choice for Consumers

Policy makers must provide openness in generation markets so that choice is available to consumers. If policy makers focus primarily on providing openness and choice for consumers, they will find that they need not prescribe precisely how the market will develop instead markets would be used to discover consumer preferences and wants, as well as optimal industry organization.

Electricity markets that have previously been closed to consumer choice by franchise or similar regulation must be legally opened, so that competitors can provide their products and services to consumers where they believe that profitable market opportunities are present. Among the firms offering their services should be the incumbent electric utilities, so long as the regulated utility's operations continue to be regulated so that competitive activities are not cross-subsidized and do not have inappropriate access to information as a result of its affiliation with a regulated utility. Once openness and choice is present, the generation business should be treated in the same ways as other competitive businesses, *i.e.*, through antitrust oversight by the Department of Justice, the Federal Trade Commission, and related state agencies.

C. The Dynamic Benefits of Competition Cannot be Fully Anticipated Up-front

Markets encourage the relentless search for efficiency that is essential to competitive success in global markets, and also provide the means to discover what consumers really want. Markets reward innovation—the search for and discovery, development, adoption and commercialization of new products, services, organizational structures, processes and procedures—that meets market demand. Successful market innovation requires risk taking, research, experimentation, and testing. Needless to say, for every innovation that is successful in the market, there are many "dry holes" and "blind alleys" that fail to meet the market test. This can apply to incumbents as well as new entrants.

Market structures should evolve through customers' demands and firms' responses to them, not by statutory or regulatory planning and design. If regulators succeed in creating an effective open-access competitive environment, then those firms which are most efficient at attracting and meeting the needs of consumers will be successful. Even more importantly, consumers will be able to get the products and service that they want at favorable prices. But the real economic benefits of increased economic efficiency will only come as firms reorganize their structures and operations. This takes time—and some patience on the part of policy makers and regulators.

On the other hand, if markets are not efficiently opened to entry, no amount of handicapping the incumbent, or giving a leg up to entrants, will guarantee a more efficient result for consumers. Indeed, the success of less efficient providers is more likely. That outcome would be the antithesis of what the drive to open markets to consumer choice is all about. In short, policies that strive to enhance the efficiency of the competitive process will be helpful, while policies that directly influence specific industry structures and outcomes will not, and should be avoided.

Dynamic, flexible, and practical regulation is needed during the transition to efficient competition in generation markets. There is no direct path from "regulation" to "competition." Policy makers and regulators are up to the task of providing a flexible and practical transition to a restructured electric utility industry but must become more effective at triage—by identifying and addressing the truly important issues (*e.g.*, providing openness and choice for consumers), and not get bogged down in designing the specifics of future markets.

D. Policy Makers and Regulators Should Allow the Efficiencies that Vertically Integrated, Multiproduct Utilities Can Provide To Benefit Consumers

Electric utilities have traditionally been organized as vertically integrated, multiproduct firms because it has facilitated coordination of the generation, transmission, distribution and sale of electricity. As vertically integrated firms, utilities have traditionally provided a single bundled utility service. An electric utility's primary

product, for example, has been the bundled utility service that it provides to its retail customers, rather than the variety of potentially separate services that comprise basic utility output. Electric utilities have often provided a variety of incidental services to customers (*e.g.,* appliance sales and service, fiber optic installations, trenching services, high-voltage services, etc.), that could either be purchased from the utility or from a non-utility provider. In short, vertically integrated electric utilities have been multiproduct firms for many years. Now, with increased competition emerging, policy makers and regulators must search for ways to maintain or replace the economies that have resulted from vertical integration while accommodating efficient—and "fair"—competition.

Many aspects of a utility's or a utility affiliate's participation in competitive markets raise controversial issues, and an appropriate mix of regulatory affiliate standards, accounting and cost allocation procedures, and behavioral codes of conduct can be used to address these issues. Only in relatively rare cases, would structural solutions, such as divestiture, be needed, and should only be used if less intrusive approaches fail.

E. Policy Makers Should Not Tilt the Competitive Pressures that Firms Face

Reliance on competitive markets is based on the principle that firms that can produce most efficiently (based on forward-looking costs), and bring the most value to consumers, should (and will) prevail. Thus, a real economic advantage in satisfying the needs of consumers possessed by one competitor, but not by others, is not anti-competitive. It simply reflects the different skills and endowments that each and every firm brings to the market, including differences in their overall cost of doing business. In competitive markets, firms, like people, are not just peas in a pod. Moreover, one of the most important lessons of competitive markets in other restructured industries is that today's advantage can be a fleeting phenomenon. Success either in entering the market, or in retaining any existing market share, is not guaranteed.

Policies that distort the competitive pressure faced by some firms would weaken the efficiency of competition. This might be good for some competitors but would raise the prices paid by consumers and would reduce social welfare. Policy makers should seek to promote consumer welfare via efficient competition, and should be careful not to artificially promote the competitive interests of any particular category of competitors. Pro-consumer policies provide strong incentives for efficiency, which benefits consumers (by providing low prices) and society (by encouraging efficient use of resources). Policies that artificially limit the competition faced by some firms would weaken the robustness and efficiency of competition and would thereby allow competitors to earn economic rents. This might be good for the "competitors" but would raise the prices paid by consumers and would reduce social welfare.

F. Consumers Need to Be Protected from Unfair Practices

Regulators continue to have a legitimate role in protecting customers from deception and other unfair practices. Early evidence from unbundled energy markets is that some residential customers can be vulnerable to fraud. Slamming and cramming are also problems consumers may face as firms compete vigorously for business. Safeguards will be important here. Finally, improving consumers' access to information on the choices that are and will be available to them is an important part of consumer protection.

V. CONCLUSION

Providing openness (ease of entry) and choice for consumers is critically important. Where entry is easy, incumbent firms will be unable to exercise market power, and where entry is artificially difficult (or impossible) they may well be able to exercise market power to the detriment of customers.

Most critical to facilitating competition in generation and retailing is ensuring that the regulated wires—clearly essential facilities at the present time—are available on reasonable terms to all buyers and sellers in the newly opened market. Regulators will continue to have a critical role in ensuring transmission and distribution access, and there must be appropriate and continuing oversight. Once legal barriers are removed, and an appropriate regulatory structure for the wires monopoly is achieved, the major elements necessary for competition to ensue are in place. From that point on, competitors' claims of inequitable treatment or unfairness require an empirical demonstration and should no longer be taken at face value.

Mr. BARTON. I want to thank you for your testimony. I did again scan all your testimony last evening, and so the fact that I wasn't

here for most of the verbal summary doesn't mean that I haven't looked at it, and I am very appreciative of it.

The Chair is going to recognize ranking member Mr. Hall for the first 5 minutes of questions.

Mr. HALL. Mr. Chairman, thank you. Mr. Kanner, your testimony seems to conclude that States can't deal with market power problems on their own and that some Federal authority and Federal intervention, Federal oversight, are absolutely necessary. Is that your position?

Mr. KANNER. That is correct, Congressman Hall. Your State of Texas is in a unique position where, with the ERCOT system, the market is defined by the different system, and the bill pending in your legislature includes a number of provisions to deal with market power, including pretty effective tools that don't require divestiture. But that is a unique situation. In most States, the market is much bigger than that single State.

Mr. HALL. Well, maybe I ought to ask Mr. Kahn, but is that bill going to pass in the Texas legislature?

Mr. KAHN. You probably know what the Texans are doing better than I. The only thing that I would like to add to that is that——

Mr. HALL. No, they don't like Federal intervention down there.

Mr. KAHN. No, they certainly don't, not in Texas; but I can state that our PUC only has control over what the regulated side of the business does. They don't have any control over the unregulated affiliates.

Mr. HALL. Well, I get back to Mr. Kanner, if he thinks—do you think the States that have already adopted retail competition plans have just missed the boat with their legislation or what position are they in now? Texas still has it in front of them. Are you telling me something different, that it is simply beyond the State's ability to accomplish, and why?

Mr. KANNER. Some of the States did address it to a certain extent. Some States looked at divestiture of generation, but that was normally used as a tool for valuing assets for strand cost determination, not specifically to address market power. Although, again, there are some exceptions.

It is largely outside the State control for a couple of reasons. One, once they establish retail competition they no longer have control over those generating assets. They are not rate regulated anymore.

Second, the transmission system is multistate in nature and regulated by FERC; and in many cases, the party that has the potential to exercise market power can be located outside the State's boundaries. So a State act says we want retail competition, and it is an entity located two States over. That is the, quote, "offending party."

Mr. HALL. You oppose the stand-alone PUHCA repeal, don't you?

Mr. KANNER. Correct.

Mr. HALL. Does PUHCA have some harmful effects on the marketplace? Do you agree or disagree with that?

Mr. KANNER. Well, I would agree that the tools that PUHCA establishes don't correspond perfectly to today's fact situation.

Mr. HALL. Is the harm more to consumers or to companies who are constrained by the statute?

Mr. KANNER. My own personal view is that the constraints on the companies are not overwhelming. I think we can come up with a better structure for looking at it than PUHCA currently has, but I don't think the constraints are overwhelming.

Companies can build generation facilities under the EPAct provisions anywhere in the country. They can invest overseas. They can get into a number of different business lines under the SEC standards. So I don't believe the limitations are excessive or inappropriate.

Mr. HALL. Mr. Gordon, I think I gleaned from some of your statements that the administration's bill goes too far in authorizing FERC to remedy market power in wholesale and retail markets; is that right?

Mr. GORDON. Yes, I think that is probably not necessary.

Mr. HALL. And what effect would the administration's bill have on competition, and could the new FERC's authority on divestiture and on original transition groups backfire on them? Do you think it will?

Mr. GORDON. Do I think it will backfire? I think it simply is unnecessarily intrusive in a process. That as long as the transmission end of it is dealt with properly and the antitrust authorities maintain the oversight that they can, I think the simple thing is you don't need to go beyond that.

Mr. HALL. All right. Mr. Chairman, I want to ask for a unanimous consent, if I might, that statements by interested parties that have asked me to put something in the record, that we be allowed—that are not witnesses, be included in the record, if we submit them to you timely.

Mr. BARTON. Subject that we need to make sure that they are pertinent and germane to the hearing. You know, all these adulatory——

Mr. HALL. Adulterous?

Mr. BARTON. No, no, no. All of these very favorable telegrams from your constituents may not be rendered relevant to the record, but if it is relevant to the record, we will put it in by unanimous consent.

Mr. HALL. If they brag on you, it is the same telegram, though.

Mr. BARTON. Well, that is probably relevant to the record then.

Mr. HALL. Let me go out and come in again. If I have statements that we think are pertinent, that need to be in the record, I ask unanimous consent that they be entered.

Mr. BARTON. Yes, without objection.

Mr. HALL. I yield back.

Mr. BARTON. Gentleman from Oklahoma, Mr. Largent, is recognized for 5 minutes.

Mr. LARGENT. Thank you, Mr. Chairman. Mr. Kanner, I wanted to ask you, should the FERC have the authority to order divestiture?

Mr. KANNER. We do adopt in our model legislation the delayed market provision that gives FERC that authority. I point out, though, Congressman Largent, that it is the club in the closet that's the last resort that we frankly don't expect would be needed to be used, that the first conditions would be FERC requiring a party to participate in the regional transmission organization or de-

nying market-based rates if there is not a competitive marketplace, and only if those tools were insufficient would it have that divestiture authority. And frankly, I think that authority is there so that the company says, all right, you won't give me market-based rates, I need to come forward with my own mitigation plan. I know the club in the closet that you have, so here is what I am going to do.

Mr. LARGENT. Is FERC authority to order divestiture—is that something that is going to be critical only during the transition period or principally during the transition period so that if we had to do something, if we had to put divestiture in, it is something we could sunset after, say, a period of 3 or 4 or 5 years.

Mr. KANNER. I believe mostly likely it would be something only used during the transition period. The question of in terms of sunsetting is if in some way there was a reconstitution that somehow escaped review, would you want that authority there? But our expectation is that these are transition mechanisms that allow us to get to and then sustain that competitive market.

Mr. LARGENT. Now, Mr. Gordon, in your testimony you said that we just need to make sure that there is open access, thereby it produces a competitive marketplace and then just allows the market to work.

Mr. GORDON. That would be my starting point. I do think that getting a transmission truly available to everybody on an exactly equivalent basis is the core to making this market work. An ISO attempts to do that. Various versions of so-called transcos also attempt to do that, perhaps in conjunction with some kind of an ISO that hasn't been completely worked out yet. And that is the way I would think we need to go. It amounts to functional unbundling of the transmission.

The question of whether you need to go beyond that and actually separate it legally is something that I actually have a somewhat similar position on. I don't think so. If it should prove that ISOs don't work or are somehow insufficient, then I might be prepared to go to that stage because I do think that is critical.

I would also say in passing that once control over transmission that you own has been taken away from you, effectively, so you can no longer use it as a strategic resource, I have to wonder why the board of directors would still be interested in having it.

Mr. LARGENT. Yeah. That is a good question.

Mr. Kahn, I wanted to ask you a question about this issue of cross-subsidization. You probably have not had an opportunity to read Utility.com's testimony. I did. And in there it talks about one approach is to allow utilities to use their names or branding for unregulated competitive affiliates, provided they disclose clearly that those affiliates are not the same as the regulated utility, operate completely independently, keep entirely separate accounts, and obtain no financial benefits from the regulated entity, including credit. Would you find that palatable?

Mr. KAHN. Well, I appreciate all of those other caveats. Name recognition in my industry is one of the things that I most possess. If I were to sell my business today to that particular utility, what they would be buying is my name and my customers. That is all I have. Skills are obtainable. So, yes, that would be a problem for me.

Mr. LARGENT. Would that be a show stopper for the contractors?

Mr. KAHN. I can assure you that for the independent contractors it would, only from the standpoint that 12 times a year I get an opportunity to write a check to that company. I know that company intimately, and namesake and logo is something that is a very valuable thing in my industry.

Mr. LARGENT. Even with the transparency in the pricing and with the separation of the books and there is absolutely no cross-subsidization, you just have goodwill that is cross-subsidizing now.

Mr. KAHN. I appreciate the fact that you could put fine lines on there. I can read fine lines in a McDonald's coffee cup that says the coffee is hot, but that lady still got money in her pocket when she spilled it in her lap.

Mr. BARTON. Would the gentleman yield on that?

Mr. LARGENT. Yeah.

Mr. BARTON. But if you take your position, you are in effect saying that somebody who has gone to the time and the difficulty and all of the hard work to develop a brand name identity, can't make use of it. And I personally don't think that is fair.

Mr. KAHN. No, I agree. But that the fact brand name identity was contrived with monopoly power, that is my perspective. They had the advantage of all of these years to have contrived that name.

Mr. BARTON. But the point is that we are looking prospectively, and how they obtained it. We can't hold it against them forever that in the time period that they obtained their brand name, everyone was monopolized. I mean, that is the way the world was for the first hundred years.

Mr. KAHN. I guess one point that was just brought to my attention again, the utility is certainly not going to be prohibited from using that for their own purposes. What we are talking about is in these unrelated businesses, these arms-length businesses.

Texas Utilities has never been in the air conditioning business before. Now that they want to go into that business, that is fine. I have no problem competing against them. Why should they be able to take advantage of the name "Texas Utilities" to beat me over the head?

Mr. BARTON. If we literally listen to your interest group on this issue, your position is probably unconstitutional because as long as we put all the caveats that Congressman Largent that, you know, you can't have credits, and it has to be totally separate arms-length transaction. I don't see how you can prohibit somebody from licensing the use of their name. I know where you are coming from, but I just don't see how you can——

Mr. KAHN. [continuing] Justify that point? Again, I was reminded, ACCA, my trade association, has done some analysis on the benefit of namesakes; and I would be happy to get you the information about that.

Mr. BARTON. The gentleman's time has expired but I took some of his time.

Mr. LARGENT. I just have one follow-up question, and that is, the issue of just allowing the State PUCs, who are already enacting codes of conduct, and then you got antitrust relief, which I know

could be very costly and time consuming for the guy that has got, you know, he is his only employee; it is a family business.

I understand that, and I am sympathetic with that argument; but in reality, couldn't the States really develop these codes of conduct and kind of the rules of play on a State-by-State basis and we not do anything at the Federal level?

Mr. KAHN. Well, you bring up two different points there. First, I appreciate your sympathy on the antitrust issue, that for me, 21 employees, man, I am lucky to get here to Washington. It is tough enough to run an air conditioning business, much less prosecute an antitrust case against a utility company.

With regard to the crossing State lines issue, I really have to go back to my point that the States have control over what that regulated arm does within their State. As soon as they move to Oklahoma, for example, what is the Texas Public Utility Commission going to do to enforce what happens in Oklahoma?

Mr. LARGENT. Well, they won't, but Oklahoma will. What I am saying is rather than you coming and making your case in Washington, DC, which I know is the easiest way to do this because you can do kind of a one-size-fits-all and it will cover all fifty States—you only got to lobby one place and that is here—you are going to have to lobby in fifty States, and so you may lack a certain uniformity from State to State, and that creates a problem; but again, we are not stepping on the States. But you will have effectively, your trade organization and members of it in those individual States, will have the opportunity to lobby their individual——

Mr. KAHN. And we have obviously. But again, when a competitor from outside of my State comes into my State, what power does my State have over that unregulated business?

Mr. BARTON. Gentleman's——

Mr. LARGENT. I was just going to say, when they are doing business in your State, they would have regulatory authority.

Mr. KAHN. Not the PUC.

Mr. BARTON. You all can continue this conversation in the cloak room.

Mr. LARGENT. Thank you, Mr. Chairman.

Mr. BARTON. The gentleman from Ohio is recognized for 5 minutes.

Mr. SAWYER. Thank you, Mr. Chairman.

Mr. GORDON. Could I follow up?

Mr. BARTON. Let us go on, if you want to allude to that, and give Mr. Sawyer his time.

Mr. SAWYER. I was going to give him some time, but I have to tell you, it reminds me of Roger Penske, who was a great racing driver in his youth and a great owner throughout most of his adult life, and he was asked what he attributed his great success to and he said the ability to read the rules. What do you mean? He said it is where I can find an unfair advantage.

And the truth of the matter is, I mean that is what we are all struggling for here is we talk about level playing fields, and yes, that is the least we will accept; but what we would really like in our heart of hearts is an unfair advantage.

I really want to—I am sorry Mr. Largent left because I think he really hit squarely on the button. Some of the difficulty with good-

will—that goodwill exists in a rate-of-return regulated obligation to serve—service territory, and as soon as you move beyond, that really doesn't exist in the same terms; and even the terminology with which we construct this unfair perception is grounded in a previous era.

When we talk about rate payers being forced to pay to subsidize, they are not rate payers. They are customers who aren't being forced to choose anybody. They can really go and choose in a far more open market if that is, in fact, the idea.

Having said that, I tend to support the idea that we don't want to have unfair cross-subsidization, but that is extremely difficult to do. And we need to think through with great care how each of the States can look at the internal financial workings of the companies involved so that they can determine where that cross-subsidization exists. I would be very reluctant to see that done on a Federal level just because of the size and magnitude of all of that.

I just want to make an observation. I was really intrigued by Commissioner Thompson's comment about how distribution facilities yield monopoly power without resorting to uncompetitive practices, and it seems to me that the testimony we had among our last two commentators really got—had some of that.

Mr. Rose, welcome from Columbus. At some point I hope you can illuminate what, in fact, is going on in Ohio restructuring. Texas, I think, looks transparent by comparison to the meetings that have been going on in Ohio.

Mr. ROSE. I should say I have been working with the Ohio legislators—and I am not speaking for them as well—but we have a contract to help them develop this year's legislation as well as last year's as well.

Mr. SAWYER. And maybe next year's.

Mr. ROSE. And next year.

Mr. GORDON. Could I add I have also testified in Ohio on these issues, and treatment of codes of conduct in Ohio, as in other States, is fairly extensive. Logo issues, affiliate transaction issues, cross-subsidy issues are the subject of intensive examination, and I think the home State regulator for whatever the utility is will be likely to be quite alert to any cross-subsidy that may be attempted.

Mr. SAWYER. Let me go back to the last comment that you were both addressing with regard to distribution and access to real choice among providers.

Mr. Rose, you have championed the notion of putting together lotteries so that customers who did not make an affirmative choice would be distributed among potential providers. Mr. Gordon, you sounded like you opposed that.

Mr. GORDON. You picked the right pair to address your question.

Mr. SAWYER. I guess my question comes down to again a question of market power. I would like you to discuss this, but I particularly would like you to concentrate on deciding on who gets to be in the lottery. Among those who are potential providers, what thresholds for being eligible you would have to meet, or do you simply have to register? If I have made no effort, do I simply get to gain market access by filling out a form, or do I have to qualify in some way?

Could we just take a moment to have a brief conversation between these two on that topic?

Mr. ROSE. Let me, first of all, just correct one thing. What I would favor is actually an auction where anybody who is qualified would participate in the lottery, is preferable to doing nothing in my view, which is somewhat similar to what FEC did in the mid-'80's after the AT&T breakup and that Georgia is now going to do for its gas utilities, which is a random assignment of customers.

The way the random assignment works is that in order to qualify for any allocation of those nonchoosing or default customers or provider of last resort, they all have different names in different States. The way that is allocated is based on your market share of those customers who did choose, or in the FCC case it was a market share of those customers who did choose, and the Georgia case it is the market share of the whole market, which has different ramifications obviously for whether that favors the incumbent or whether it is favors the new entrants.

But that is how you get in. You have zero market share, then you don't get anything, and presumably there is some kind of a threshold that anybody has to have almost on every program, and every State has this. And let me add, too, this is purely a State issue in my view. This is not a Federal issue, this is something that every State has to look into and decide for themselves.

Mr. SAWYER. That was going to be my last question.

Mr. GORDON. My objection to it is that it basically short-circuits the market. It doesn't necessarily offer a better service. And it also doesn't rely on consumer choice, which I think is the linchpin to all of this. Consumers won't all change instantly, but they will change as they learn and as they are offered better deals. That generates the real benefits.

That is what electric restructuring was all about in the first place; real investment, doing things better, figuring out a better bundle of services. All of that has to be done to generate any real improvement in economic welfare. Otherwise you are just shifting customers around to different people. That does reduce concentration but it misses the point of the competitive process.

Mr. ROSE. Let me respond to that, it is very important——

Mr. BARTON. The gentleman will have to claim the time here.

Mr. ROSE. [continuing] nobody is taking the customer away from anybody and no customer at any time is being assigned to somebody they don't want. And in the FCC example customers got a warning that they would be placed in this random allocation if they didn't choose. That spurred a lot of people to decide. If I recall correctly, that is when I picked my long-distance provider.

The other thing is that it was one free switch back, so if I got assigned to a provider I didn't like, I can go back, it didn't cost me anything. So nobody is ever forced to be with anybody.

I realize that has been in Ohio. I am very sensitive to this because we are fighting this battle right now. It has been grossly mischaracterized, the auction procedure that is in there, in the Mead-Johnson proposal this year, and it is also very different than last year, by the way.

In this case, now the customers would never even know who is supplying the kilowatt hours to them. It is not like last year where

they would. There is no direct interface. It is looking at 10 percent loads of the default customers. They are getting allocated. The customers still sees their bill from the company that sends them the bill today.

Mr. SAWYER. In large measure, would you both then agree with the notion that although Mr. Thompson's observation may have some merit, that it is most appropriately a State issue when it comes to questions of distribution?

Mr. ROSE. Yes, I agree.

Mr. GORDON. I agree with that.

Mr. SAWYER. Thank you, Mr. Chairman.

Mr. BARTON. It is a strange feeling when the witnesses outnumber the members by about 3 to 1. We have got to be careful here.

I have a 1:30 meeting with one of the commissioners on the Nuclear Regulatory Commission. So I am going to recognize myself for a few questions and then turn it over to Mr. Burr. The left end of the panel as I look at it, I don't want you to all to feel unloved that all the questions have been down here.

I want to ask Mr. Rogers a question. Do you think that the FERC should be given the authority to require transmission owners to join ISOs?

Mr. ROGERS. My judgment is, RTOs are very important to creating a robust wholesale market, and that the FERC's authority should be clarified in this area. And that is critical, I believe, and consistent with the underlying policy of the Energy Policy Act of 1992.

Mr. BARTON. Are you for a FERC mandate or for more of a voluntarily incentivized system?

Mr. ROGERS. I am more for incentives, but I am also for conditioning authority. I think there are circumstances because where they may recognize market power as a result of a merger or some proposal that they have to approve, I believe the commission should have the authority to condition the approval, for instance, of a merger. Were they to eliminate market power, they would then join the RTO.

Mr. BARTON. Okay. What about PUHCA? I assume you would support PUHCA being repealed?

Mr. ROGERS. I would say that would be an understatement.

Mr. BARTON. An understatement. Is PUHCA, as it is currently configured, a barrier to entry for utilities that are thinking about building additional generation capacity?

Mr. ROGERS. It is a significant impediment for us, for instance, in terms of we are limited. Even though our balance sheet allows us, PUHCA limits our ability to invest in merchant plants. It limits our ability to compete for generation. It limits our ability to invest internationally, even though our balance sheet allows us to do it.

I will tell you the most important distinction. Foreign companies, they come into this country and buy utilities, and then under PUHCA we are precluded. An example of that is Pacificorp. which was acquired by Scottish Power. Under PUHCA we couldn't even compete for that business or for that——

Mr. BARTON. Competing to buy the——

Mr. ROGERS. To buy.

Mr. BARTON. [continuing] what the foreign entity bought? Okay.

Mr. King, could you describe briefly your modern meter technology that you have been using and how that might help in going into a competitive market?

Mr. KING. Sure.

Mr. BARTON. Did somebody already ask you that? I wasn't here for the whole time. I was told they haven't. It is really creative.

Mr. KING. It is a solid state meter, fully electronic. It includes wireless modems in it. So it communicates over radio communications, sending the meter readbacks eventually to us over the Internet, and records the information every 5 minutes. And what is important about that is that customers who don't want to pay the high price of peak energy don't have to, and they can save significantly on their bills.

Mr. BARTON. Does your meter technology have the ability to do what is called reverse metering?

Mr. KING. Some flavors of it do, where you can do net metering if the customer produces power onsite as well, if they have solar panels, for example.

Mr. BARTON. Okay.

Mr. KING. I would like to address this in the context of market power. We talk about no cross-subsidization, but under the rules right now in California we provide meters for those customers. We pay all the costs of doing so, including reading those meters and so on. The way it is set up now, those customers have to continue to pay the utility for metering services within their bundled distribution rate as part of their monopoly distribution.

Mr. BARTON. They pay them and then they pay you too?

Mr. KING. They pay twice.

Mr. BARTON. You think that is unfair?

Mr. KING. Yes, somehow.

Mr. BARTON. Okay. I am going to yield back the balance of my time to recognize Mr. Burr to chair the remainder of the hearing. He has the full power and authority that such chairmanship has.

I want to thank the panel, and I apologize for requiring eight of you to be at the table. We kept having additional members want additional witnesses. We started out, this panel was going to have 5 witnesses, and it was 6 and then it was 7 and then it was 8, and there was even a request late for there to be even another 1 or 2. So I do apologize for each of you to be here in such a large group.

Mr. BURR [presiding]. I also apologize to this panel for running in and out. But we are going to have quite a day on the floor, I think, before it is over, and we are all trying to figure out exactly how it is going to happen. So please accept everybody's apology.

Let me go to you, Mr. Kurtz, real quick, because if I understand from your testimony, you believe that FERC ought to have the ability to mandate everybody in the ISOs, correct?

Mr. KURTZ. Yes, we do.

Mr. BURR. Does that include municipals that own transmission?

Mr. KURTZ. Well, that may very well be possible as a necessity in the future, in large part publicly owned organizations. There is going to be a struggle clearly between local control——

Mr. BURR. Can you pull that mike a little closer to you?

Mr. KURTZ. Clearly one would recognize the struggle between local control and being controlled at the Federal level with small organizations. From my standpoint, you are not going to run into that greatly through members of the American Public Power Association, because generally most of them are distributing companies only. They are very few, very large organizations in the American Public Power organization.

Mr. BURR. But there are some that own transmission?

Mr. KURTZ. There are some that own, and for there to be an expectation, if there is the ability I think to have a dominant position, that they would forever expect to be excluded from that consideration I think may be unrealistic.

Mr. BURR. So your answer would be, yes, you think that municipals that own transmission should be included under the FERC's ability to force them into ISOs?

Mr. KURTZ. I think if they are dominant players in the industry that should be considered.

Mr. BURR. Let me go back. If there are municipals that own transmission, should they be included under the same brush that you said the rest of the industry should as it relates to FERC's power with ISOs, with them?

Mr. KURTZ. Well, the reason why I would hedge on that is because you have different levels of transmission. For instance, take Gainesville, Florida. We are not a dominant player in the transmission world. We are generally a local company.

And, therefore, you have publicly owned organizations whose transmission or subtransmission or high voltage distribution do not play a significant component, nor could it be considered a significant component in the transfer of power into and out of regions, I would submit much different than the Tennessee Valley Authority.

Mr. BURR. Would FERC agree with your assessment that it wouldn't affect other people's ability to deliver power?

Mr. KURTZ. FERC has, if I remember correctly, a seven-step evaluatory process where they determine the difference between whether transmission is significant enough to be transmission or whether it is local distribution. So there is a methodology FERC uses for making that evaluation.

Mr. BURR. How about you, Mr. Rogers, the same question?

Mr. ROGERS. It would be my judgment, as a former Deputy General Counsel of the FERC, that they would include municipal transmission under their definition. And it would be my recommendation, as a matter of public policy, that all transmission, whether it is a public agency that owns it or the government that owns or it is an investor-owned, it all ought to be included, because the critical point about an RTO is to have increased reliability to all the potential customers on the grid, and that requires participation by everybody and nobody should be allowed to be an island.

Mr. BURR. With few exceptions, don't most of the proposals and most of the initiatives agree on what it is we need to do, the thing that is lacking? We use different words to describe, but is it confidence that the marketplace will work in a competitive way?

Mr. ROGERS. I think that is a fair characterization.

Mr. BURR. So the challenge for this committee, as we move legislation, is to assure from you all the way down to Mr. Gordon and

to the companies and, more importantly, to the capital markets across the country, that the free flow of electricity can happen from point A to point Z without interruption, which means that you can't exclude anybody. Whether the decision is made to empower FEC or whether we choose to go another avenue, you can't have one size over here and another size over here. It has to be predictable and make sense.

Mr. ROGERS. I would agree with that.

Mr. BURR. How important is it—let me ask you, from the standpoint of Cinergy, how important is it that the capital markets perceive the change that we make—potentially make as a tremendous opportunity for their capital to be invested?

Mr. ROGERS. I would say from a capital market perspective, they want to see a truly competitive market. When you have a hybrid market, you have the great possibility that capital invested, the returns would be uneven in that situation.

Mr. BURR. Where is the capital injection going to be used?

Mr. ROGERS. My judgment is, is you look at the amount of distribution we own in this country and the amount of transmission and generation, most of the capital in the future will go into the generation part of the business, which in my judgment should be deregulated completely, and would be under most State plans as well as Federal.

Second, and this is a very critical point, Congressman, I believe—and you can study what has happened in the U.K. and the National Grid Company there—if we have regional transmission organizations, significant capital would be put into the transmission system, which would improve an already very reliable system but would enhance the reliability over time.

Mr. BURR. Mr. Kurtz, I don't want you to think that I disagree with you on your statement. I am not sure where I am on the question of the transmission right now, but I do find it troubling from the first panel that there is not an expectation of new generation.

And I guess I would ask anybody who would like to comment, if we get it right, I realize that that is a big if, but let us assume that we get the ideal bill, do we have no generation? Yes, sir.

Mr. ROGERS. I would be quick to say in the Northeast they identified about 6,000 megawatts of new generation needed, and there is already on the drawing board today 24,000 megawatts. So you have significant capital money in project, in the innovation of American industry moving into that region.

In our region, you may remember the problems that we had last summer, which was really a price fluctuation in the market. Let me just show you how quickly the markets responded. We have already seen instances where companies from other regions of the country are coming into our region proposing to build gas turbine units to deal with these perceived market shortages.

The point is, markets are very efficient and they work quickly, and where people see opportunities, they invest the money, and that translates into putting generation on the ground when it is needed in the future.

Mr. BURR. Which is competition?

Mr. ROGERS. Which is what competition is all about.

Ms. TIGHE. Yes, really just to echo that, in those places where there is demand, we are definitely seeing new generation projects being developed. Actually, we have a compilation of some of these projects and we would be happy to provide that to you.

One of the key things here is that it is important that the structure of those regional transmission organizations be done properly, so that there will be ability to interconnect with the transmission system on a fair basis, and that the decisions made and the operation of the transmission grid will be fair to these new generators. That is an important factor as developers consider where they are going to locate.

Mr. SAWYER. Mr. Chairman, might I piggyback on your question——

Mr. BURR. I would be happy to yield.

Mr. SAWYER. [continuing] and turn back to the question of capital formation around transmission per se. I have great confidence that generation will be able to do that. You, throughout the history of regulated utilities, have been largely competing with one another for capital. That has been really the terms of competition.

I am concerned that transmission in an uncertain environment, a blend of both Federal oversight, State siting responsibilities, and the degree to which States become important links in transmission without benefiting directly from the siting and investment in those transmission facilities, I am concerned about the uncertainty of that and their ability to attract sufficient capital to maintain and grow the system into real competition.

Did that make sense to you and, if so, can you comment on it from the point of view of transmission per se?

Mr. ROGERS. I think you have raised a very important set of issues around what will transmission look like in the future. My comment will be that you will see, and you have already seen it, ISOs formed in California and in New England and the mid-Atlantic and the Midwest. You will see regional transmission companies developed, some as ISOs, some as TRANSCOs, but at the end of the day they will become initially in some regions and then they will combine, because the flow of electricity is not bound by State lines. It is not bound by regions.

And what is going to happen? Think about the history. The history is this: Every utility that has been developed over the last 75 years primarily built transmission to get power from the plants to their distribution grid. In a competitive world, all of these little individual islands, and that is what RTOs do, get connected up, and so the ability to move power. So when you have power over here, it is enhanced dramatically if you built the right transmission between the areas.

And we have worked hard as separate companies to do this, and that is part of our tradition and that is part of good business. But the other reality, and this is your point, the most important reality is in a new competitive world there have got to be incentives to beef up the transmission grids.

Mr. SAWYER. Exactly.

Mr. ROGERS. And those have to be done, and there has to be a coordinated effort between the incentives on the Federal level, because it only makes sense for the FERC to regulate what is inter-

state commerce transmission. But there needs to be some coordinated mechanism in the siting of transmission, because let me tell you one of the difficult most things to do today is build a new transmission line, and we need to build new transmission lines to facilitate the growth of this country.

Mr. SAWYER. And without that the ability to attract capital and doing all of those good things that you just described could be substantially limited?

Mr. ROGERS. Well, it becomes very difficult to attract capital if you have difficulty in getting approvals and getting the construction done. I mean it does create a problem, but the truth of the matter is, capital will be there if we have clear guidelines in terms of the interface between the regulation and the incentives on the Federal level and the siting on the state level.

Mr. SAWYER. Thank you.

Mr. GORDON. Could I add a point?

Mr. BURR. Yes, sir.

Mr. GORDON. I wanted to say that I agree with everything that Jim has to say there, but I think there is one piece that has to be solved, I mentioned it earlier, and that is the pricing mechanism for transmission and the oversight regulation that exists for it. It has to have in it some incentive for whoever the transmission owner is to look for where the new transmission is needed and then to build it. There has to be a driver.

Otherwise you are back in the world where engineers look at the system and decide what is needed next. That was probably okay in the earlier era. In fact, it was very successful in the New England region for a long time, but I don't think it will carry a competitive era forward. So the FERC really does have to address that and address it sooner.

Mr. BURR. That was probably the design in your area, and I would ask you, how much did the transmission lines contribute to the price spike that happened?

Mr. ROGERS. Well, we had an unusual set of things coming together last summer in the Midwest. And I mean we had a tornado knock out one of the nuclear units in northern Ohio, we had some unplanned outages, and plus we had peaky weather. The fact of the matter is, we had adequate capacity, but the psychology of markets sometimes drives prices.

The FERC did an investigation of this and came back and said these are the bumps in the road to a competitive market. My judgment is, and I feel very strongly about this, our company has got a very strong transmission system. In fact, we have been named one of the five delivery points for all new future contracts, even though we don't have the largest transmission system in the Midwest.

My judgment is, if we would have had an effective ISO in the Midwest last summer, we would not have had the problems that we had. So I am one of those people that believe the sooner we can get these ISOs in place or some form of RTO, the better off we are and the smoother the road will be to competition.

Mr. SAWYER. Did you have a further comment?

Mr. ROGERS. Yes, sir, Congressman, I think a very instructive example of how money flows into the transmission grid is to look at

what is going on in the U.K. When they privatized the U.K., which was the government-owned operation, and they already had a national grid because they ran it as a government operation, the amount of money that the national grid company has invested in transmission to facilitate the flow and to deal with these load pockets, it has been amazing the amount of capital that has been put into that system and the efficiency and the reliability in the system today, fundamentally better than it was when the government ran it.

My judgment is, in this country our transmission grid will be fundamentally better in a world of RTOs than in the world that we are in today.

Mr. SAWYER. Thank you, Mr. Chairman. I appreciate your latitude on that.

Mr. BURR. The Chair would recognize the gentleman from Oklahoma.

Mr. LARGENT. Thank you.

Mr. Gordon, I want to come back to you real quick on this subject of ordered divestiture, because I know in your testimony you said we just need to have open access and allow the markets to work. Is it your opinion that if we do this thing right and we have good open access and it is working, we have competition, having language in there that would allow FERC to order divesture, would that be a bad thing?

Mr. GORDON. You know, my instinct is to say you really want to not force people to do things unless you absolutely have to force them. If you would like to see which way the industry structure would settle out in a competitive environment—and I can't imagine what economy of scale there is going to be, but there might be one—there might be a reason not to do it unless you absolutely had to. So I think my own preference would be not to require it.

Mr. LARGENT. Okay. Mr. Rogers, I had a question for you. I have been trying to think this through from a utility perspective. If you had the option to choose a TRANSCO versus an ISO, speak to me from kind of a utility's perspective on why you might prefer one over another.

Mr. ROGERS. Because I am such a strong believer in competitive markets, I would like to see the markets become robust sooner rather than later. We have been part of the process of building an ISO in the Midwest. Because of all of the issues related to ownership and debentures, it takes a long time to put a TRANSCO organization together. Because sooner is better than later in creating this competitive market, we have opted for an ISO, but we clearly see in our future converting that into a TRANSCO.

It is also my opinion that companies that primarily support TRANSCOs, are unwilling to go to ISOs in the short run, don't really want regional grids at all, and so it is a stalling technique. And so from my standpoint we need to move into ISOs sooner. We are going to learn a lot, it is going to help us transition to TRANSCOs. It is going to allow us to work through the mortgage debenture issues, the State regulatory issues in terms of ownership and splitting it out of your rate base, in which your rates are set for in the State level.

So I think you get an effective regional market working sooner, but we have to be clear about the goal line. The goal line ultimately is going to be a TRANSCO, because to get the rewards and the risks in better balance, I think long term having an independent TRANSCO company—I think the U.K. is a wonderful example of how that works . You are going to see significant investments to beef up the system because it will be in the interest of the entire system, not necessarily the interest of one company.

Mr. LARGENT. It seems like it sort of flies in the face of experience that you want to appoint a committee, which is what an ISO would basically be, a political committee, to move the ball down the court quickly. But I guess I understand what you are saying, and I never really thought about the fact that you move from an ISO on into a TRANSCO. I personally think TRANSCOs, if I were a utility I would prefer to be dealing with somebody that is working either on a for-profit or not-for-profit basis operating that transmission system.

Mr. ROGERS. Let me tell you our board of directors struggled with this as we felt our way through, and I think we reached the conclusion, and that is why in the ISO in the Midwest that we are involved with, there is a provision that allows it to convert to a TRANSCO.

If you live through the experience we lived through last summer in the Midwest, with the volatility and the reliability issues that were raised, I believe a lot of people that don't want to see competition happen in this country, the first thing they say, if there is any reliability problem that is attributable to competitive markets. So if you believe, as I do, that competitive markets are the right answer, you want to reduce the probability of reliability problems. In my judgment you can set guidelines for this independent system operator that allow the market to work and allow the transmission to work.

And as I said, I don't think we would have had the degree of the problem we had in the Midwest last summer if we would had had a functioning ISO. I also agree with you that ultimately the TRANSCO is the right structure, but if you are committed to getting a competitive market, you have got to think first about reliability, and an ISO will be very effective in the short run in making sure that we have a very reliable system as we make this transition over the next 5 to 10 years for the competitive market.

Mr. LARGENT. Mr. Chairman, if I could indulge just one more thing. I have read the testimony of utility.com, and Mr. King, I would like you to make a brief comment. The thing that I really found fascinating, and it was really an angle that I never had read before or thought of before, was the environmental impact of having individual metering, advanced metering of your retail consumers, so they could optimize their consumption at low-cost times and back away when there is high cost times, and the environmental effect that that has of operating utilities at peak efficiencies. And could you just comment on that?

Mr. KING. Sure. It really has a huge impact. Up to now under the industry, power plants have been built to meet the peak day of the summer, and consumers have been given no reason to reduce their consumption at those times. So unlike most markets where

you have the supply and demand curve, people weren't asked whether they wanted to pay those high prices, and the solution was just build more and more power plants.

By giving them this choice, they don't even have to make big reductions in those. They can have a major impact on the efficiency of the industry. In fact, right now the power industry operates at only about 46 percent capacity, because you have got these power plants that sit around and only are used for 10 or 20 or 100 hours a year. And that efficiency could go up about by as much as 50 percent, by some estimates, just by letting consumers have that choice and having the technology that records when they use the power.

Another part of the environmental aspect of that is that many of those peaking plants tend to be the dirtiest plants in terms of emitting air pollution. So there is additional major benefit from avoiding the use of those power plants.

Mr. LARGENT. Thank you, Mr. Chairman.

Mr. BURR. Let me ask one final question, if I could, and I would segue into it off of the ISO issue that is on the table, and only make a point that I would hope that we could find a way to allow FERC, if we choose FERC to be the determining factor on ISOs, to expedite the process of not only the formation but the asset valuation.

And I go back to a recent thing in California where companies are still trying to determine whether the dollars that they claimed are, in fact, the dollars that they are credited with by FERC. And I think it gets back to not only the capital issue, it gets back to business planning, it gets back to how we evaluate the success or failure of the ISO and of the transmission grid.

And I will use that to segue into mergers. Clearly I throw on the table to anybody who would like to comment, is there a need in the future, assuming that we find the right legislation to accomplish retail open access, for FERC to be involved in any primary way in the determination of mergers? Ms. Tighe.

Ms. TIGHE. Thank you. Yes, we believe that they should be, that in fact they should have the ability to examine mergers, not only for a wholesale impacts but also impacts on the retail markets.

Mr. BURR. Mr. Kurtz.

Mr. KURTZ. We do believe that FERC should now and should continue to be involved in evaluating mergers. You know, there is a lot of discussion about if we get the right legislation, if this, if that. I think one of the points of our testimony is that we are not there by a long shot yet, and we have a long way to go and there are a lot of things we need to do to get there. And, therefore, to get to the answers to the "ifs," we have got to make sure that FERC has the regulatory ability to deal with those.

If we have a drawback in the future or anomalies in the future, FERC needs to be able to continue to oversee that process and we believe strongly they should continue to do that.

Mr. BURR. I would remind you and others that I don't think there are any members that are proposing the deregulation of transmission of many of the areas that we concentrate on, saying here are concerns. We still expect, because we are not changing FERC's involvement, for there to be the correct oversight of those areas.

I think that one can question whether the attempt is to deregulate or reregulate the generation, and I think there is a huge difference in that that we will deal with based upon the great testimonies of you and others who have come before this committee, some 36 before you, and what members have been able to learn from those testimonies.

Mr. Gordon.

Mr. KURTZ. Mr. Chairman, if I may.

Mr. BURR. Excuse me?

Mr. KURTZ. The point is it is really hard to separate. There seems to be a lot of discussion about separating generation from transmission. The fact is, electric systems operate as a dynamic system, I come from the State of Florida. The State of Florida is a very long, narrow State. It has transmission that runs up and down. The predominant load in the state of Florida is in south Florida.

Depending on what generation that you are operating, even if you have absolute and total complete access to transmission in the State of Florida, depending on where the load is and where you operate generators in, you can break up the State of Florida on a real-time dynamic stability basis if you have the outage of a unit, if you have the outage of a certain transmission corridor.

And so for us I guess to intellectually not recognize the electrical link and the dynamics of an electric system between the generators and the transmission, and to assume that you can just say we are going to regulate transmission and we are going to deregulate generation, if we end up with a system where everybody chooses to put generation in north Florida, all of the transmission is deregulated, all of the load is in south Florida, electrically you are not going to have a reliable system to do that.

Mr. BURR. Clearly I would hope that companies that go in to build generation would locate that new generation in an area that, one, the load is; two, that they have confidence in the transmission grid. But I think you raise another question, and that is that there are infrastructure needs in our transmission grid around the country, and I don't think anybody argues with us on that.

I think it will take movement of a retail bill for there ever to be the investment that is needed in the transmission grid, to upgrade it.

Mr. Gordon.

Mr. GORDON. Yes, my preference is, as you heard earlier, is to try and not to expand into the generation market the FERC's authority. We want to deregulate to the extent that we possibly can. To the extent that somebody is gaming the transmission system through operating the generation in a way that it is out of the usual order, that is a kind of a horizontal issue that an antitrust agency might have to look at.

But I would still leave it at that level and not try to have the FERC regulating a market that hopefully we are making competitive. So there is a horizontal market power problem to be overseen there, and it may be subtle and require sophisticated engineering understanding of how a unified electrical system works, but I think it should be handled on that basis rather than on regulating the whole market.

Mr. BURR. Anybody? Mr. Rogers.

Mr. ROGERS. I would just make one comment. Since our company is a product of a 20-month approval process where we had to go to three different States and the FERC and the SEC before we became Cinergy—and by the way, as a footnote, our utilities still keep their names. All of our nonregulated businesses are under the name Cinergy, not Public Service Indiana, not Cincinnati Gas and Electric, for some of the reasons that we talked about earlier today.

But this is my point, the FTC and the Justice Department have deadlines on how quickly they can deal with the merger. They could go up or down. On the BP, British Petroleum-Amoco merger, 6 months. They can go up and down. And that created a company between $50 and $100 million of market capitalization. The largest company in our industry is less, about $20 billion. Chrysler, Daimler-Benz, Exxon, Mobil, do you want to talk about large combinations? They don't go through a 20-month approval processes, they get done in less than 6 months. The capital markets put a huge penalty on utility combinations because of the uncertainty.

And quite frankly it is a burden on the managements of the companies trying to put them together, because of the uncertainty and the length of the period for approval. My point to you is this: FERC has the authority today, and I can clearly see situations where the FERC, and particularly dealing with market power issues, should have the authority to eliminate the market power, whether it is some limited divesture or requiring them to be part of an RTO, which has the effect, quite frankly, of eliminating some of the problem.

But the fact of the matter is, is that virtually every merger at the FERC has taken 18 months to 2 years to get done. There needs to be, and, yes, they have imposed on themselves time lines, but I think it would be incumbent upon you to facilitate the process, good for the capital markets, good for consumers, to say to the FERC, "This is what your authority is, this is what you look at, and you get it done in 6 months."

Then I think you facilitate a consolidation that is going to happen in our industry. The one thing that nobody has talked about today as they worry about market power, we have 3,000 sellers of electricity in this country. We have one of the most fragmented markets in the world, our companies, and I compete all around the country. I compete with companies that are $30, $40, and $50 billion dollars market capitalization and my company is only $4 billion, and I am considered a big company in the U.S.

Mr. KANNER. I wanted to add, it is a very valid question, whether FERC needs to be the lead agency in merger review. Our feeling is it does, both to look at the competitive effects, as others have suggested, we need to add that to it, but we also need to make sure that some of the regulatory gaps, some of the mergers or potential combinations that are outside FERC review are captured.

And Mr. Largent's amendment of last year addressed some of these issues. Holding company to holding company mergers, we believe that is appropriate. The reason for FERC being in the lead is their expertise, as Mr. Rogers said, in the merger. In a utility merger conditions will be imposed looking at things like RTO participation or potential divestiture, and FERC is going to be the

agency that is going to oversee the implementation of that. So it is appropriate for them to be the merger review entity, since they are still going to end up being the enforcement entity.

Mr. BURR. Where would your confidence level with the FTC and DOJ be in their divestiture determinations between the BP-Mobil? I mean clearly they are not the Department of Energy. I am sure as they go through their evaluation, they consult very closely with not only the Department of Energy but others as it relates to the monopoly that might be created, the marketplaces that they might have tremendous advantages without divestiture.

And I would ask you then, what is the difference in what they currently do and what we would ask them to do, if they were the primary agency on electric merger?

Mr. KANNER. The difference would be is that the oil industry hasn't been subject to 90 plus years of rate regulation, and it is that history that FERC has had as the primary regulator that is the difference here.

Mr. ROGERS. May I comment on that, because I think there ought to be clarity around that point?

Mr. BURR. Yes, sir.

Mr. ROGERS. Just make this comment. I mean when you file for a merger, you have to have Hart-Scott-Rodino approval. And in an early part of my life when I worked for Enron, one of the things we had to do is, it didn't require FERC approval but it did require Hart-Scott, and there were issues in terms of in the gathering fields, in production areas, being required to spin off some gathering facilities or some of the lines in that area.

The reality of life is you get very extensive review of what you do at the FTC under that approval process, as well as the Department of Justice today defers to the FERC. That is the way it has been in the past; it doesn't mean that is the way it should be in the future. And quite frankly, the Department of Justice and FTC have done a very good job in dealing with these issues, and the combinations are significantly bigger than the ones that we would be contemplating in this industry in the future.

Mr. BURR. Ms. Tighe, you will be the last one.

Ms. TIGHE. Mr. Burr, you brought up the issue of infrastructure investment, particularly in the transmission system, and the fact that will be needed. We very much see that as part of the role of the properly structured RTO. And it is also clearly within the authority of FERC to see that that responsibility is structured properly within the RTO.

And I think we would go even farther to say that in order to implement that needed investment in the transmission infrastructure, that FERC should have the responsibility for transmission siting, of course in coordination with the States and the regions, but they should be the one that provides the overall coordination for the transmission siting so we will have this consistency and uniformity from region to region.

Mr. BURR. I thank you, as I do the rest of the witnesses, for your willingness to come in to share your information. And I know that you can't judge the interest of this subcommittee by the number of members who are here because a lot of them are on the floor debating amendments as we sit here. But clearly this is a subject that

will be—we will have more hearings on before we see movement, but I am hopeful that we can begin to work with everybody that has an interest to see whether in fact a bill can be reached, one that is good for not only the companies but the consumers and the consumer groups that are concerned.

And this hearing is now adjourned.

[Whereupon, at 2:18 p.m., the subcommittee was adjourned.]

[Additional material submitted for the record follows:]

PREPARED STATEMENT OF THE REPEAL PUHCA NOW! COALITION

Mr. Chairman and Members of the Subcommittee: The Repeal PUCHA Now! Coalition is pleased to submit this testimony to address the need to repeal the Public Utility Holding Company Act (otherwise known as PUHCA). The Repeal PUHCA Now! Coalition is a group of electric and gas companies which has supported enactment of legislation repealing PUHCA as recommended by the Securities and Exchange Commission in a report to Congress in 1995. Member companies include registered and exempt electric and gas utility holding companies restricted under PUHCA. The Repeal PUHCA Now! Coalition believes it is essential that PUHCA repeal legislation be enacted into law this year. Simply put, repealing PUHCA repeals an Act that serves as a barrier to competition, a barrier to state restructuring efforts and a barrier to consumer benefits.

The Coalition commends the Subcommittee for conducting a hearing on PUHCA so that the need and urgency for repeal may be made again this Congress. The Coalition respectfully believes that the subjects of today's hearings, "Market Power, Mergers, and PUHCA," need not be linked to examine vigorously the separate issues of each. As discussed below, the Coalition believes that PUHCA repeal must be considered independently, on its own merits. PUHCA repeal is not a market power/merger issue. Indeed, keeping the 64-year old statute in place frustrates competition, is a barrier to entry, and actually promotes industry concentration. When this occurs, the case for repealing PUHCA now is overwhelming.

I. INTRODUCTION

As everyone here knows, the electric utility industry is changing rapidly. Twenty states have now enacted laws or regulations restructuring retail electric markets affecting 58% of the U.S. population. Other states are considering similar measures. As electricity markets become more and more competitive, the strictures and limitations of PUHCA are not compatible with the current state of the industry. PUHCA is outdated, duplicative and no longer serves the interests of consumers or investors. PUHCA has become a regulatory anachronism, a barrier to competition and innovation. It imposes unneeded restrictions, significant costs, and confers no real benefit. The time to act to repeal PUHCA is now and the Repeal PUHCA Now! Coalition urges the Congress to pass PUHCA repeal legislation as soon as it can reasonably be done.

PUHCA repeal should not be held hostage to the important debate about the potential further restructuring of the electric industry, or whether comprehensive federal electricity legislation is needed to benefit all consumers nationwide. From state to state and here in Washington, the members of the Repeal PUHCA Now! Coalition have been very active in this debate. But the Congress must realize that electric utility restructuring issues impact all stakeholders in the electric utility industry, not just the eighteen (18) active registered holding companies and one hundred fifty-one (151) exempt electric holding companies. These electric utility restructuring issues deserve serious study, discussion and debate. This discussion and debate is well underway in the Congress. Already this Congress, there are no less than seven bills currently pending in the Congress that would in some respect restructure the electric utility industry, and other bills, including the Administration's, are expected to be introduced soon. As this reflects, the issues are as contentious as they are complex. As a result, no meaningful consensus has emerged on whether, or even if, Congress should enact comprehensive electricity legislation. A truly durable consensus will not develop overnight. Thus, the Repeal PUHCA Now! Coalition strongly urges that the debate on future electric policy move forward separately from consideration of PUHCA repeal legislation.

Keep in mind, Mr. Chairman, that serious debate and discussion of these global electric policy issues has only developed in the last two Congresses. Conversely, a full merits review of PUHCA repeal started over seventeen years ago. In 1982, during a Republican Administration, the SEC found that PUHCA's statutory objective

had been achieved and recommended PUHCA repeal to a Congress composed of a Republican Senate and a Democratic House. In the intervening seventeen years, the case has been overwhelmingly built to show that conclusion was correct. In 1995, during a Democratic Administration, after conducting another full study of PUHCA's relevance, including significant public participation, the SEC again concluded that PUHCA was no longer needed and that, with appropriate consumer protection provisions to assure effective regulation of utilities, repeal was the preferred option.

The Repeal PUHCA Now! Coalition agrees. The SEC's 1995 supporting analysis is clear and irrefutable. Indeed, it has now been over twenty-five years that the agency accomplished the goals Congress set for it when the PUHCA was passed in 1935. We agree with the SEC that leaving PUHCA in place burdens the industry and the agency, and does so at a cost to society that far exceeds any potential benefits.

Repealing PUHCA is important not just to the companies that for over 64 years have borne the burden of its regulatory requirements, and whose ability to respond to *existing* competition is handicapped by that Act, but to other utilities—gas and electric—as well. On this issue, gas and electric registered holding companies are united: we all need the ability to respond more freely and flexibly to market opportunities emerging daily as the States restructure retail electric markets and respond to vigorous competition in the wholesale markets.

Similarly, companies now exempt from the Act's requirements—again both gas and electric—also seek repeal. The potential application to them of the Act's full strictures, and the current imposition of limits on their ability to serve customers geographically or through additional utility services, hinders innovation and frustrates an exempt holding company's ability to compete in wholesale and retail markets.

While the future structure of the electric industry remains open to debate, there is a much clearer picture with respect to the natural gas industry. The gas industry has already experienced significant and historic regulatory and competitive changes. All the gas registered companies now face competition in virtually every facet of their business. Yet they remain subject to additional regulation over their lines of business, corporate structures and financing that their competitors do not have. PUHCA's regulations impose higher costs and less flexibility, handicapping them in meeting the demands of intensely competitive gas markets. Suffice it to say, repeal of PUHCA, with appropriate consumer safeguards, is essential in letting these gas companies compete and develop innovative products and services, while the regulatory agencies and legislatures, including Congress, consider further changes in energy policy as applied to the electric industries.

II. THE BURDEN OF PUHCA

Registered holding companies face burdensome and limiting requirements under PUHCA. These burdens, which create severe disadvantages when compared to other industry participants, include:

- We are limited to serving utility customers in a "single integrated" utility system, which seriously restricts the geographic scope of our utility operations. As a result, we are hampered in offering services to others, even in our core business, either by significantly expanding our operations or investing in other utilities, as can be done by non-holding companies.
- We generally need prior approval from the SEC before our affiliates and subsidiaries can enter into contracts with each other. The SEC determination of the terms (including whether the contract will be at market rates or at cost) is binding on rate regulatory agencies. As a result, opportunities to save some costs or to operate with efficiencies, available on short notice, cannot always be seized.
- We, and our non-utility subsidiaries, generally cannot issue or sell securities, or alter the rights and powers of security holders, without prior SEC approval. As a result, our capital structures are much more limited; and our ability to take advantage of financing opportunities, especially in dynamic capital markets, is more limited; and we cannot use several types of securities now widely accepted as appropriate throughout the rest of our industries.
- Without special SEC approval, we cannot diversify into other lines of business—under existing SEC interpretations, we are limited to the single utility business, plus only such other businesses as "reasonably incidental, or economically necessary or appropriate" to the operation of an integrated utility business. Even with some recent SEC initiatives, business opportunities that would help additional economic development in our service territories, and even businesses that

if allowed to operate freely would save our customers money, may be foreclosed. In addition, where exemptions do exist, they often contain technical requirements that prevent the use of efficient business structures and often restrict or limit how registered companies can employ shareholder capital.

PUHCA places severe restrictions on registered holding company acquisitions of natural gas distribution companies. The SEC has consistently refused to view an electric system and a natural gas system as capable of constituting a "single integrated public utility system". The agency allows electric registered holding companies to "retain" a gas system only if the demanding standards of the Section 11 "ABC Clauses" are met. This requirement effectively precludes an existing electric registered holding company from acquiring even a neighboring gas system and enjoying the competitive convergence benefits enjoyed by numerous combination (electric and gas) exempt holding companies. A registered holding company could potentially satisfy the ABC clauses only if it acquired or merged with an existing combination company.

Even the exempt companies, although free of virtually all of the specific corporate restrictions in PUHCA, are limited to serving utility customers in a specific geographic area, lest they lose their exemption. They also must be concerned about diversification, because the SEC has the power to revoke their exemption under the so-called "unless and except" clause.

Although they were important at the time of the Act's passage, the stringency and severity of these restrictions make little sense today, especially as the utility industry is restructuring. In the 64 years since 1935, securities markets have become much more effective and efficient. The SEC's other authorities under the Securities Act of 1933, the Securities Exchange Act of 1934, and the Trust Indenture Act of 1939 assure that investors receive appropriate information and can make informed decisions. Moreover, there is extensive financial and corporate information available commercially through hundreds of magazines, newsletters, on-line computer services, and network sources, enabling the markets to respond within hours of significant events. Rating agencies, such as Moody's and Standard & Poor's, constantly evaluate our management, financial integrity, and operations and rate us accordingly. As a capital intensive industry dependent on the financial markets and being sensitive to the costs of such capital, we are committed to maintaining financial flexibility through a strong capital structure and favorable securities ratings by such agencies.

Similarly, the utility regulatory commissions, both FERC and the State Commissions, have clearer authority than was in place in 1935. The standardization of utility accounting, better staffing and more clearly defined requirements have all made rate regulation more effective.

In light of the changes the electric industry is experiencing today, and expressly in light of the authority that already exists in the SEC, FERC and the State Commissions regarding the securities markets and rate matters, PUHCA has become redundant regulation. It lacks the flexibility to allow the companies to adapt to new circumstances. Its model of the utility industry simply no longer comports with the reality of what the industry is doing, and what FERC, the State legislatures and State Commissions would like us to do. We need permanent relief today from the unnecessary regulatory burdens imposed by the Act.

III. DEBUNKING THE MYTHS ABOUT PUHCA

There is strong bipartisan support for PUHCA reform. In the last two Congresses, PUHCA repeal bills have had cosponsors from both sides of the aisle. Both Democratic and Republic Administrations, dating back to the Reagan Administration, support PUHCA repeal. While not everyone may agree on all the details of potential federal electric utility restructuring legislation, there is strong support that the time for PUHCA to be repealed or reformed is now. With this in mind, it may be helpful to address several of the last gasp arguments repeal opponents still make.

MYTH No. 1: PUHCA Prevents Utilities from Exercising Market Power.

This hearing today appears to link PUHCA with merger and market power issues. Such appearance might lead policy makers to conclude erroneously that PUHCA repeal will create market power abuses. Contrary to the myths about PUHCA preventing the exercise of market power, PUHCA actually perpetuates market concentration. Companies subject to PUHCA are confined within geographic boundaries consistent with the "integration" standard. While at one time this was considered a way of stopping growth, and enabling federal and state utility regulation to mature, it has instead led to a concentration of the utility market. This market concentration that occurs in a monopoly situation serves to impede competition and

frustrate state restructuring programs. If PUHCA stays in place, it will only perpetuate a monopoly situation for those consumers in that service territory.

Now the Coalition realizes that some have asserted that it is essential to retain PUHCA in order to limit what they call "concentration of market power" as the electric industry restructures. Those who make that assertion either do not understand the role PUHCA has played, or willfully misstate it. As stated earlier, PUHCA is a corporate structure and securities statute. Its main goal was corporate simplification, not establishing or setting specific rates for utility services. We cannot emphasize enough that PUHCA's existing provisions actually increase the likelihood of concentrations in particular markets, because the "integration requirements" and geographic restrictions of the Act limit both registered companies and exempt companies to retail utility holdings in particular areas, and restricts the ability of more distant companies to acquire, construct or operate facilities that could compete with the local utility. PUHCA effectively keeps new entrants out of markets, and keeps registered companies from engaging in competitive lines of business. Indeed, PUHCA as it stands requires utilities to limit acquisitions to nearby utilities—ones that can be integrated or that do not result in a loss of exempt status. Those nearby utilities are the ones most likely to have presented the possibility of competition.

PUHCA was originally enacted to prevent abuses by utility companies by restricting growth and advancements at a time when there were little or no state or federal utility regulatory controls available. While this approach served us well in 1935, it is now outdated and serves as an impediment and a barrier to a competitive market, especially at the retail level.

PUHCA was not designed as and is not a utility or rate regulation statute. PUHCA is primarily a law dealing with corporate governance and securities issues. Aside from the fact that it has outlived its usefulness because of changes in the way we regulate and review securities transactions, PUHCA might be viewed as an energy matter only from the standpoint that the companies it governs happen to be in the energy sector. Regulating public utilities when they provide electricity services to consumers is governed by other significant laws. These laws, most notably the Federal Power Act, the Natural Gas Act, and other state utility laws, deal with the rates consumers pay for electricity and gas services. PUHCA does not. In fact, PUHCA repeal bills in the last two Congresses, with their consumer protection provisions, actually will help public utility regulators do their ratemaking job at both the federal and state levels. To withhold PUHCA repeal from moving forward due to concerns about market concentration in a time when competition in the retail market is rapidly moving forward sends conflicting policy signals. Competition is good, unless you are a registered holding company. Over the long-term, a competitive, free market provides low prices and efficiencies for our consumers, but long-term consumers benefits will be prevented to consumers served by the 18 active registered holding companies.

Myth No. 2: Repealing PUHCA Will Create a Regulatory Gap.

Repealing PUHCA will not create a regulatory gap, it will eliminate one. Ever since the U.S. Supreme Court issued the *Ohio Power* decision, PUHCA's requirements that affiliate contracts be "at cost" have prevented FERC and state regulators from applying a market test to lower costs of services for wholesale and retail consumers in most cases. This decision, in large measure, has protected utilities' costs in rate bases and, to a significant degree, has preempted FERC and state regulators from disallowing the recovery of certain costs. With the repeal of PUHCA, this regulatory gap will be eliminated once and for all. The rate regulators, at both the wholesale and retail levels, properly will have the authority to determine the allocation and reasonableness of costs incurred by the utility in the provision of necessary services and whether or not such costs should be recovered in rates. Currently PUHCA hinders such rate regulation.

Yet, despite the need to repeal this outdated act, many are concerned that repeal of PUHCA is a repeal of consumer protections. This is simply not true.

It is important to remember that there are more than 3,000 entities currently providing electric and gas service to consumers. Of these, approximately 170 are holding companies. However, approximately 151 holding companies are exempt from PUHCA, leaving PUHCA to regulate the 18 active registered holding companies. Repealing PUHCA does not mean these registered holding companies will no longer be regulated. It only means they will be regulated under other a number of statutes, including all state public utility laws, the Federal Power Act, and the Natural Gas Act. There will be no regulatory gap if PUHCA is repealed.

Yet the cries continue that PUHCA cannot be repealed because it protects consumers. What about the majority of individuals who are served by utilities not covered by PUHCA? Who is currently protecting them?

Repealing PUHCA will not hurt consumers, but retaining the status quo will. If a consumer is served by a company regulated under PUHCA, that company is restricted from entering into competitive transactions, expanding into new business areas and improving efficiencies that could benefit the consumer. While the protections that various PUHCA repeal bills provide for consumers are clear, we should also note the benefits.

In fact, stand alone PUHCA repeal bills introduced in the last two Congresses continue to provide protection for consumers, but eliminates unnecessary agency duplication and deletes arcane provisions that no longer serve a public interest purpose. These repeal bills actually *improve* certain important aspects of federal and state utility regulation if enacted in the current regulated market conditions. Some have indicated that this may be financially burdensome to states; however, the ongoing restructuring of the electric utility system has imposed significant new responsibilities on the states, involving numerous companies and issues. The states have been in the lead in taking on these responsibilities. Surely, with the experience the states have had to date with restructuring issues, they will be able to effectively deal with any potential resource issues.

Various stand alone PUHCA repeal bills also fully provide for protection of consumers by providing access to books and records, by maintaining accountability procedures, providing for review of affiliate transactions and continued FERC and State commission rate regulation and audit authority. These are a far more direct means of addressing market concerns and protecting consumers than PUHCA of 1935 can provide in today's regulated market.

The Repeal PUHCA Now! Coalition recognizes that some state commissioners and other ratepayer advocates have expressed concern that state authority would not be sufficient to obtain the necessary information for proper discharge of state regulatory action. They are concerned that there would be a continuing need, after repeal of PUHCA, for federal audit authority and federal oversight of system transactions that would pass costs through to ratepayers. The Coalition understands those concerns. We also understand the significant difference between repealing the Act while providing for certain safeguards, and simply transferring the existing burdensome requirements to a new forum. We believe PUHCA repeal legislation can fully address these concerns and include provisions to provide appropriate access to books and records. The Coalition is fully prepared to work with the Congress to assure that a final bill includes provisions that would implement any necessary consumer safeguards.

With regard to books and records, all utility companies know full well that the books and records of the utility company must be available to regulators for their review. The burden will remain on a utility to demonstrate that its proposed rates are just and reasonable. Similarly, we understand and can accept a review of the books and records of those affiliates that deal with the utility company and that would thereby pass costs through in rates. Regulators should have access to all information that is relevant in reviewing and establishing rates for electric services. However, there are undoubtedly some affiliates in a diversified company that will not pass costs through to ratepayers, or whose activities are so removed from the utility activities that access to their books and records would be of no *legitimate* value for ratemaking or cost allocation purposes. The key test is what access is actually necessary for the effective and proper discharge of the regulatory authority involved.

As to the oversight of affiliate transactions, again we understand the interest of regulators in reviewing those transactions involving the utility, and which will cause the incurrence of costs to be passed through to ratepayers. Indeed, many state regulatory commissions already review transactions between a utility and its affiliates, and no further authority is needed. Here again, to the extent it affects rates, we do not oppose reasonable affiliate transaction provisions in a PUHCA repeal bill. However, we can also envision a number of transactions between affiliates completely apart from the operating utility companies, and which would not cause the incurrence of costs to the utility. Where the affiliate contractual arrangements are not related to costs to be incurred or passed through in the utility's regulated rates, separate regulatory review of the interaffiliate transactions would be unnecessary.

Myth No. 3: More Utilities Will Merge If PUHCA Is Repealed.

As noted earlier, the competitive transformation of the utility industry is underway. Twenty states have now enacted restructuring legislation or regulations. Similar to every other heavily regulated industry that has undergone a competitive transition, some consolidation of service providers is inevitable. But contrary to myth, consolidation will not occur exclusively because of PUHCA repeal, and whatever consolidation takes place will not escape significant regulatory review and oversight.

It is important to recognize several facts about mergers and market power assertions if PUHCA is repealed. First, the very same expert agencies and departments who today substantively review mergers will do so after PUHCA is repealed. FERC will retain all of its merger authority. It has recently updated its merger policy in light of changes occurring in the electric utility industry. Without PUHCA, FERC will still review future mergers unconstrained by any new *Ohio Power* or other similar regulatory conflicts at the federal level. State Commissions will still have their authority to approve, block or condition mergers that they have today under state law. State legislatures that wish to require that a utility company operating in that state must be incorporated in that state and remain fully subject to the state's authority regarding its securities and other corporate matters, can continue to do so. PUHCA's repeal will have no effect on that. The Department of Justice will retain its antitrust authority, and the FTC its Hart-Scott-Rodino authority. The only thing that will change when PUHCA is repealed is that after all of those approvals are given, the SEC will no longer have the unnecessary and duplicative regulatory burden of again stating its deference to the decisions the regulatory agencies have already reached.

Mr. Chairman, let us be clear: when PUHCA is repealed, no merger will occur without the same full regulatory scrutiny that occurs today. If there are efficiencies and benefits to be gained, those mergers should go forward. If there are not, there is ample regulatory authority in the hands of knowledgeable regulators to stop them.

The Repeal PUHCA Now! Coalition recognizes there is concern that states may not have the resources necessary to handle these new responsibilities. But again, the Coalition notes that the additional resources needed to handle the activities of 18 companies is nothing compared with the responsibilities of regulating the remaining electric and gas utility companies that do not come under the purview of PUHCA. It seems this problem is one of ensuring that this type of review occurs, not by whom it is done.

Simply put, we believe that the nation's state and federal regulators have the ability to review potential mergers and protect the consumer. There is no failure of federal and state utility regulation requiring PUHCA to stay in place to review the inevitable consolidation of the utility industry. In fact, removing the SEC from reviewing mergers does not mean these assurances go away.

Myth No. 4: PUHCA Cannot Be Repealed Until Retail Competition Is Established.

Effective retail competition can not be established unless and until PUHCA is repealed. PUHCA's requirements and restrictions unduly limit and burden virtually any utility company owning or operating any utility assets for the production, transmission, transportation or distribution of electric energy or manufactured or natural gas within the United States. As discussed more fully below, not Congress, the states, or the FERC can create a truly competitive environment with PUHCA remaining in place.

In reviewing the issues that may need to be addressed this year, Congress should keep in mind the level of activity concerning retail choice in the states and at the FERC. As you know, almost every state currently has some type of electricity restructuring proceedings underway. Twenty states have implemented retail competition frameworks, some on a phased-in basis.

Congress has wisely given the states and FERC significant time and latitude in picking the pace, method and means for achieving retail competition. This approach has allowed the states to proceed with retail competition tailored to their own regional circumstances. This has provided Congress and regulators critical information and experience to make informed decisions about any potential comprehensive federal legislation.

Based upon the evidence to date, the states that are restructuring are in fact moving forward without federal intervention. From California to New York, Arizona to Arkansas, Maine to Maryland, the states have passed laws or regulations to establish retail competition. Thus, the real question for the Congress to focus on is whether the sixty-four year old statute is impeding the numerous state initiatives to restructure retail electric markets. Does PUHCA help or hurt the existing and future efforts to establish state ordered retail competition?

In the Coalition's view, keeping PUHCA in place will hurt state ordered establishment of retail electric competition. Simply put, the scope of retail competition will be artificially constrained and truncated by a number of PUHCA's regulatory restrictions. Let us give you several examples.

PUHCA forbids domestic Exempt Wholesale Generators ("EWGs") from selling power at retail. As a result, many low-cost generation suppliers refrain from making retail sales because of PUHCA-related concerns. This applies to all entities—wheth-

er registered, exempt or non-holding companies. Indeed, any generation supplier wishing to avoid a holding company structure would face potential PUHCA jurisdiction if it were to setup a subsidiary and that subsidiary were to make retail sales.

Registered holding companies interested in making retail sales from facilities that are distant from their franchised retail service areas must face the geographic constraints of PUHCA's "integration" standard, which, as noted above, generally restricts registered company "utility" operations to a regional scope. This means, for example, that a registered holding company based in the Eastern U.S. would be effectively excluded from selling retail power from a facility located in California. Similarly, an exempt holding company can risk its exempt status by undertaking non-EWG sales outside the geographic boundaries defined by Sections 3(a)(1) and 3(a)(2). Thus, for example, a utility holding a Section 3(a)(1) "intrastate" exemption cannot make substantial retail sales outside the state where the utility is incorporated and conducts most of its utility business. This does not promote economic efficiency or a robust retail generation market.

In addition, many state restructuring laws call for or are contemplating the separation of generation and transmission/distribution assets into separate corporate entities. This aspect of restructuring can cause particular problems for both registered and exempt holding companies. Think about it: can a 64-year-old piece of legislation be applied to a different utility business than was conceivably envisioned in 1935? PUHCA was not designed to be flexible. PUHCA mandates a single geographically and operational integrated structure, not well adapted to an evolving industry as a result of federal and state restructuring competition initiatives. As noted earlier, PUHCA isolates electric and gas systems to limited, discrete geographic areas. The requirement under PUHCA that registered holding companies maintain a single, integrated utility business has quickly become problematic as governmental entities and a growing competitive market pressures companies to restructure. As electric utilities are compelled by state legislation, regulation or competitive forces to either "unbundle" utility functions and assets in an effort to restructure their businesses along product lines or comply with corporate unbundling requirements, the conflicts with PUHCA are becoming acute.

PUHCA controls this "unbundling" process unnecessarily. Yet the "unbundling" already has begun as a result of the twenty state restructuring plans already enacted, the Public Utility Regulatory Policies Act of 1978 ("PURPA") and the Energy Policy Act of 1992 ("Policy Act"). This "unbundling" has produced significant new players with geographically widespread utility properties. Since the new players under PURPA and the Policy Act are exempt from PUHCA, how can PUHCA's geographic integration requirements be significant and necessary to this changing industry?

There is another aspect of PUHCA's integration requirements, which may be at odds with retail competition unbundling of functions and services. Registered holding company systems are required to operate in an integrated manner. This requirement has led to centralized electric system planning, construction, and the use of (a) companies providing common management, financial, accounting and planning services, among other services, for all companies, utility and non-utility alike, in the same system, (b) fuel companies serving various affiliated companies and (c) companies operating power plants for various affiliated companies. In addition, for registered holding company systems and their integrated operations, it has been a prevalent practice to have common officers, and in many cases, common directors among affiliated companies. Will these integrated planning, service and personnel requirements be appropriate and workable in a disaggregated and competitive electric business where flexibility is necessary?

A number of registered holding companies have divested or are planning to divest their electric generator assets and will operate in restructured systems where their retail customer base will be open to competition. It is unclear that the integration standard will have any relevance under such circumstances.

For multistate registered holding company, PUHCA is a major concern as states move forward to competition. PUHCA restricts our ability to compete. This is attractive to our "unregulated" competitors as they move forward unimpeded. PUHCA restricts the types of business we can invest in, where we can invest and how much capital we can deploy. Restricted investments, required integration systems and financial prohibitions severely impact our structural and financial ability to respond to a rapidly moving competitive retail market. If a level playing field is sought, for a competitive market, PUHCA stands out as a significant barrier to achieving this goal.

Technology is another issue. PUHCA was adopted in a world without computers, without reliable transmission systems, without regional power pools, without reliable long-distance communication. Technology was one reason for PUHCA's geo-

graphic integration limits. Obviously, technology has passed PUHCA, and its integration requirements by.

A prominent feature of current FERC policy and most state restructuring frameworks is the establishing of so-called Regional Transmission Organizations ("RTOs")—whether they are an independent transmission company ("Transco") or an Independent System Operator (or "ISO"). These RTOs typically assume in some fashion control of the regional or statewide electric transmission grid in order to assure further non-discriminatory access and efficient, reliable system operation.

PUHCA presents a potential regulatory dilemma for some RTOs, since these entities may, depending on the facts, fall under the definition of "electric utility company" under Section 2(a)(3) of PUHCA—that is, an RTO will "operate facilities used for the generation, transmission, or distribution of electric energy for sale . . ." Indeed, in order to perform their mandate effectively, RTOs must necessarily exercise operational control over transmission grid facilities.

RTOs are not the kind of public utility entities that PUHCA was designed to regulate. They will not exercise market power. They raise no issues regarding ratepayer harm; rather, they will facilitate ratepayer interests by promoting regional electricity markets. Yet because RTOs could, under certain circumstances, be deemed to be PUHCA "electric utility companies", any person or company which might be regarded as exerting a "controlling influence" over an RTO could in turn be deemed a "holding company" potentially subject to full PUHCA regulation. This is a very real concern. To be sure, the SEC Staff has issued a no-action letter concurring that the California ISO is not a PUHCA "electric utility company" because it is an "instrumentality" of the State of California, based on the State legislature's restructuring directive. However, the means of RTO creation varies from region to region, and most RTOs will operate on a regional, rather than a statewide basis. The PUHCA uncertainties associated with the structure and operations of RTOs may cast a regulatory cloud over a vital aspect of state and federal restructuring efforts. It is unclear how the SEC will deal with this critical issue, especially now that most of the RTOs that have been approved to date have been and are also power pools, which have not been regarded as creating a holding company structure for member utilities. Thus, on the one hand, RTOs will be critical to successful restructuring efforts. On the other hand, PUHCA may impede RTOs from developing regionally, with broad-based membership.

The corporate or functional unbundling features of current restructuring programs can also be highly problematic for utilities holding a Section 3(a)(2) exemption. Section 3(a)(2) provides an exemption for holding companies that carry on the bulk of their utility activity at the parent company level, with only minor utility subsidiary operations. Thus, for example, if a parent utility company must transfer to a subsidiary company substantial generation assets to comply with state initiated restructuring law, it may no longer qualify for a Section 3(a)(2) exemption, since the bulk of its utility operations may now be conducted downstream at the subsidiary level.

In addition, restructuring mandates may effectively compel a utility to create a new holding company over generation, transmission/distribution, and non-utility subsidiaries, as a means of assuring effective corporate separation of utility functions and safeguarding against potential cross-subsidization. The creation of such a top-tier holding company with no utility assets of its own, however, precludes retention of a Section 3(a)(2) exemption (which requires that the parent holding company also be a utility company).

In sum, over the long-road PUHCA will hinder state restructuring efforts. PUHCA is an entry barrier, impeding robust retail competition. State driven restructuring presents potential problems for the ability of registered companies to comply with PUHCA's requirements and compete in newly created retail markets. Registered companies are subject to the "integration" standard, which demands, among other things, that utility operations be component parts of a vertically integrated system. This standard clearly clashes with emerging competitive systems based on unbundled service, independent system operators, and power exchanges. And ironically, state restructuring will likely endanger certain utilities' existing exemptions and thus require them to become registered holding companies.

Leaving PUHCA intact as state restructuring proceeds will create perverse incentives, as companies recreate "PUHCA Pretzels"—especially regarding transmission assets—to comply with PUHCA's broad reach, restructure their products and services, and to compete in retail electricity markets. This federal barrier to state enacted retail competition reforms can only be removed by the Congress. That is why PUHCA repeal legislation should be signed into law this year.

IV. CONCLUSION

In conclusion, the Repeal PUHCA Now! Coalition believes it has addressed the various issues of concern that have been raised about repeal of this statute which, as the SEC has noted, is outdated and no longer needed. Consumer protections will still be provided, market power problems are not compounded and regulatory guardians will still vigorously oversee the exercise of market power through rate reviews and merger activities. If we are for fair wholesale and retail competition, where numerous firms compete under similar regulatory restrictions, then removal of PUHCA is a key component to a competitive atmosphere. We urge the Congress to repeal PUHCA this year.

TESTIMONY OF RICHARD M. FARMER
ON BEHALF OF THE SEC ROUNDTABLE GROUP
BEFORE THE
HOUSE ENERGY AND POWER SUBCOMMITTEE
MAY 6, 1999

Mr. Chairman, Members of the Subcommittee, my name is Richard M. Farmer, and I am a partner in the law firm of Thelen Reid & Priest, LLP. I am submitting testimony today to this Subcommittee on behalf of an ad hoc group of 14 electric and gas utility systems, with public utility operations in about 20 states (collectively, the "SEC Roundtable Group").[1] On behalf of the Group, I would like to thank you very much for inviting us to submit testimony in favor of legislation repealing the Public Utility Holding Company Act of 1935 ("PUHCA).

Simply put, PUHCA has long outlived its usefulness and should be repealed. In light of the effectiveness of state utility regulation, and the evolution of other federal laws, investors, consumers and the public interest are now more than adequately protected from the abuses that PUHCA was enacted to prevent. Moreover, continued application of PUHCA is denying electric and gas utilities the flexibility they need to respond to the significant competitive, economic and regulatory changes taking place in such industries in this country and throughout the world. In fact, by mandating vertically integrated utility

---

1. A complete list of the companies forming the SEC Roundtable Group is set forth in Attachment 1 hereto.

systems, confined to a single area or region, PUHCA is fundamentally at odds with the current competitive economics of the electric and gas utility industries, and evolving federal and state regulatory policies. Neither the integration standards, the existing exemptions, nor the definitional provisions of PUHCA readily allow the other structural changes that are necessary in order for utilities to compete effectively and to preserve and enhance shareholder value in a time of reduced growth in the core gas and electric businesses.

State utility laws, including those substituting competition for regulation to the maximum practical extent (as well as federal utility, securities and other laws) have developed to the point where state regulators (together with the Federal Energy Regulatory Commission (the "FERC")) are now fully capable of adequately safeguarding the interests of utility consumers in the absence of a federal holding company statute. In this regard, it is important to remember that PUHCA was never intended directly to address rate regulatory issues, either at the federal or state level. The Securities and Exchange Commission (the "SEC") was charged with regulating "the corporate structure and financings of public-utility holding companies and their affiliates." As you have heard, the SEC now recommends, as it continually has done since 1982, that PUHCA should be repealed. Retail rate matters are exclusively within the

province of state regulators, while the setting of wholesale rates and other transactions by utilities relating to the interstate transmission and sale of electricity and gas are regulated by the FERC.

The legislative objective of the SEC Roundtable Group is to see PUHCA repealed at the earliest possible date. Therefore, we would support appropriate "stand alone" legislation to repeal PUHCA or the inclusion of satisfactory legislative language repealing PUHCA in an acceptable "comprehensive" bill, if a consensus on such a bill were to develop. However, the Group believes that there are two very important points to consider in this regard. Firstly, given the difficulty of crafting a "comprehensive" bill with broad bi-partisan support over the last several years, we would urge the Subcommittee not to let striving for the perfect interfere with achieving the good; that is to say, the SEC Roundtable Group urges the Subcommittee to approve expeditiously "comprehensive" legislation containing those legislative elements around which a bi-partisan consensus already exists, such as the repeal of PUHCA. Secondly, although each company within the SEC Roundtable Group may have its own threshold, the Group unanimously agrees that in some of the "comprehensive" legislation that is being suggested by various interest groups, there may well be a legislative "price"

for repeal of PUHCA that is simply too high a price for the members of our Group to pay.

If the Subcommittee is drafting legislation to repeal PUHCA, the SEC Roundtable Group would suggest that the Subcommittee consider the two legislative alternatives that accompany this testimony as Attachments 2 and 3. These attachments contain legislative language repealing PUHCA while varying from the approach that has previously been considered.

Attachment 2 contains draft legislation that generally (i) would repeal PUHCA by a date certain (December 31, 2001), (ii) make the provisions of PUHCA inapplicable to a holding company and its associate companies prior to such date if (a) each jurisdictional state commission certified to the FERC that it had no objection to PUHCA being inapplicable to such holding company system, or (b) each state in which a domestic public utility subsidiary company of a holding company does business is implementing customer choice in the retail distribution of electricity or gas or has formally determined not to implement such customer choice, and (iii) require the FERC to present a detailed report to the Congress by December 31, 2004, (a) providing information with respect to the actions of the States with respect to implementing retail choice, and (b) including its recommendations, if any, for additional federal legislation to

encourage or maintain competition and preserve reliability in the electric and gas utility industries.

Attachment 3 contains a copy of S. 313 as reported out of the Senate Banking Committee on February 11, 1999. We have marked S. 313 to reflect those changes that the SEC Roundtable Group believes are desirable to provide an objective standard for regulatory access to books and records of affiliate companies in a holding company system in a competitive environment and to correct certain technical and drafting inconsistencies in S. 313. Simply put, state regulators should have access to all those books and records that are necessary to regulate jurisdictional utility subsidiaries within a holding company system. However, in an increasingly competitive environment, regulators should rely on competition to keep the cost of gas and electricity low, and such regulators should not go on "fishing expeditions" through the books and records of affiliates that provide no goods or services to the jurisdictional utilities in a holding company system. Most certainly, if PUHCA is repealed through "comprehensive" legislation designed to encourage utility competition, the affiliate oversight and access to books and records provisions now contained in S. 313 are unnecessary. The competitive forces unleashed through such a measure should be more than adequate to substitute for additional regulation.

As the SEC has noted for almost 20 years now, PUHCA is an archaic law that has long since served its purpose. With its mandate of a vertically integrated utility system confined to a single area or region, PUHCA is fundamentally at odds with the restructuring that is beginning to take place in this country. But PUHCA is clearly a barrier to such restructuring and to increasing competition in the electric and gas utility industries. It inhibits efficiency gains, limits new competitors in the marketplace, leads to differing regulatory rules for competitors that are holding companies, and contributes to inefficient investment decisions by utility management and shareholders. The SEC Roundtable Group urges this Subcommittee to approve legislation repealing PUHCA now.

Thank you again, Mr. Chairman, for the opportunity to submit this testimony to the Subcommittee.

ATTACHMENTS

ATTACHMENT 1

List of SEC Roundtable Group

CMS Enterprises Company
Columbia Energy Group
Consolidated Natural Gas Company
Duke Energy
Edison International
MDU Resources Group, Inc.
Minnesota Power & Light Company
NiSource Inc.
Pinnacle West Capital Corporation
Public Service Enterprise Group Incorporated
Reliant Energy, Incorporated
SCANA Corporation
Sempra Energy
Texas Utilities Company

ATTACHMENT 2

Thelen Reid & Priest

May 6, 1999

106TH CONGRESS

1st Session **H.R.** [---------]

To repeal the Public Utility Holding Company Act of 1935, to enact the Competitive Energy and Reliability Act of 1999, to encourage competition and reliability in the electric and gas industries, and for other purposes.

.....

IN THE HOUSE OF REPRESENTATIVES OF THE UNITED STATES

[----------], 1999

[List of Sponsors]

.....

A BILL

To repeal the Public Utility Company Act of 1935, to enact the Competitive Energy and Reliability Act of 1999, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*

2 *tives of the United States of America in Congress assembled,*

3 **SEC. 1. SHORT TITLE.**

4 This Act may be cited as the "Competitive Energy and

1 Reliability Act of 1999".

2 **SEC. 2. FINDINGS AND PURPOSES.**

3 (a) FINDINGS--The Congress finds that--

4 (1) the Public Utility Holding Company Act of

5 1935 was intended to facilitate the work of Federal

6 and State regulators by placing constraints

7 on certain activities of holding company systems;

8 (2) developments since 1935, including changes in

9 Federal and State regulation and changes in the manner in

10 which the electric and gas industries now conduct their

11 businesses, have called into question the continued rel-

12 evance of the model of regulation and industry structure

13 established by that Act;

14 (3) there is a continuing need for State reg-

15 ulation in order to ensure the protection of utility

16 customers with respect to rates;

17 (4) it is appropriate for the States to consider the

18 implementation of customer choice in the retail distribution

19 of electricity and gas; and

20 (5) pending the effective date of repeal of the

21 Public Utility Holding Company Act of 1935, it is

22 appropriate that the provisions thereof be made

23 inapplicable, on a case by case basis, in those States

24 that encourage competition and are able adequately to

1 protect their electric and gas utility customers.
2 (b) PURPOSES.--The purposes of this Act are--
3 (1) to eliminate unnecessary regulation, yet continue
4 to provide for consumer protection by facilitating
5 affirmative State action to encourage retail choice for
6 electricity and gas customers or alternative regulatory
7 structures designed to encourage competition and preserve
8 reliability in the electric and gas utility industries; and
9 (2) to require the Federal Energy Regulatory Commission
10 to report to Congress and make recommendations for
11 additional Federal legislation, if necessary, with respect
12 to measures designed to encourage competition and preserve
13 reliability in the electric and gas utility industries.
14 **SEC. 3. DEFINITIONS.**
15 For purposes of this Act:
16 (1) The term "person" means an individual or company;
17 (2) The term "company" means a corporation, a limited
18 liability company, a partnership, an association, a business
19 trust, or an organized group of persons, whether
20 incorporated or not, or any receiver, trustee or liquidating
21 agent of any of the foregoing in its capacity as such;
22 (3) The term "electric utility company" means any company
23 that owns or operates facilities used for the generation,
24 transmission or distribution of electric energy for sale;

1 (4) The term "gas utility company" means any
2 company that owns or operates facilities used for
3 distribution at retail (other than the distribution
4 only in enclosed portable containers) of natural or
5 manufactured gas for heat, light or power.
6 (5) The term "public utility company" means an
7 electric utility company or gas utility company but does
8 not mean a qualifying facility as defined in the Public
9 Utility Regulatory Policies Act of 1978, as amended,
10 or an exempt wholesale generator or a foreign utility
11 company as defined in the Energy Policy Act of 1992.
12 (6) The term "public utility holding company"
13 means (A) any company that directly or indirectly
14 owns, controls, or holds with power to vote, 10
15 percent or more of the outstanding voting securities
16 of a public utility company or of a holding company
17 of any public utility company; and (B) any person,
18 determined by the Commission, after notice and op-
19 portunity for hearing, to exercise directly or
20 indirectly (either alone or pursuant to an
21 arrangement or understanding with one or more
22 persons) such a controlling influence over the
23 management or policies of any public utility
24 or holding company as to make it necessary or

1 appropriate for the protection of consumers with respect
2 to rates that such persons be subject to the obligations,
3 duties, and liabilities imposed upon holding companies
4 under the Public Utility Holding Company Act of 1935.
5 (7) The term "subsidiary company" of a holding
6 company means (A) any company 10 percent or more
7 of the outstanding voting securities of which are
8 directly or indirectly owned, controlled, or held
9 with power to vote, by such holding company; and
10 (B) any person the management or policies of which
11 the Commission, after notice and opportunity for
12 hearing, determines to be subject to a controlling
13 influence, directly or indirectly, by such holding
14 company (either alone or pursuant to an arrangement
15 or understanding with one or more other persons) so as
16 to make it necessary for the protection of consumers
17 with respect to rates that such person be subject
18 to the obligations, duties, and liabilities imposed upon
19 subsidiary companies of holding companies under the Public
20 Utility Holding Company Act of 1935.
21 (8) The term "holding company system" means a holding
22 company together with all of its subsidiary companies.
23 (9) The term "domestic" when referring to a company
24 means a company organized in that State.

1 (10) The term "associate company" of a company
2 means any company in the same holding company system.
3 (11) The term "voting security" means any
4 security presently entitling the owner or holder
5 thereof to vote in the direction or management of
6 the affairs of a company.
7 (12) The term "Commission" means the
8 Securities and Exchange Commission.
9 (13) The term "State" means any state of
10 the United States or the District of Columbia.
11 (14) The term "State Commission" means any
12 commission, board, agency, or officer, by whatever
13 name designated, of a State, municipality, or
14 other political subdivision of a State that under the
15 law of such State has jurisdiction to regulate
16 public utility companies.
17 **SEC. 4. REPEAL OF THE PUBLIC UTILITY HOLDING COM-**
18 **PANY ACT OF 1935.**
19 The Public Utility Holding Company Act of 1935
20 (15 U.S.C. 79a et seq.) is hereby repealed, effective
21 December 31, 2001.
22 **SEC. 5. INAPPLICABILITY OF THE PUBLIC UTILITY**
23 **HOLDING ACT OF 1935.**
24 Prior to December 31, 2001, the provisions

1 of the Public Utility Holding Company Act of 1935
2 shall not apply to a holding company or any
3 associate company of such holding company if:
4 (a) Each State Commission having jurisdiction
5 over a significant, domestic public utility subsidiary
6 company of such holding company certifies to the
7 Commission that such State Commission has no
8 objection to the provisions of the Public Utility
9 Holding Company Act of 1935 being inapplicable with
10 respect to such holding company system; or
11 (b) Each State in which a significant, domestic
12 public utility subsidiary company of such holding
13 company does business has determined by legislation
14 or in a proceeding of the State Commission, whether
15 such proceeding is a generic proceeding initiated by
16 such State Commission or a proceeding commenced by
17 such public utility company, that either
18 throughout the State or as to such public
19 utility subsidiary company such State is implementing
20 customer choice in the retail distribution of electricity or
21 gas, or has determined by legislation or in a proceeding of
22 the State Commission not to implement such customer choice
23 and a certification to either of such effects has been filed
24 by such public utility subsidiary company with the

1 Commission.

2 (c) For purposes of this section 5--

3 (1) a "significant public utility subsidiary company"
4 of a holding company is any public utility subsidiary whose
5 net public utility plant represents twenty-five (25) percent
6 or more of the consolidated net public utility plant of such
7 holding company based upon the latest available audited
8 financial statements of such public utility subsidiary and
9 such holding company.

10 (2) All certifications required to be filed with the
11 Commission pursuant to this section 5 shall be filed in
12 accordance with rules and regulations to be promulgated by
13 the Commission within 180 days from the effective date of
14 this Act.

15 **SEC. 6. REPORT TO CONGRESS.**

16 On or prior to December 31, 2004, the Federal Energy
17 Regulatory Commission shall present a detailed report to
18 the Congress (i) providing information and data with respect
19 to the decisions taken by each of the States with respect to
20 the matters discussed in section 5 of this Act, and (ii)
21 including its recommendations, if any, for additional
22 Federal legislation required in order to encourage or
23 maintain competition and preserve reliability
24 in the electric and gas utility industries.

1 **SEC. 7. EFFECT ON OTHER REGULATION.**

2 Nothing in this Act shall preclude a
3 State Commission from exercising its juris-
4 diction under otherwise applicable law to
5 protect utility consumers.

6 **SEC. 8. IMPLEMENTATION.**

7 The Commission shall promulgate regul-
8 ations necessary or appropriate to implement
9 this title not later than six months after
10 the date of enactment of this title.

11 **SEC. 9 EFFECTIVE DATE**

12 This Act shall be effective immediately.
13
14
15
16
17
18
19
20
21
22
23
24

ATTACHMENT 3

Calendar No. 23

106TH CONGRESS
1ST SESSION

S. 313

[Report No. 106–7]

To repeal the Public Utility Holding Company Act of 1935, to enact the Public Utility Holding Company Act of 1999, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JANUARY 27, 1999

Mr. SHELBY (for himself, Mr. DODD, Mr. GRAMM, Mr. SARBANES, Mr. MURKOWSKI, Mr. LOTT, Mr. MACK, Mr. CRAIG, Mr. BROWNBACK, Mr. COCHRAN, and Mr. COVERDELL) introduced the following bill; which was read twice and referred to the Committee on Banking, Housing, and Urban Affairs

MARCH 2, 1999

Reported by Mr. GRAMM, without amendment

A BILL

To repeal the Public Utility Holding Company Act of 1935, to enact the Public Utility Holding Company Act of 1999, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the "Public Utility Holding
3 Company Act of 1999".

4 **SEC. 2. FINDINGS AND PURPOSES.**

5 (a) FINDINGS.—The Congress finds that—

6 (1) the Public Utility Holding Company Act of
7 1935 was intended to facilitate the work of Federal
8 and State regulators by placing certain constraints
9 on the activities of holding company systems;

10 (2) developments since 1935, including changes
11 in other regulation and in the electric and gas indus-
12 tries, have called into question the continued rel-
13 evance of the model of regulation established by that
14 Act;

15 (3) there is a continuing need for State regula-
16 tion in order to ensure the rate protection of utility
17 customers; and

18 (4) limited Federal regulation is necessary to
19 supplement the work of State commissions for the
20 continued rate protection of electric and gas utility
21 customers.

22 (b) PURPOSES.—The purposes of this Act are—

23 (1) to eliminate unnecessary regulation, yet
24 continue to provide for consumer protection by facili-
25 tating existing rate regulatory authority through im-
26 proved Federal and State commission access to

1 books and records of all companies in a holding com-
2 pany system, to the extent that such information is
3 relevant to rates paid by utility customers, while af-
4 fording companies the flexibility required to compete
5 in the energy markets; and
6 (2) to address protection of electric and gas
7 utility customers by providing for Federal and State
8 access to books and records of all companies in a
9 holding company system that are relevant to utility
10 rates.

11 **SEC. 3. DEFINITIONS.**

12 For purposes of this Act—
13 (1) the term "affiliate" of a company means
14 any company, 5 percent or more of the outstanding
15 voting securities of which are owned, controlled, or
16 held with power to vote, directly or indirectly, by
17 such company;
18 (2) the term "associate company" of a company
19 means any company in the same holding company
20 system with such company;
21 (3) the term "Commission" means the Federal
22 Energy Regulatory Commission;
23 (4) the term "company" means a corporation,
24 partnership, association, joint stock company, busi-
25 ness trust, or any organized group of persons,

1 whether incorporated or not, or a receiver, trustee,
2 or other liquidating agent of any of the foregoing;
3 (5) the term "electric utility company" means
4 any company that owns or operates facilities used
5 for the generation, transmission, or distribution of
6 electric energy for sale;
7 (6) the terms "exempt wholesale generator"
8 and "foreign utility company" have the same mean-
9 ings as in sections 32 and 33, respectively, of the
10 Public Utility Holding Company Act of 1935, as
11 those sections existed on the day before the effective
12 date of this Act;
13 (7) the term "gas utility company" means any
14 company that owns or operates facilities used for
15 distribution at retail (other than the distribution
16 only in enclosed portable containers or distribution
17 to tenants or employees of the company operating
18 such facilities for their own use and not for resale)
19 of natural or manufactured gas for heat, light, or
20 power;
21 (8) the term "holding company" means—
22 (A) any company that directly or indirectly
23 owns, controls, or holds, with power to vote, 10
24 percent or more of the outstanding voting secu-

1 rities of a public utility company or of a holding
2 company of any public utility company; and
3 (B) any person, determined by the Com-
4 mission, after notice and opportunity for hear-
5 ing, to exercise directly or indirectly (either
6 alone or pursuant to an arrangement or under-
7 standing with one or more persons) such a con-
8 trolling influence over the management or poli-
9 cies of any public utility company or holding
10 company as to make it necessary or appropriate
11 for the rate protection of utility customers with
12 respect to rates that such person be subject to
13 the obligations, duties, and liabilities imposed
14 by this Act upon holding companies;
15 (9) the term "holding company system" means
16 a holding company, together with its subsidiary com-
17 panies;
18 (10) the term "jurisdictional rates" means
19 rates established by the Commission for the trans-
20 mission of electric energy in interstate commerce,
21 the sale of electric energy at wholesale in interstate
22 commerce, the transportation of natural gas in inter-
23 state commerce, and the sale in interstate commerce
24 of natural gas for resale for ultimate public con-

1 sumption for domestic, commercial, industrial, or
2 any other use;
3 (11) the term "natural gas company" means a
4 person engaged in the transportation of natural gas
5 in interstate commerce or the sale of such gas in
6 interstate commerce for resale;
7 (12) the term "person" means an individual or
8 company;
9 (13) the term "public utility" means any person
10 who owns or operates facilities used for transmission
11 of electric energy in interstate commerce or sales of
12 electric energy at wholesale in interstate commerce;
13 (14) the term "public utility company" means
14 an electric utility company or a gas utility company;
15 (15) the term "State commission" means any
16 commission, board, agency, or officer, by whatever
17 name designated, of a State, municipality, or other
18 political subdivision of a State that, under the laws
19 of such State, has jurisdiction to regulate public util-
20 ity companies;
21 (16) the term "subsidiary company" of a hold-
22 ing company means—
23 (A) any company, 10 percent or more of
24 the outstanding voting securities of which are
25 directly or indirectly owned, controlled, or held

with power to vote, by such holding company; and

(B) any person, the management or policies of which the Commission, after notice and opportunity for hearing, determines to be subject to a controlling influence, directly or indirectly, by such holding company (either alone or pursuant to an arrangement or understanding with one or more other persons) so as to make it necessary for the rate protection of utility customers with respect to rates that such person be subject to the obligations, duties, and liabilities imposed by this Act upon subsidiary companies of holding companies; and

(17) the term "voting security" means any security presently entitling the owner or holder thereof to vote in the direction or management of the affairs of a company.

SEC. 4. REPEAL OF THE PUBLIC UTILITY HOLDING COMPANY ACT OF 1935.

The Public Utility Holding Company Act of 1935 (15 U.S.C. 79a et seq.) is repealed.

SEC. 5. FEDERAL ACCESS TO BOOKS AND RECORDS.

(a) IN GENERAL.—Each holding company and each associate company thereof shall maintain, and shall make

to the extent reasonably necessary to identify

1 available to the Commission, such books, accounts, memo-
2 randa, and other records as the Commission deems to be
3 relevant to costs incurred by a public utility or natural
4 gas company that is an associate company of such holding
5 company and necessary or appropriate for the protection
6 of utility customers with respect to jurisdictional rates, for
7 the transmission of electric energy in interstate commerce,
8 the sale of electric energy at wholesale in interstate com-
9 merce, the transportation of natural gas in interstate com-
10 merce, and the sale in interstate commerce of natural gas
11 for resale for ultimate public consumption for domestic,
12 commercial, industrial, or any other use.
13 (b) AFFILIATE COMPANIES.—Each affiliate of a hold-
14 ing company or of any subsidiary company of a holding
15 company shall maintain, and make available to the Com-
16 mission, such books, accounts, memoranda, and other
17 records with respect to any transaction with another affili-
18 ate, as the Commission deems to be relevant to costs in-
19 curred by a public utility or natural gas company that is
20 an associate company of such holding company and nec-
21 essary or appropriate for the protection of utility cus-
22 tomers with respect to jurisdictional rates.
23 (c) HOLDING COMPANY SYSTEMS.—The Commission
24 may examine the books, accounts, memoranda, and other
25 records of any company in a holding company system, or

to the extent reasonably necessary to identify

1 any affiliate thereof, as the Commission deems to be rel-
2 evant to costs incurred by a public utility or natural gas
3 company within such holding company system and nec-
4 essary or appropriate for the protection of utility cus-
5 tomers with respect to jurisdictional rates.

6 (d) CONFIDENTIALITY.—No member, officer, or em-
7 ployee of the Commission shall divulge any fact or infor-
8 mation that may come to his or her knowledge during the
9 course of examination of books, accounts, memoranda, or
10 other records as provided in this section, except as may
11 be directed by the Commission or by a court of competent
12 jurisdiction.

13 **SEC. 6. STATE ACCESS TO BOOKS AND RECORDS.**

14 (a) IN GENERAL.—Upon the written request of a
15 State commission having jurisdiction to regulate a public
16 utility company in a holding company system, the holding
17 company or any associate company or affiliate thereof,
18 other than such public utility company, wherever located,
19 shall produce for inspection books, accounts, memoranda,
20 and other records that—

21 (1) have been identified in reasonable detail in
22 a proceeding before the State commission;

23 (2) the State commission deems are relevant to
24 costs incurred by such public utility company; and

are reasonably necessary to identify the

1 (3) are necessary for the effective discharge of
2 the responsibilities of the State commission with re-
3 spect to such proceeding.
4 (b) LIMITATION.—Subsection (a) does not apply to
5 any person that is a holding company solely by reason of
6 ownership of one or more qualifying facilities under the
7 Public Utility Regulatory Policies Act.
8 (c) CONFIDENTIALITY OF INFORMATION.—The pro-
9 duction of books, accounts, memoranda, and other records
10 under subsection (a) shall be subject to such terms and
11 conditions as may be necessary and appropriate to safe-
12 guard against unwarranted disclosure to the public of any
13 trade secrets or sensitive commercial information.
14 (d) EFFECT ON STATE LAW.—Nothing in this sec-
15 tion shall preempt applicable State law concerning the pro-
16 vision of books, records, or any other information, or in
17 any way limit the rights of any State to obtain books,
18 records, or any other information under any other Federal
19 law, contract, or otherwise.
20 (e) COURT JURISDICTION.—Any United States dis-
21 trict court located in the State in which the State commis-
22 sion referred to in subsection (a) is located shall have ju-
23 risdiction to enforce compliance with this section.

1 **SEC. 7. EXEMPTION AUTHORITY.**

2 (a) RULEMAKING.—Not later than 90 days after the
3 effective date of this Act, the Commission shall promul-
4 gate a final rule to exempt from the requirements of sec-
5 tion 5 any person that is a holding company, solely with
6 respect to one or more—

7 (1) qualifying facilities under the Public Utility
8 Regulatory Policies Act of 1978;

9 (2) exempt wholesale generators; or

10 (3) foreign utility companies.

11 (b) OTHER AUTHORITY.—If, upon application or
12 upon its own motion, the Commission finds that the books,
13 records, accounts, memoranda, and other records of any
14 person are not relevant to the jurisdictional rates of a pub-
15 lic utility or natural gas company, or if the Commission
16 finds that any class of transactions is not relevant to the
17 jurisdictional rates of a public utility or natural gas com-
18 pany, the Commission shall exempt such person or trans-
19 action from the requirements of section 5.

20 **SEC. 8. AFFILIATE TRANSACTIONS.**

21 Nothing in this Act shall preclude the Commission
22 or a State commission from exercising its jurisdiction
23 under otherwise applicable law to determine whether a
24 public utility company, public utility, or natural gas com-
25 pany may recover in rates any costs of an activity per-
26 formed by an associate company, or any costs of goods

1 or services acquired by such public utility company from
2 an associate company.

3 **SEC. 9. APPLICABILITY.**

4 No provision of this Act shall apply to, or be deemed
5 to include—

6 (1) the United States;

7 (2) a State or any political subdivision of a
8 State;

9 (3) any foreign governmental authority not op-
10 erating in the United States;

11 (4) any agency, authority, or instrumentality of
12 any entity referred to in paragraph (1), (2), or (3);
13 or

14 (5) any officer, agent, or employee of any entity
15 referred to in paragraph (1), (2), or (3) acting as
16 such in the course of his or her official duty.

17 **SEC. 10. EFFECT ON OTHER REGULATIONS.**

18 Nothing in this Act precludes the Commission or a
19 State commission from exercising its jurisdiction under
20 otherwise applicable law to protect utility customers.

21 **SEC. 11. ENFORCEMENT.**

22 The Commission shall have the same powers as set
23 forth in sections 306 through 317 of the Federal Power
24 Act (16 U.S.C. 825d–825p) to enforce the provisions of
25 this Act.

1 **SEC. 12. SAVINGS PROVISIONS.**

2 (a) IN GENERAL.—Nothing in this Act prohibits a
3 person from engaging in or continuing to engage in activi-
4 ties or transactions in which it is legally engaged or au-
5 thorized to engage on the effective date of this Act.

6 (b) EFFECT ON OTHER COMMISSION AUTHORITY.—
7 Nothing in this Act limits the authority of the Commission
8 under the Federal Power Act (16 U.S.C. 791a et seq.)
9 (including section 301 of that Act) or the Natural Gas
10 Act (15 U.S.C. 717 et seq.) (including section 8 of that
11 Act).

12 **SEC. 13. IMPLEMENTATION.**

13 Not later than 18 months after the date of enactment
14 of this Act, the Commission shall—

15 (1) promulgate such regulations as may be nec-
16 essary or appropriate to implement this Act (other
17 than section 6); and

18 (2) submit to the Congress detailed rec-
19 ommendations on technical and conforming amend-
20 ments to Federal law necessary to carry out this Act
21 and the amendments made by this Act.

22 **SEC. 14. TRANSFER OF RESOURCES.**

23 All books and records that relate primarily to the
24 functions transferred to the Commission under this Act
25 shall be transferred from the Securities and Exchange
26 Commission to the Commission.

1 **SEC. 15. EFFECTIVE DATE.**

2 This Act shall take effect 18 months after the date
3 of enactment of this Act.

4 **SEC. 16. AUTHORIZATION OF APPROPRIATIONS.**

5 There are authorized to be appropriated such funds
6 as may be necessary to carry out this Act.

7 **SEC. 17. CONFORMING AMENDMENT TO THE FEDERAL**
8 **POWER ACT.**

9 Section 318 of the Federal Power Act (16 U.S.C.
10 825q) is repealed.

NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL
Princeton Forrestal Village, 116-390 Village Boulevard, Princeton, New Jersey 08540-5731

September 2, 1999

Chairman Joe Barton
Subcommittee on Energy and Power
U.S. House of Representatives
Committee on Commerce
Room 2125, Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Barton:

I am pleased to provide you the attached answers to your questions of August 11, 1999 in connection with my April 22, 1999 testimony before the Subcommittee on Energy and Power on Electricity Competition: Reliability and Transmission in Competitive Electricity Markets.

Sincerely,

David R. Nevius
Vice President

DRN:hg
Attachment

Phone 609-452-8060 ■ Fax 609-452-9550 ■ www.nerc.com

Answers of David Nevius
Vice President of the North American Electric Reliability Council
to Follow-up Questions from Chairman Joe Barton
Subcommittee on Energy and Power
September 3, 1999

Question No. 1: Is there a way to provide for enforceable reliability standards without providing for some additional Federal authority to enforce standards? Can private organizations such as NERC assume police powers or compel transmission owners or bulk power users to join NERC? Can there be enforceable reliability standards without a Federal role?

Answer: No, I don't believe it is possible to have enforceable reliability standards without some additional Federal enforcement authority, for three reasons. First, the Federal Energy Regulatory Commission has jurisdiction over the wholesale sale of electricity in interstate commerce and the transmission of electricity in interstate commerce. FERC does not have clear jurisdiction over issues dealing with reliability. Following the Northeast blackout in 1965, legislation was introduced in Congress that would have given the Federal Power Commission (FERC's predecessor) clear authority and responsibility over reliability matters. But Congress never adopted that legislation. Instead, the industry formed what would become the North American Electric Reliability Council to coordinate industry standard setting on a voluntary basis, with compliance based on "peer pressure." There were no enforceable reliability standards, but that approach has served North America well for more than three decades. It is the emergence of competition in the electric industry that now calls that approach into question.

Second, FERC does not have jurisdiction over all entities that must interact to maintain the reliability of the interstate, international high voltage electric transmission system. FERC does not have jurisdiction over the utilities within the Electric Reliability Council of Texas, the Tennessee Valley Authority, the Federal power marketing administrations (Bonneville Power Administration, Southeastern Power Administration, Southwestern Power Administration, and Western Area Power Administration), the municipally- and state-owned utilities, and the rural electric co-operatives that have financing from the Rural Utilities Service. Those entities account for approximately 30 percent of the transmission assets in this country.

Third, policing and enforcement is inherently a governmental function. Absent governmental authorization, such as exists in the securities laws for the stock exchanges and National Association of Securities Dealers to operate under Securities and Exchange Commission oversight, NERC cannot assume police powers nor can it compel transmission providers or bulk power system users to become members.

For these reasons, NERC proposes creation of an independent industry self-regulatory reliability organization under FERC oversight. This plan follows the self-regulatory models of the securities industry. The new organization would have the

authority to set and enforce mandatory reliability standards. This approach capitalizes on the electric industry's technical expertise in this highly complex area, while also providing the governmental presence needed to assure the fairness and validity of the enforcement process.

Question No. 2: There are some differences between the proposed NERC reliability language and the reliability provisions of H.R. 1828. Please provide comments on those differences, and indicate whether you believe H.R. 1828 is an improvement over the NERC proposal.

Answer: The reliability provisions of H.R. 1828 are essentially the same as the NERC reliability language, with three significant exceptions. (Section 601(a) of H.R. 1828 would add a new section 218, dealing with reliability, to the Federal Power Act; the section references below are to that new section 218.)

The first important difference deals with governance of the new industry self-regulatory organization. The NERC language provides for governance by a " board wholly comprised of independent directors." H.R. 1828 (section 218(e)(4)(E)) changes that to governance by a "board of no more than eleven members, one of whom shall be appointed by the Secretary of Energy." That change is unacceptable to NERC and the coalition that is supporting the NERC language. The fundamental premise of the NERC reliability legislation is to have an *industry* self-regulatory organization operating under government oversight. Permitting the Secretary of Energy to designate a representative on the board would put the government into the organization itself. More importantly, the NERC proposal calls for *independent* directors, that is, directors who do not have an interest in other market participants. This independence requirement is omitted in H.R. 1828. This omission has consequences even beyond the Department of Energy and could transform the board for the new reliability organization from an independent one to a "stakeholder" board – a significant change. The Federal power marketing administrations, for example, are part of the Department of Energy. The Secretary of Energy, therefore, is not "independent" from other market participants, but is a stakeholder in the industry. Finally, the high voltage transmission system is *international* in nature. The proposed new reliability organization provides a means for interests from the U.S., Canada, and, as appropriate, Mexico, to participate together in reliability standards development and enforcement. The provision of H.R. 1828 that would place a representative of the United States government in the governing structure of the new reliability organization has already raised significant questions from Canadian participants.

The second significant difference between the NERC language and H.R. 1828 concerns the treatment accorded Federal power marketing administrations, the Tennessee Valley Authority, the Bureau of Reclamation, and the Corps of Engineers, as well as requirements of the Nuclear Regulatory Commission. Section 218(k) of H.R. 1828 states:

> "Any actions taken under this section by the Commission, the Electric Reliability Organization, and any Affiliated Regional Reliability Entity shall be consistent

with any statutory or treaty obligation of a Federal Power Marketing Administration, the Tennessee Valley Authority, the Bureau of Reclamation and the Corps of Engineers and any Nuclear Regulatory Commission requirements."

There is no comparable provision in the NERC language, and NERC sees no basis for including such a provision. The provision appears to establish an additional substantive standard that any actions by the self-regulatory organization must meet for these identified electric market participants. NERC knows of no reason why these entities should be given special status when it comes to reliability, or why these entities should not be bound by the same reliability rules that would bind all other participants in the electricity markets. The Commission, the Electric Reliability Organization, or an Affiliated Regional Reliability Organization cannot change a statutory or treaty obligation of these entities, any more than they can change any other law to which other electric industry participants may be subject, including, for example, clean air laws. NERC therefore recommends that this provision not be included in any reliability legislation that moves forward.

The third significant difference between the NERC language and H.R. 1828 concerns the application of the antitrust laws. Under the NERC language, activities of the Electric Reliability Organization and its Affiliated Regional Reliability Entities, as well as the activities undertaken in good faith under the rules of those organizations by members of those organizations, are rebuttably presumed to be in compliance with the antitrust laws. Under the provisions of H.R. 1828 (section 218(o)), the conduct of the Electric Reliability Organization, its Affiliated Regional Reliability Entities, and members of those organizations, to the extent that conduct is undertaken to develop or implement an Organization Standard that is approved by the Commission under other provisions of the legislation, would not be deemed illegal per se. Such conduct would be judged on the basis of its reasonableness, taking account all relevant factors affecting competition.

NERC believes that the antitrust provisions of H.R. 1828 are too restrictive. More than in any other industry, the cooperative actions of participants in the electric industry are crucial to being able to maintain the reliable operation of the transmission grid. Market participants should not have disincentives to engaging in the necessary cooperative behavior. By establishing the presumption, although rebuttable, that the actions of the reliability organization and its regional affiliates are legal, NERC's approach offers the needed assurance to industry participants that engaging in the cooperative actions necessary to maintain a reliable bulk power system will not subject them to antitrust liability. The presumption of antitrust law legality is justified by the oversight authority given to FERC over the reliability organization's governance procedures and development and enforcement of standards.

NERC therefore recommends that the original antitrust provisions of the NERC language be substituted for those in section 218(o) of H.R. 1828. If this cannot be accomplished, several technical issues in this H.R. 1828 language should at least be addressed. These include:

1. Omission of "enforcement" from protected activities. The H.R. 1828 language states that conduct undertaken to "develop or implement" standards is not deemed illegal per se, but it makes no mention of "enforcement." The responsibilities of the Electric Reliability Organization and its affiliates and members are to "develop, implement, and enforce" reliability standards. "Enforcement" should be included as a protected activity.

2. Focusing the "reasonableness" language exclusively on effects on competition. H.R. 1828 specifies that conduct is to be "judged on its reasonableness, taking into account all relevant factors *affecting competition* (emphasis added)." Some of the activities of the Electric Reliability Organization, its affiliates and members in setting and enforcing standards for the reliable operation of the grid will likely have the effect of restricting competition, because that is necessary in order to maintain reliability. Having such activity judged based only on matters affecting competition eliminates half the equation. While we recommend retention of the original NERC language, if any "reasonableness" standard is to be included, NERC strongly recommends that the language be revised to include impacts both on competition and reliability. Alternatively, the standard could be one of "reasonableness, taking account of all relevant factors," without highlighting any particular factor.

3. Limitation of antitrust protection to actions "approved by the Commission under subsection (f)." NERC recommends that this clause be deleted. Otherwise, this language raises at least two significant issues. First, what are the implications of this language for standards that are adopted and enforced on an emergency basis prior to "approval" by FERC? Second, is any antitrust protection available under the language of H.R. 1828 for an existing Organization Standard that is suspended under subsection (f)(3)(b)?

In addition to these three significant differences, H.R. 1828 provides for an Electricity Outage Investigation Board within the Department of Energy (section 602 of H.R. 1828). This additional governmental agency is unnecessary. Both the NERC language and H.R. 1828 would establish the Electric Reliability Organization as an independent, industry self-regulatory organization, with FERC overseeing that organization. An Electricity Outage Investigation Board within DOE would simply duplicate the efforts of the new reliability organization and FERC.

The remainder of the differences between the NERC language and the reliability provisions of H.R. 1828 are of either a clarifying or conforming nature. NERC has no objection to those other changes.

Question No. 3: There are concerns about how transmission constraints impede interstate electric sales. Where are the major constraints – which States and regions have the worst constraints? How do these transmission constraints limit interstate commerce in electricity?

Answer: Transmission constraints limit interstate commerce in electricity because they restrict the amount of power that can be moved from one part of the country to another at a particular time. The constraints arise from the physical configuration of the generation and transmission facilities. The constraints can be one of three different kinds – thermal limits, voltage limits, or stability limits.

- Thermal Limits: Thermal limits establish the maximum amount of electrical current that a transmission line or electric facility can conduct over a specified time period before it sustains permanent damage by overheating or before it violates public safety requirements. System operators must constantly monitor actual flows throughout the network to ensure that the power flows do not exceed these limits. Operators must also monitor for "contingency" limits, that is, to ensure that the power flow on any one facility will not exceed its limit following the sudden loss (outage) of any other facility. (Since electrical power flows readjust instantaneously, the system must at all times be operated in this preventive mode.)
- Voltage Limits: System voltages and changes in voltages must be maintained within a range of minimum and maximum limits. Voltage limits establish the maximum amount of electric power that can be transferred without causing damage to the electric system or customer facilities. A widespread collapse of system voltage can result in a collapse of portions or all of the interconnected network.
- Stability Limits: The transmission network must be capable of surviving disturbances (e.g., generators tripping off, lightening strikes, wind damage to conductors) through the transient and dynamic time periods (ranging from milliseconds to several minutes) following a disturbance. All generators connected to ac interconnected transmission systems operate in synchronism with each other at the same frequency (nominally 60 Hertz). Immediately following a system disturbance, generators begin to oscillate relative to each other, causing fluctuations in system frequency, line loadings, and system voltages. For the system to be stable, the oscillations must diminish as the electric systems attain a new, stable operating point. If a new, stable operating point is not quickly established, the generators will likely lose synchronism with one another, and all or a portion of the interconnected electric systems may become unstable. The results of generator instability may damage equipment and cause uncontrolled, widespread interruption of electric supply to customers.

NERC's Planning Standards and Operating Policies set parameters within which the system must be designed and operated in order to avoid exceeding any of these limits.

Twice a year, NERC reports on its assessment of the reliability of the electric system for the upcoming season, examining both generation adequacy and transmission adequacy. While the location of transmission constraints can vary from time to time, depending upon how the system is configured, what load is being served, and what generators are online, the NERC reliability assessments give a general picture of where transmission constraints are likely to occur. I have attached a copy of *NERC's 1999 Summer Assessment* (released June 1999) to my answers. The summaries of the Regional assessments, beginning at page 21 of the Summer Assessment, give a general indication of where transmission constraints can be expected under base case conditions. However, as conditions depart from the base case either because of equipment outages or higher-than-expected demand, transmission constraints may be more severe or arise in other areas than indicated in the report. As stated in the Executive Summary of the *1999 Summer Assessment*, "[i]mprovements to the transmission system are not keeping pace with the demands being placed on the system."

Question No. 4: What is your position on the FERC proposed rules on RTOs? In particular, do you think the pricing provisions will encourage expansion of transmission and remove constraints?

Answer: NERC told FERC in comments filed August 23, 1999, that properly functioning RTOs could help the industry deal with the challenges it faces, but that RTOs were not the whole answer. NERC identified four challenges facing the electric industry: the current balkanization of the transmission grid; the mismatch between how business is arranged and how power actually flows; transmission pricing and compensation issues, and the huge increase in the number and complexity of transactions. With regard to transmission pricing, NERC said the following:

> "Transmission rates must provide incentives to get the right amount of transmission infrastructure built. The cost of transmission is a relatively small part of the overall price of delivered power. We must make sure that shortages of transmission capacity do not restrict power flows and limit the benefits that otherwise could be achieved from competitive electricity markets."

In the notice of proposed rulemaking, FERC expressed a willingness to be flexible about transmission rates and to entertain incentive rates as an inducement to get companies to join an RTO. The Commission did not directly take on the linkage between transmission rate reform and needed expansion of the transmission system. NERC believes that this is a subject that the Commission will need to take on directly. I have attached a copy of NERC's comments to these answers.

Question No. 5: H.R. 1828 and H.R. 2050 authorize compacts to plan and site transmission lines. Do you think States will delegate their siting authority to such regional bodies?

Answer: NERC thinks it unlikely that states will delegate their siting authority to regional bodies in a way that effectively deals with siting new transmission, although

regional planning efforts may be productive. In certain parts of the country (New England, for example) there is considerable experience in states working together to address regional problems. But the problems facing the industry today are often siting new lines *between* what have been traditional regions. NERC's Annual Ten-Year Reliability Assessments cite a number of examples of these difficulties. I have attached a copy of NERC's Ten-Year Reliability Assessment for the period 1998–2007 to these answers. Unless the regional bodies were sufficiently large to include what are now "boundary" problems, giving a regional body siting authority may not be effective.

Moreover, siting new transmission lines has become one of the most contentious issues facing state authorities. NERC does not believe that state authorities would willingly give up control over matters that their citizens feel so strongly about.

One additional factor is increasingly present. Federal land management and resource agencies are playing a growing role, for example under the Federal Land Management Policies Act, in deciding whether and where additional transmission facilities can be built. Regional compacts would not be effective in these circumstances unless federal agencies are willing and able to turn over their own siting authorities.

Attachments

1. Comments of North American Electric Reliability Council to FERC Regional Transmission Organization rulemaking, filed August 23, 1999

2. *1999 Summer Assessment*, NERC (June 1999)

3. *Reliability Assessment 1998–2007*, NERC (1998)

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

In the Matter of:

Regional Transmission Organizations	))	Docket No. RM99-2-000

To: **The Commission**

COMMENTS OF THE
NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL

Princeton Forrestal Village
116-390 Village Boulevard
Princeton, New Jersey 08540-5731

(609) 452-8060

August 23, 1999

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

In the Matter of:

Regional Transmission Organizations	))	Docket No. RM99-2-000

COMMENTS OF THE
NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL

The North American Electric Reliability Council ("NERC") is pleased to provide written comments to assist the Commission in its deliberations on the next steps for fostering competitive electricity markets. In a relatively short period of time, we have seen a dramatic transformation of the bulk electricity market in North America. At the center of these changes is Order No. 888, by which the Commission has established the regulatory framework for assuring the development of a competitive commodity market for electricity by requiring public utility transmission owners to provide transmission service on a non-discriminatory basis.

Since the adoption of Order No. 888, the volume of wholesale trading has increased markedly, as has the transactional complexity associated with delivering electricity from seller to buyer. New market participants are using the transmission system to offer innovative electricity products and services. At the same time, power flow patterns on the grid are changing dramatically, and the transmission system is being used in ways for which it was not designed. The

Commission now proposes rules to foster the development of regional transmission organizations ("RTOs") as the next step in the evolution of the electric industry.

There is no subject more important than assuring that the Commission's goal of fostering competitive electricity markets is fully and effectively accomplished without jeopardizing system reliability. NERC strongly believes that this can be done. The rapidly changing market conditions and the new rules established by the Commission present significant challenges to the electricity industry as it attempts to devise new ways of doing business that fully accommodate the needs of many differently situated market participants. The Commission and the industry are facing four sets of interdependent challenges to achieving fully competitive and reliable electricity markets:

- The current balkanization of the transmission grid;
- The mismatch between how business is arranged and how power actually flows;
- Transmission pricing and compensation issues, and
- A huge increase in the number and complexity of transactions.

In developing a final rule and in evaluating a particular RTO proposal, the Commission should consider how well each addresses these four challenges.

The Commission proposes specific minimum characteristics and functions for a transmission entity to qualify as an RTO. These minimum characteristics and functions would confer certain benefits for the reliability of the interconnected bulk-power system and competitive regional energy markets. The Commission anticipates that an RTO would enhance reliability by: (1) operating the system for a larger region, (2) ensuring coordination during system emergencies and restorations, (3) conducting comprehensive and objective reliability studies, (4) coordinating generation and transmission outage schedules, and (5) sharing ancillary services responsibilities. If RTOs can be formed that deliver on these promises, NERC encourages their formation. Further, if RTOs can be formed that

provide a superior means for ATC calculation, OASIS administration, and emergency curtailments (when congestion management is inadequate), NERC also encourages their formation.

NERC has long recognized the merits of regional coordination of reliability issues. The need for such coordination efforts has only increased as the management of short-term reliability of the interconnected bulk power system and the operation of new competitive bulk power markets become inseparable. While individual transmission providers have widely disparate views on whether and what type of institution should be formed in their region, if RTOs are formed after issuance of a Final Rule, these institutions must be designed, implemented, and operated consistent with NERC operating and planning policies. By the same token, NERC must (and will) revise its operating and planning policies to recognize and accommodate these emerging institutions, as necessary.

In summary, NERC supports the Commission's overall objectives for RTOs and recommends that RTOs be structured to ensure integration of reliability and energy market practices among regions, in keeping with the continental, international nature of the evolving energy markets. NERC also generally supports the proposal to allow different regions the flexibility to develop RTOs, provided that any alternative is consistent with or superior to satisfying the NOPR's minimum characteristics and functions. Unless an RTO performs all of the minimum characteristics and functions, it should not be formed without additional assurance that it provides a superior means for maintaining reliability and supporting fair and efficient commercial power markets. Finally, we expect RTOs to evolve to meet market needs. The Commission has wisely recognized the need for an open architecture to allow for that evolution, so long as the emerging institutions continue to accomplish the goals the Commission has set for RTOs.

About NERC

Because of the significant emphasis that the NOPR places on NERC activities, it is important for the Commission to understand the changes that are taking place within NERC itself. NERC is a not-for-profit industry group formed after the Northeast blackout in 1965 to promote the reliability of the interstate high-voltage electric transmission grids that serve North America.

The electric grid is an extremely complex machine. Electricity cannot be stored in the same way as other sources of energy. Thus, the reliability of a system depends on ensuring that the demand and supply are continuously in balance, from moment to moment. The electric grid has essentially no switches for routing power, and therefore, controlling the grid means mainly controlling the operation of generators attached to the grid. The flows of electricity from all the generators are superimposed on each other so that the constraints on each system operator are determined, to some extent, by the actions of all the others. To keep the grid operating within desired limits and to avoid, in the extreme, cascading failures and widespread blackouts, the operators must follow a common set of rules that set outer bounds within which commercial transactions can take place. In addition, because electric current shifts instantaneously to other lines when one component fails, the system must always be operated to have sufficient margins to accommodate such failures. And the grid is not analogous to a pipeline. Similar commercial issues are present, but the solutions and approaches that worked for the switched networks in the gas industry cannot be assumed to work in the same way for the electric industry.

NERC works with all segments of the electric industry as well as customers to develop and encourage compliance with rules for the reliable planning and operation of these grids. NERC's members (and owners) are the ten Regional Reliability Councils that account for virtually all the electricity supplied in the United States, Canada, and a portion of Baja California Norte, Mexico. NERC's

mission is to promote the reliability, both the security[1] and the adequacy,[2] of the bulk power systems of North America—in other words, "to keep the lights on."

Efforts began in 1992, following passage of the Energy Policy Act, to transform NERC from a voluntary industry organization that used peer pressure to *encourage* compliance with that set of common rules (which worked in a regulated utility context), into a *mandatory* compliance organization required in a competitive electricity industry. For the last year, NERC has worked to lead the development of legislation that will transform NERC from a voluntary system of reliability management to one that is mandatory with the backing and support of governments. On February 1, 1999, NERC's Board of Trustees, comprising a broad and diverse cross section of electric market participants and customers, approved this consensus legislative language by an overwhelmingly favorable vote. Bills incorporating that legislative language have now been introduced in Congress.

This legislative proposal is designed to assure continued reliability and effective use of interstate electricity grids as the Nation's electricity markets continue to evolve. It authorizes creation of an independent self-regulatory reliability organization that will set and enforce compliance with grid operating rules, with oversight in the U.S. by FERC. This self-regulatory organization would operate in much the same way that the securities industry regulates itself through the stock exchanges and NASD with oversight by the Securities and Exchange Commission.

---

1 "Security" means the ability of the electric system, as it exists at any particular time, to withstand sudden disturbances such as electric short circuits or unanticipated loss of system facilities.

2 "Adequacy" means the ability of the electric system to supply the aggregate electrical demand and energy requirements of the customers at all times, taking into account scheduled and unscheduled outages of system facilities.

The organization would apply the reliability rules equally to all that own, operate, or use transmission facilities, whether they are investor-owned utilities, municipalities, co-ops, state agencies, the Federal government through the power marketing administrations, the Tennessee Valley Authority, independent power producers, power marketers, or end-use customers, with delegation and deference to regional entities as appropriate. Optimally, government's role (its need to provide oversight, assure transparency and impartiality in standard setting, and fairness in enforceability), would be exercised as "back-up" powers, placing primary reliance on the private sector's initiative and own best efforts in these matters. Such a structure would allow for the flexibility and timeliness of action that are so essential to provide for reliability in dynamic and changing system circumstances. Government's back-up powers and appellate functions, in turn, would give confidence that the system is operating in the public interest.

As the Commission moves forward in its rulemaking, NERC will work with the Commission so that the solutions devised are consonant with both NERC's existing structure and that which will emerge once legislation is adopted.

NERC's Preparations for the Transition to a New Self-Regulatory Structure

NERC has been working actively over the last year on a number of initiatives that will allow it to change into this independent self-regulatory organization, in particular:

- Changed the NERC Bylaws obligating the Regional Councils and their members to comply with NERC policies (previously, best efforts sufficed);
- Restated Mission;
- Established a new open, non-discriminatory process for developing NERC Operating and Planning Standards;
- Added 9 independent directors to Board of Trustees (to take over after legislation is enacted);

- Established Market Interface Committee to address impact of reliability standards on competitive market;
- Broadened representation on all standing committees to reflect all market segments;
- Developed Compliance Enforcement Program Pilot;
- Established subcommittees to develop and administer a compliance review process, develop penalties for noncompliance, provide an appeals procedure and recommend changes to the policies and standards; and
- Developed programs to establish standards for the training and qualification of those who operate the bulk electric systems in North America.

The Challenges Facing the Commission and the Industry

The Commission and the entire electric industry are facing a complex set of interrelated, interdependent challenges as all seek to realize the benefits of competitive markets. These must be worked on together, in a coordinated fashion. Actions taken, or the failure to act, in one area have consequences for other areas. Properly functioning RTOs can be part of the answer, but they are not, in and of themselves, sufficient.

Challenge No. 1: The current balkanization of the grid

The Commission notes that "[t]here are more than 100 owners of the Nation's grid who operate about 140 separate control areas. In addition, there are 10 regional reliability councils, 23 security coordinators, 5 regional transmission groups (RTGs) and 5 independent system operators." Moreover, the grid crosses international boundaries, adding certain legal and political complexities. There is a new phenomenon as well. NERC and the regional councils are beginning to receive requests for designation of new control areas. Some are from individual generators or groups of generators, without specific load to serve, who are seeking to take on the rights and responsibilities of control areas. There are perceptions by some that

control areas have market advantages over non-control areas. In other situations, entities that formerly functioned as a single control area may be splitting up. NERC has formed a task group to examine whether this new development may have reliability impacts and whether existing control area criteria are sufficient for the new developments in the marketplace.

Both existing and emerging institutions must facilitate, not impede, the ability of many buyers and sellers to broaden commerce, while at the same time maintaining the reliability of the grid.

RTOs Must Ensure Integration of Reliability and Energy Market Practices Among Regions

NERC believes that problems at the "seams," i.e., at or across the boundaries between adjacent RTOs, must be rationalized with the broader objectives of this NOPR and NERC requirements and standards. We recognize that not all boundaries—existing or otherwise—experience these problems. As a general matter, the boundaries of the emerging entities should not be placed at known seams, or weak points. A single entity is far more likely to have the incentive and ability to strengthen the weak points on the grid.[3] Additionally, where the geographical scope and configuration of RTOs cannot adequately internalize these problems, RTOs must be required to ensure the integration of reliability and market practices for interregional transactions. Thus, two classes of problems at the "seams" require resolution: (1) integration of market practices across seams, and (2) integration of reliability practices across seams. NERC believes that the full benefits of RTOs will not be achieved if major problems at the "seams" are not adequately internalized, to the extent practicable, within each new RTO.

---

[3] We already have experience with some areas of the country, e.g., the Southwest Power Pool, having created regional independent entities that have eliminated significant "seams" issues between individual operating authorities, or control areas, by taking a broader and more consistent regional approach.

As the Commission has noted, with so many entities, the lines of authority and communication are not always as clear as they should be. Under current practices, this balkanization of the grid and the three-step transactions management process necessary to fulfill a source-to-sink obligation both magnifies the complexity of a customer's request for transmission service and limits the development of broader, regional competitive bulk-power markets.[4] As one example, the volume and distance of next-hour transactions are severely limited by the complexity of making multiple transmission requests.

Market Integration Issues

Whereas there is a need for flexibility in the development of RTOs, there is also a need for some level of standardization of interregional markets (*i.e.*, inter-RTO markets) to ensure the largest possible markets. NERC proposes, as an additional minimum function of RTOs, that RTOs be required to ensure the integration of market interface practices among the RTOs.[5] The standards and practices that need this integration include:

- Transmission reservation practices, including minimum OASIS standards for inter-RTO transactions, performance and availability requirements for RTO OASIS nodes;
- Coordination and sharing of necessary data by each RTO with its neighboring RTOs for the calculation of TTC and ATC on interconnected paths between other RTOs in the interconnection and through any other RTO;

---

4 The three-step process includes the procedures for reservation, scheduling, and tagging. *See* "Experiment for Processing Requests for Next-Hour Transmission Service on the OASIS," Report of the North American Electric Reliability Council, May 13, 1999, at 5.

5 The Commission can also further this goal by taking final action on the OASIS Phase 1-A business practices that are pending in Docket No. RM95-9-003.

- Ancillary services, *e.g.*, each RTO should support minimum required ancillary services for transactions between RTOs and through an RTO;
- Transaction management standards that support the next-hour and longer-term energy markets; and
- Interregional congestion management, including alternatives to TLR and methods for "off-loading" systems across regions.

Reliability Integration Issues

NERC proposes, as an additional minimum function of RTOs, that RTOs be required to ensure the integration of reliability practices among the RTOs within an interconnection. The standards and practices that need this integration include:

- Parallel path flows;
- Transmission loading relief, including the application of different curtailment priorities;
- Ancillary services; and
- Data exchange and sharing between security coordinators.

An RTO must develop and implement procedures to address parallel path flows within its regions, and with other regions, where problems of parallel path flows cannot otherwise be internalized by the establishment of RTOs with "appropriate scope and regional configuration." However, as envisioned in the NOPR, an RTO by itself, has limited ability to solve all parallel path issues.

NERC supports the Commission's recommendation that the requirement to develop and implement procedures to address parallel path flows issues are satisfied no later than three years after an RTO commences initial operation.[6] NERC has

6 The proposed "Function 3" in the NOPR, on parallel path flow states: "The RTO must develop and implement procedures to address parallel path flow issues within its region and with other regions. The RTO must satisfy this requirement with respect to coordination with other regions no later than three years after it commences initial operation." NOPR at 200.

begun to address this issue on a national level, and the information systems needed to support the Commission's goal for RTOs with respect to parallel path flows are under development. FERC should direct the RTOs to work closely with NERC to ensure a coordinated national effort on this issue.

NERC agrees that, if an RTO is formed with the minimum characteristics and functions envisioned in the NOPR, the RTO should appropriately assume the function of security coordinator. However, that should not preclude a single security coordinator from being responsible for more than one RTO. Also, if RTOs are formed, any such RTO must have the authorities prescribed by the characteristic on "short-term reliability" if it also performs the other minimum characteristics and functions proposed in the NOPR.

As an additional, specific requirement in the rulemaking, NERC urges that the Commission include these obligations:

- The RTO must adhere to the reliability rules adopted by NERC and the relevant regional reliability council. Once legislation is adopted and the new self-regulatory organization is established, that will be required by law. Until legislation is adopted, the Commission should impose this requirement as a condition of becoming an RTO.
- Any congestion management regime that an RTO adopts must take account of effects beyond the RTO's boundaries—an RTO should not burden its neighbors. NERC is committed to fostering effective congestion management. But RTOs or even regions do not exist in a vacuum. Congestion management approaches that work within a particular region may not adequately deal with transactions that are sourced outside the region, or that sink outside the region. Nor may they take account of parallel flows outside the region resulting from intra-regional transactions. As RTOs develop congestion management approaches, the Commission must require that they be compatible with what is happening elsewhere.

- The RTO must be obligated to work with NERC and other RTOs to resolve "seams" issues. As stated above, it is generally preferable not to locate the boundaries of the RTOs at known weak links in the grid. That will not always be possible, and the location of constraints will likely change as generation or transmission is added or removed from the system. Where "seams" issues remain, RTOs must be obligated to work with NERC and the other RTOs to develop workable solutions to the constraints.

Challenge No. 2: The mismatch between how business is arranged and how power actually flows

Power flows in an interconnected system along all paths between a source and a sink, according to the laws of physics. The industry makes arrangements for transmission service today in a way that does not account for how power flows in the network. Following a long-used "contract path" convention or simplification, transmission providers and transmission customers arrange for service from point A to point B to point C along a single, designated path. Although that reservation compensates transmission providers on the contract path, actual power flows impact other systems not party to the contract path. A transaction from PJM to Duke causes flows in Ontario.

The Commission and the industry are struggling with issues concerning the definition and calculation of Available Transfer Capability. Various efforts are underway to standardize how total transfer capability and available transfer capability are to be calculated. But as long as business is not done based on the way power flows in the network, the incentives for making improvements in this area are skewed. The task before all of us is to devise integrated approaches that give market participants the simplicity and predictability they need, while at the same time giving those who build and operate the system the ability to deal with the complexities of the flows on the system. Ignoring the need for simplicity and

predictability will frustrate the emerging competitive marketplace. Ignoring the complexity of flows on the network puts reliable operation of the grid at risk.

The Commission should avoid requirements that inhibit the development of alternatives or improvements to the contract path methodology. Commission requirements should not perpetuate an unchanged contract path methodology. A requirement that transmission providers post the available transmission capacity for each path makes no sense unless (1) that capacity is calculated based on flows on the entire network, and (2) that calculation affects how people do business. It is far preferable to take account of network flows when transactions are first being established than on an after-the-fact basis when the system is under duress.

We acknowledge that there is not agreement on what the new regime should be. More than one solution may be possible, so long as network effects are considered and so long as the different approaches are compatible. Again, the goal should be to foster broad markets while maintaining system reliability. Achieving this requires an accurate assessment of what the system capabilities are. It is as wrong to understate capacity (and foreclose commerce) as it is to overstate capacity and put the system at risk. In this connection, NERC supports the Commission's proposal for the RTO to be ultimately responsible for evaluating ATC data submitted to it by transmission owners and for resolving conflicting ATC values for the same interconnection. In the NOPR, the Commission refers to this as "level 3."

Challenge No. 3: Transmission pricing and compensation issues

In the past, when transmission was provided on a bundled basis by vertically integrated firms, the costs of transmission and of the actions utilities took to maintain reliable service were generally assured of recovery in the rates of its various customer classes. With the unbundling of the transmission and merchant functions, that is no longer the case. New rate structures are necessary to deal with three issues. First, transmission rates must provide incentives to get the right

amount of transmission infrastructure built. The cost of transmission is a relatively small part of the overall price of delivered power. We must make sure that shortages of transmission capacity do not restrict power flows and limit the benefits that otherwise could be achieved from competitive electricity markets.

Second, market mechanisms, i.e., pricing and contracts, may offer better ways of dealing with congestion management than does physical interruption of power flows. As NERC stated to the Commission in the filing made on February 18, 1999, it is our goal that transmission loading relief (TLR) be the last resort in dealing with congestion on the grid. It will always be necessary to have TLR or an equivalent in place. Maintaining the stability of the grid is critical, and events can occur for which the only timely solution is interruption of flows. Nonetheless, if the industry had in place more market-oriented mechanisms that dealt effectively with constraints, either by relieving them or influence people to arrange their business to avoid them in the first place, then the frequency of TLRs would decrease.

Third, entities that take actions to support the reliability of the grid must receive compensation. For example, generators run to provide voltage support or to provide redispatch to alleviate a constraint need ways of recovering the costs of doing so. There must not be disincentives, in the form of unrecovered costs, to having people perform those vital functions. This summer NERC has underway a market redispatch pilot program to explore some of those issues. The MRD is a work in progress, and NERC expects to file a report on the results of the pilot program later this Fall, with recommendations for improvements or alternatives.

NERC does not have an answer for the question of how such rates ought to be designed. There are strongly held, differing opinions on that subject throughout the industry. The Commission can provide needed leadership by giving permission and placing the strong expectation that the industry come to closure on these issues. And while flexibility is one important consideration, whatever solutions are

arrived at must work together. That may require the Commission to be more proscriptive, and it should not hesitate to do so.

Challenge No. 4: Transaction management

The number and complexity of transactions on the grid is growing enormously. For example, Entergy, one of the approximately 140 control areas that make up the North American grid, has provided the following illustration of the dramatic increase in the number of transactions that it has experienced.

Year	Schedules	OASIS Reservations
1996	3,500	0
1997	10,000	15,000
1998	30,000	45,000
1999 (est.)	45,000	50,000

One of the benefits of competition is product and service innovation. That is clearly happening in the electric industry, as new market participants buy power of varying degrees of firmness, combine it with some of their own generation, and repackage it for sale. Title may change hands several times. Customers are better off, because they have more options. But these increased opportunities also cause a huge increase in the number of transactions that take place in the system. From a reliability standpoint, transmission providers must still assess each of these transactions for its impact on the system, in light of all the other transactions that are also taking place on the system. And we can only expect that these increases will continue, as the markets develop further and as retail access becomes more widely available.

In Order No. 889 the Commission required transmission providers to establish OASIS, the Open Access Same-time Information System, as the means for disseminating transmission-related information such as available transmission capacity. The Commission also directed the industry to work toward the development, in Phase 2 of OASIS, of electronic scheduling. If we are to realize the full potential of competitive markets, the Commission needs to renew that

requirement and give it a higher priority. In doing so, however, the Commission needs to guard against a new balkanization as different providers develop proprietary systems with incompatible requirements. Business practices need to be standardized, so that there is a seamless, continental, international electricity market.

NERC has been developing new tools to deal with the reliability issues raised by the increased trade. In 1998, NERC introduced the interim Interchange Distribution Calculator ("iIDC"), which models flows in the Eastern Interconnection and allows transmission providers and security coordinators to assess the impact of transactions on the grid. NERC requires that each interchange transaction (i.e., transactions between control areas) be tagged with certain identifying information. When there is a need for curtailment, the iIDC gives security coordinators a list, ranked by service priority, of the transactions that are contributing to the overload. Information in the iIDC is incomplete, but planned improvements in this area are in progress. It has been the only way that security coordinators and transmission providers have been able to deal with the increased flows on the grid in the last two years.

During September 1999 NERC will introduce electronic tagging, an internet-based template of standardized transaction information that will replace the current phone, fax, and e-mail methods of communicating tags. It will greatly facilitate the assessment of the impacts of interchange transactions on grid security. It will also significantly improve the information base in the system. Once electronic tagging is implemented, NERC will also introduce the Interchange Distribution Calculator, a more complete and more functional version of the iIDC. When coupled with mandatory electronic tagging, the IDC will provide much stronger tools for security coordinators to deal with the effects of parallel flows on

the grid. It is the IDC that will make possible implementation of the constrained path method of curtailing transactions on the grid.[7]

Our work on these tools leads to this observation: The data needed for assessing and controlling the system from a reliability standpoint greatly overlaps the data that is needed for reservation and scheduling from a business or commercial standpoint. While there will be important issues of confidentiality with regard to sensitive commercial information, the Commission should lead the industry to the development of an integrated system for dealing with all this information. Market participants will need a simple system with low transaction costs that permits seamless trading over wide areas. Those responsible for the operation and reliability of the system will need a system that enables them to deal with the complexities of parallel flows on the integrated grid. Having multiple, incompatible systems will further neither of those ends.

Conclusion

The emerging competitive markets present great opportunities and great challenges. There can be enormous benefits from broad, integrated markets that also maintain the reliability of the interconnected grid. NERC will continue to work with others in the industry and the Commission to accomplish that end.

---

7 With CPM, the reservation priority on the constrained link of a contract path determines the curtailment priority for an interchange transaction. The "weakest link" method is used today, meaning that the lowest curtailment priority on the contract path determines the curtailment priority for the entire transaction.

1999 SUMMER ASSESSMENT

Reliability of Bulk Electricity Supply in North America

North American Electric Reliability Council

June 1999

Table of Contents

Assessment Summary 3

Interconnection Assessments 4

Table 1: 1999 Summer Peak Demand and Resources by Interconnection 5

Table 2: 1999 NERC Total Summer (July) Peak Demand and Resources 6

Areas of Particular Interest 7

Table 3: Estimated 1999 Summer Resources and Demands (MW) and Margins (%) 9

Table 4: Generating Unit Additions Scheduled for Initial Service, Retirement, or Rerating — March 1999 through September 1999 12

Table 5: Transmission System Additions and Upgrades (230 kV and Above) — March 1999 through September 1999 15

Figure 1: Normal Base Electricity Transfers and First Contingency Incremental Transfer Capabilities (Nonsimultaneous), MW 17

Regional Assessments 20

A Look Back at 1998/99 Winter 37

Definitions, Assumptions, and Abbreviations 38

Reliability Assessment Subcommittee 41

Introduction

The North American Electric Reliability Council's (NERC) Engineering Committee directed its Reliability Assessment Subcommittee (RAS) to prepare an independent assessment of the reliability of the bulk electricity supply in North America for the upcoming summer (June through September 1999).

Assessment Summary

Generating capacity resources will be adequate to meet projected electricity demands in most areas of North America this summer. Resources are expected to be tight but manageable in ECAR, SERC, ERCOT, and the Arizona-New Mexico-Southern Nevada and the California-Mexico Areas of WSCC. All of these areas are expecting relatively low capacity margins, so higher-than-projected demand during hot weather or unexpected generation outages could put a strain on resources. Also, some risk of interruptions to firm load remains in the Canadian province of Alberta (WSCC).

Areas of concern last summer in MAIN and New England show marked improvement with the return to service of key nuclear generating units. However, New England may experience low margins in June as four nuclear units are ramping back to full load after outages.

Supply Adequacy

Alberta (WSCC) — The capacity resources of the Canadian province of Alberta are expected to be adequate for this summer. Demand in the province is lower in the summer than in the winter and 226 MW of new capacity has been added since November 1998, improving capacity margin projections (18.6%) for the summer peak compared to last summer. However, the risk of interruptions to firm demand remains due to Alberta's reliance on external resources imported primarily on the transmission tie to British Columbia.

Tight but Manageable in Some Areas

Capacity resources in some other areas are expected to be tight, but manageable:

ECAR — With the ongoing outage of the Cook Nuclear Units (2,060 MW total), ECAR's operational capacity margin is only slightly improved from last summer. However, there is a greater likelihood this year that electricity will be available from neighboring Regions.

ERCOT — Demand projections in ERCOT are only slightly less than the record peak demands set last summer during the hottest summer on record in Texas. Although Total Internal Demand is projected to be slightly below last summer's all-time peak, capacity resources only have increased by 744 MW over last summer, significantly reducing the projected capacity margin for ERCOT compared to projections for last summer.

New England — The month of June could be tight in New England as three nuclear units are ramping back to full output after refueling outages, and Millstone No. 2 returns from an extended outage.

SERC — The projected capacity margin continues to be less than in previous years, but is expected to be adequate if demand forecasts are not exceeded and unit availability remains high. SERC's projected demand is 4.2% below last summer's record-setting peak.

Southwest WSCC — The Arizona-New Mexico-Southern Nevada and the California-Mexico Areas of WSCC may not have adequate resources to accommodate a widespread severe heat wave or a significantly higher-than-normal forced outage rate for generation. Those Areas are experiencing a continuing trend of peak demand growth exceeding the addition of new generation facilities.

Adequate Resources Projected Elsewhere

Generating resources are projected to be adequate in the other Regions this summer. However, unanticipated equipment problems and extreme weather can combine to produce demands that strain supply margins.

System Security

Improvements to the transmission system have increased transfer capabilities on some interfaces. However, additional Available Transfer Capability (ATC) has already been reserved for the summer, and many transmission system interfaces will continue to be heavily loaded. Key transmission elements that may be frequently subjected to Transmission Loading Relief (TLR) procedures are noted in the Regional Assessments.

Between June 1 and September 30, market participants in the Eastern Interconnection will conduct an experiment in market redispatch. The experiment will explore how redispatch of generation through contractual arrangements between generator owners and Purchasing/Selling Entities (PSEs) can be used to reduce the congestion on certain transmission interfaces. If the redispatch is successful, the number of applications of TLR procedures may be reduced on some interfaces.

Right-of-way maintenance should remain a high priority for all transmission owners and operators. Major system disturbances in WSCC and ECAR in 1996 began when transmission lines shorted out from overgrown trees. Tree contact was at least partly to blame for a system disturbance in the Denver, Colorado area last summer.

Interregional Coordination

Coordination of system operation continues to improve. All 21 of the NERC Security Coordinator centers will be operational this summer. Security Coordinators have begun using the System Data Exchange (SDX) program to exchange modeling data for day-ahead security analyses in the Eastern Interconnection. Those data are also used to update the power flow models for calculating transfer distribution factors.

The new Electronic Tagging (E-Tag) system, which is planned for implementation in mid-June, will provide Security Coordinators more complete information about transactions on the system. The first phase of the new Interchange Distribution Calculator (IDC) also will come into service in June. IDC will be used to administer the NERC TLR procedures this summer and in the market redispatch experiment.

Hydro Conditions: Average Water Conditions Expected in Most Areas

Hydro conditions are expected to be normal for the upcoming summer in most areas, and hydroelectric generation is expected to be average for the season. Availability of hydroelectric energy in the Pacific Northwest is expected to be above normal, which will likely result in electricity flows at or near the established transmission limits from Oregon into the demand centers in California.

Fuel Supply

Fuel supplies and inventories are expected to be adequate this summer. No delivery problems are expected.

Interconnection Assessments

The three major electrical Interconnections in North America are expected to have adequate capacity margins this summer (see Table 1). However, these margins show a decline from last summer. Despite overall adequate margins for the Interconnections, the potential for local adequacy problems still exists in areas with limited transmission import capability. Improvements to the transmission system are not keeping pace with the increasing demands being placed on the system. Improved capacity resources in the Midwest should lower the dependence on external resources for replacement power and relieve some loading on the transmission system experienced last summer.

TABLE 1: 1999 SUMMER PEAK DEMAND AND RESOURCES BY INTERCONNECTION

	Interconnection		
	Eastern (July)	**Western (August)**	**ERCOT (August)**
Projected Total Internal Demand (MW)	540,769	132,261	53,569
Interruptible Demand & DCLM (MW)	27,057	4,622	3,090
Projected Net Internal Demand (MW)	513,712	127,639	50,479
Last Summer's Peak Demand (MW)	528,213	131,579	53,689
Change (%)	2.4	0.5	-0.2
Projected Generating Capacity (MW)	596,065	156,396	57,699
Interconnection Tie Capability (MW)	1,850	1,080	820
Net Capacity Resources (MW)	598,915	157,476	58,519
Margin (MW)	84,203	29,837	8,040
Capacity Margin (%)	14.1	18.9	13.7

NOTE: The ERCOT and Western Interconnections are projected to peak in August and the Eastern Interconnection in July. As a whole, NERC is expected to peak in July.

TABLE 1 DEFINITIONS

Projected Total Internal Demand	Sum of Internal Demand plus Standby Demand (monthly coincident) for the Interconnection
Interruptible Demand & DCLM	Sum of Interruptible Demand and Direct Control Load Management (DCLM) for the Interconnection
Projected Net Internal Demand	Projected Total Internal Demand less Interruptible Demand and DCLM for the Interconnection
Last Summer's Peak Demand	Last summer's Actual Peak Demand
Change (%)	Change in Projected Total Internal Demand compared to last summer's Actual Peak Demand for the Interconnection, expressed as a percentage
Projected Generating Capacity	Sum of Projected Utility Generating Capacity plus Projected IPP Generation Capacity for the Interconnection
Interconnection Tie Capability	Import Capability of the Interconnection's HVDC ties to other Interconnections
Net Capacity Resources	Projected Generating Capacity plus Tie Capability for the Interconnection
Margin	Net Capacity Resources less Projected Net Internal Demand for the Interconnection
Capacity Margin (%)	Margin divided by Net Capacity Resources, expressed as a percentage for the Interconnection

TABLE 2: 1999 NERC TOTAL SUMMER (JULY) PEAK DEMAND AND RESOURCES

Projected Total Internal Demand (MW)	722,662
Interruptible Demand & DCLM (MW)	34,829
Projected Net Internal Demand (MW)	687,833
Last Summer's Peak Demand (MW)	708,098
Change for Projected Total Internal Demand Over Last Summer's Peak Demand (%)	2.1
Change for Projected Net Internal Demand Over Last Summer's Peak Demand (%)	-2.9
Last Summer's Net Internal Demand Projection (MW)	673,446
Last Summer's Peak Above Last Summer's Projection (%)	5.1
Change in Projected Net Internal Demand Over Last Summer's Net Internal Demand Projection (%)	2.1

Peak Demand: 2.9% Below Last Summer

Peak net internal demand for electricity for NERC is projected to be 2.9% lower than the actual 1998 summer peak. Last summer's actual peak demand was 5.1% above projections. All three Interconnections exceeded projected demands last summer, which was hotter than normal, particularly in ERCOT. The 1999 summer peak projection is based on normal weather and is 2.1% above last year's peak projection. For comparison, summer peak demands are projected to grow at an average annual rate of 1.8% per year over the next decade.

Areas of Particular Interest

RAS performed follow-up assessments of MAIN and New England and a special assessment of the Canadian province of Alberta for the 1999 summer.

MAIN

Capacity margins in MAIN show significant improvement over the last two summers. All nuclear plants in MAIN are in service for this summer, and more than 1,300 MW of additional generation is scheduled to be added in the Region before the summer peak. LaSalle Nuclear Station (2,080 MW total) and Clinton Nuclear Station (930 MW) restarted in mid-May.

New England (NPCC)

New England's projected capacity situation for this summer shows a marked improvement over last summer with the return to service of Millstone 2 and 3 nuclear units (2,010 MW total). ISO New England expects a manageable summer with sufficient capacity. The month of June could be tight in New England as four nuclear units ramp back to full output after refueling outages.

Should the unlikely combination of higher-than-expected demand and lower-than-expected generating resource availability occur during the 1999 summer, ISO New England will implement NEPOOL Operating Procedure No. 4 — Action During a Capacity Deficiency (OP 4). (See NPCC's Regional Assessment for further details on the OP 4 procedure.) That long-standing procedure has been a successful operations tool for ensuring reliability in New England. It was used successfully during the last two summers.

Alberta

Capacity resources in the province of Alberta are expected to be adequate for this summer. Demand in the province is lower in the summer than in winter and 226 MW of new capacity has been added since November 1998, improving capacity margin projections (18.6%) for the summer peak compared to last summer.

The province adopted legislation in 1996 that allows open competition for generation resources through open transmission access to the power pool. Under this structure, all long-term generation additions are market driven. As Alberta's market has evolved from a vertically integrated utility structure to an open market, there also has been high demand growth in the province. Potential for low capacity margins has prompted special seasonal assessments by RAS since the summer of 1998.

Alberta's system is relatively isolated from the remainder of the Western Interconnection. As such, it relies heavily on load management programs as part of its policies and procedures to maintain sufficient internal operating reserves. Under Alberta's regulations, should resources at a given time prove insufficient, firm customer demand is disconnected by the distribution companies as a final step to preserve necessary operating reserves. Alberta's resources for the 1999 summer include 362 MW of "Price Responsive Demand" that is contractually interruptible — customers agree to be interrupted when necessary.

In June 1998, during a period of unexpected generation outages, Alberta was forced to interrupt up to 100 MW of firm customer demand to maintain operating reserves. Alberta also was forced to interrupt 100 MW of firm demand on October 25, 1998 to comply with NERC's Disturbance Control Standard of returning Area Control Error (ACE) to zero within ten minutes following a contingency. (Although Alberta was carrying adequate operating reserves at the time, those reserves did not respond quickly enough to return ACE to zero.) Alberta has since contracted with the Bonneville Power Administration to purchase up to 200 MW of additional spinning reserves

to meet obligations to Northwest Power Pool when internal operating reserves are being used to maintain supply to firm customers.

Alberta imports power into the province through one 500 kV transmission tie to British Columbia with a path rating of 1,200 MW, and a back-to-back DC tie with Saskatchewan rated at 150 MW. However, the import capability of the tie with British Columbia is limited to 800 MW for system stability reasons. This summer, those ties will be relied on to import 400 MW of projected purchases to supplement Alberta's internal generating capacity. Those purchases, not yet under contract, will likely be based on the supply and demand balance in Alberta and the price difference between the Alberta Pool Price and the market price outside the province.

The following table shows the capacity resources for Alberta for the upcoming summer.

ALBERTA, CANADA TABLE 1

Capacity and Demand — 1999 Summer

Peak Demand in MW	June	July	August	September
Projected Internal Demand	7,081	7,205	7,218	7,090
Standby Demand	—	—	—	—
Total Internal Demand	7,081	7,205	7,218	7,090
Direct Controlled Load Management	175	175	175	175
Interruptible Demand	187	187	187	187
Net Internal Demand	6,719	6,843	6,856	6,728
Capacity Resources in MW				
Total Owned Capacity	7,772	7,783	7,796	7,809
Inoperable Capacity	126	126	126	126
Net Operable Capacity	7,646	7,657	7,670	7,683
Independent Power Producers	352	352	352	352
Total Capacity Purchases	400	400	400	400
Total Capacity Sales	—	—	—	—
Net Capacity Resources	8,398	8,409	8,422	8,435
Capacity Margin	1,679	1,566	1,566	1,707
% Capacity Margin	20.0	18.6	18.6	20.2
Transmission Tie Capability				
British Columbia	800	800	800	800
Saskatchewan	150	150	150	150
Total	950	950	950	950
Expected Transactions	400	400	400	400
Uncommitted Transmission Import Capability	550	550	550	550

Note: These values include both the demand and capacity resources for the City of Medicine Hat, which is physically located within Alberta, but is not a member of the Alberta Interconnected Electric System.

Substantial amounts of market-driven generating capacity additions are planned in Alberta over the next few years. RAS will continue to monitor the progress of Alberta during this transitional period.

TABLE 3: ESTIMATED 1999 SUMMER RESOURCES AND DEMANDS (MW) AND MARGINS (%)

	June Net Capacity Resources (MW)	*June* Net Internal Demand (MW)	*June* Capacity Margin (%)	*July* Net Capacity Resources (MW)	*July* Net Internal Demand (MW)	*July* Capacity Margin (%)
United States						
ECAR[1]	102,949	83,032	19.3	103,358	90,675	12.3
ERCOT	57,589	47,224	18.0	57,860	49,028	15.3
FRCC[2]	39,708	33,012	16.9	39,708	33,979	14.4
MAAC	55,511	42,678	23.1	55,511	47,626	14.2
MAIN	51,699	42,046	18.7	52,447	45,496	13.3
MAPP	35,184	28,181	19.9	35,186	29,602	15.9
NPCC	60,491	48,275	20.2	60,671	52,069	14.2
New York	36,707	27,918	23.9	36,707	29,700	19.1
ISO New England[3]	23,784	20,357	14.4	23,964	22,369	6.7
SERC	151,675	127,440	16.0	152,302	133,906	12.1
Entergy	23,409	18,824	19.6	23,444	20,074	14.4
Southern	41,099	36,764	10.5	41,247	38,532	6.6
TVA	29,317	25,312	13.7	29,427	25,735	12.5
VACAR	57,850	46,540	19.6	58,184	49,565	14.8
SPP	42,554	33,544	21.2	42,554	35,896	15.6
Northern	4,956	3,647	26.4	4,956	3,961	20.1
Southeastern	23,359	18,708	19.9	23,359	19,909	14.8
West Central	14,239	11,189	21.4	14,239	12,026	15.5
WSCC[4]	135,238	104,244	22.9	135,277	109,193	19.3
Northwest Power Pool	48,398	32,408	33.0	48,192	33,457	30.6
Rocky Mountain	10,084	7,140	29.2	10,109	7,752	23.3
Arizona-New Mexico-Southern Nevada	22,124	18,693	15.5	22,357	19,729	11.8
California-Mexico (U.S.)	56,131	46,003	18.0	56,355	48,255	14.4
Total — United States	**732,598**	**589,676**	**19.5**	**734,874**	**627,470**	**14.6**
Canada						
MAPP	6,538	4,935	24.5	6,548	4,931	24.7
NPCC	54,278	39,596	27.0	58,652	39,532	32.6
Maritime	4,388	2,712	38.2	4,895	2,585	47.2
Ontario	25,564	20,429	20.1	26,429	20,198	23.6
Québec	24,326	16,455	32.4	27,328	16,749	38.7
WSCC	20,788	14,359	30.9	20,799	14,498	30.3
Total — Canada	**81,604**	**58,890**	**27.8**	**85,999**	**58,961**	**31.4**
Mexico						
WSCC-Mexico[5]	1,573	1,268	19.4	1,713	1,402	18.2
Total	**815,775**	**649,834**	**20.3**	**822,586**	**687,833**	**16.4**

TABLE 3 (CONT.): ESTIMATED 1999 SUMMER RESOURCES AND DEMANDS (MW) AND MARGINS (%)

	August			*September*		
	Net Capacity Resources (MW)	Net Internal Demand (MW)	Capacity Margin (%)	Net Capacity Resources (MW)	Net Internal Demand (MW)	Capacity Margin (%)
United States						
ECAR[1]	103,465	89,370	13.6	102,217	79,869	21.9
ERCOT	57,860	50,479	12.8	57,802	46,273	19.9
FRCC[2]	39,708	34,295	13.6	39,708	33,195	16.4
MAAC	55,511	45,133	18.7	55,511	39,980	28.0
MAIN	52,447	45,185	13.8	51,508	38,265	25.7
MAPP	35,214	28,924	17.9	35,318	26,620	24.6
NPCC	60,671	51,178	15.6	60,937	46,628	23.5
New York	36,707	28,809	21.5	36,707	27,027	26.4
ISO New England[3]	23,964	22,369	6.7	24,230	19,601	19.1
SERC	152,266	132,507	13.0	152,080	121,522	20.1
Entergy	23,449	19,790	15.6	23,432	17,801	24.0
Southern	41,137	38,203	7.1	41,277	35,318	14.4
TVA	29,430	25,581	13.1	29,161	23,474	19.5
VACAR	58,250	48,933	16.0	58,210	44,929	22.8
SPP	42,554	36,025	15.3	42,554	32,343	24.0
Northern	4,956	3,893	21.4	4,956	3,499	29.4
Southeastern	23,359	19,933	14.7	23,359	17,721	24.1
West Central	14,239	12,199	14.3	14,239	11,123	21.9
WSCC[4]	134,844	111,641	17.2	134,874	104,894	22.2
Northwest Power Pool	48,065	33,008	31.3	48,736	31,477	35.4
Rocky Mountain	10,100	7,767	23.1	10,160	7,174	29.4
Arizona-New Mexico-Southern Nevada	22,412	19,870	11.3	21,699	18,235	16.0
California-Mexico (U.S.)	58,552	50,996	12.9	55,401	48,008	13.3
Total — United States	**734,540**	**624,737**	**14.9**	**732,509**	**569,589**	**22.2**
Canada						
MAPP	6,564	5,054	23.0	6,622	4,810	27.4
NPCC	56,831	40,556	28.6	54,187	38,615	28.7
Maritime	4,973	2,584	48.0	4,905	2,735	44.2
Ontario	26,445	21,300	19.5	23,860	18,617	22.0
Québec	25,413	16,672	34.4	25,422	17,263	32.1
WSCC	20,767	14,562	29.9	20,751	14,492	30.2
Total — Canada	**84,162**	**60,172**	**28.5**	**81,560**	**57,917**	**29.0**
Mexico						
WSCC-Mexico[5]	1,753	1,436	18.1	1,753	1,447	17.5
Total	**820,455**	**686,345**	**16.3**	**815,822**	**628,953**	**22.9**

Definitions and Notes to Table 3

Net Capacity Resources

Existing available generating capacity, plus new units scheduled for service by the given month, plus the net of capacity purchases and sales. Generation known to be inoperable due to extended outages is not included in these resources.

Net Internal Demand

Projected peak-hour demand for the given month, including standby demand, less the sum of direct control load management and interruptible demands.

Capacity Margin

The difference between Net Capacity Resources and Net Internal Demand expressed as a percent of Net Capacity Resources. This is the capacity available to cover random factors such as forecast outages of generating equipment, demand forecast errors, weather extremes, and capacity service schedule slippage. Variations from capacity margins in Regional tables may exist due to differences in reporting methods for purchases and sales.

Specific Table Notes

[1] This is the aggregate of member system noncoincident peak demand projections, adjusted for historical diversity of the ECAR Region.

[2] Capacity Margin/Reserve Margin — Although Capacity Margin is included in this table for consistency with other Regions, FRCC uses Reserve Margin, not Capacity Margin, as one of its guidelines in assessing adequacy.

[3] Available Resources do not include the equivalent generating capacity benefits to NEPOOL associated with the Hydro-Québec-to-NEPOOL Firm Energy Contract. An estimated 3,375 to 3,875 MW of additional generation and load relief is expected to be available through ISO New England system operator implementation of NEPOOL Operating Procedure No. 4 — Action During a Capacity Deficiency (OP 4).

[4] The sum of the Areas' resources do not equal the WSCC total because in some cases, planned purchases have been reported for which the selling entities have not yet been identified. Adequate capacity margin is available in the Western Interconnection to cover resources not identified.

[5] Only the northern portion of Baja California Norté, Mexico that is interconnected to the United States.

TABLE 4: GENERATING UNIT ADDITIONS SCHEDULED FOR INITIAL SERVICE, RETIREMENT, OR RERATING — MARCH 1999 THROUGH SEPTEMBER 1999

Region	Unit	MW Change	Unit Type	Fuel	Action	Effective Operating Date
ECAR	Arcanum No. 3	2	Int. Combustion	No. 2 Fuel Oil	New	June
	Ashtabula No. 6	43	Steam Turbine	Bituminous	Reactivate	June
	B.C. Cobb No. 2	56	Steam Turbine	Natural Gas	Reactivate	May
	Belle River No. 12-1	72	Gas Turbine	Natural Gas	New	August
	Belle River No. 12-2	72	Gas Turbine	Natural Gas	New	August
	Belle River No. 13-1	72	Gas Turbine	Natural Gas	New	June
	Belleville No. 1	21	Hydro	Water	New	June
	Belleville No. 2	21	Hydro	Water	New	June
	Bowling Green GT No. 1	32	Gas Turbine	No. 2 Fuel Oil	New	June
	Bryan No. 1-3	5	Int. Combustion	No. 2 Fuel Oil	New	June
	Cleveland No. 1-5	9	Int. Combustion	No. 2 Fuel Oil	New	June
	City of Columbus No. 1-6	11	Int. Combustion	No. 2 Fuel Oil	New	August
	Conners Creek No. 15	150	Steam Turbine	Natural Gas	Reactivate	June
	Conners Creek No. 16	150	Steam Turbine	Natural Gas	Reactivate	June
	Delray No. 11-1	62	Gas Turbine	Natural Gas	New	June
	Delray No. 12-1	62	Gas Turbine	Natural Gas	New	June
	Dover No. 1-6	11	Int. Combustion	No. 2 Fuel Oil	New	June
	E.W. Brown No. 6	164	Gas Turbine	Natural Gas	New	August
	E.W. Brown No. 7	164	Gas Turbine	Natural Gas	New	August
	Greenwood No. 11-1	82	Gas Turbine	Natural Gas	New	June
	Greenwood No. 11-2	72	Gas Turbine	Natural Gas	New	June
	Greenwood No. 11-3	72	Gas Turbine	Natural Gas	New	June
	Hamilton GT No. 3	30	Gas Turbine	No. 2 Fuel Oil	New	June
	J.K. Smith CT No. 1	110	Gas Turbine	Natural Gas	New	June
	J.K. Smith CT No. 2	110	Gas Turbine	Natural Gas	New	June
	J.K. Smith CT No. 3	110	Gas Turbine	Natural Gas	New	June
	Jackson Center No. 1	2	Int. Combustion	No. 2 Fuel Oil	New	June
	Napoleon No. 4-6	5	Int. Combustion	No. 2 Fuel Oil	New	June
	Orrville No. 1-3	5	Int. Combustion	No. 2 Fuel Oil	New	June
	Seneca Nos. 1, 2, & 3	88	Pumped Storage	Water	Uprate	June
	St. Mary's GT No. 1	10	Gas Turbine	No. 2 Fuel Oil	New	June
	Trenton Channel No. 7	11	Steam Turbine	Coal	Uprate	June
	Trenton Channel No. 8	-5	Steam Turbine	Coal	Derate	June
	Trenton Channel No. 9	28	Steam Turbine	Coal	Uprate	June
	Versailles No. 1-3	5	Int. Combustion	No. 2 Fuel Oil	New	June
	Vestaburg No. 8	24	Gas Turbine	Natural Gas	New	June
FRCC	Crystal River No. 3	20	Nuclear	Uranium	Uprate	May
	Crystal River No. 5	17	Steam Turbine	Coal	Uprate	May
	C.D. McIntosh, Jr. CT No. 5	217	Gas Turbine	Natural Gas	New	June
	Hines Energy Complex No. 1	470	Combined Cycle	Natural Gas	New	April

TABLE 4 (CONT.): GENERATING UNIT ADDITIONS SCHEDULED FOR INITIAL SERVICE, RETIREMENT, OR RERATING — MARCH 1999 THROUGH SEPTEMBER 1999

Region	Unit	MW Change	Unit Type	Fuel	Action	Effective Operating Date
FRCC (cont.)	S.O. Purdom No. 5	-24	Steam Turbine	Natural Gas	Retire	September
	S.O. Purdom No. 6	-24	Steam Turbine	Natural Gas	Retire	September
	Stock Island GT No. 2	18	Gas Turbine	No. 2 Fuel Oil	Uprate	March
	Stock Island GT No. 3	18	Gas Turbine	No. 2 Fuel Oil	Uprate	March
MAAC	Holtwood No. 17	-72	Steam Turbine	Coal	Retire	May
	Limerick No. 2	40	Nuclear	Uranium	Uprate	May
	Martins Creek Nos. 1-4	72	Gas Turbine	Natural Gas	Uprate	May
	Sunbury CT Nos. 1-2	36	Gas Turbine	Natural Gas	Uprate	May
	Westwood	-30	Steam Turbine	Coal	Retire	March
MAIN	Calumet	30	Gas Turbine	Natural Gas	Portable & temporary	June
	Concord Nos. 1-4	44	Gas Turbine	Natural Gas	Uprate	June
	Crawford	30	Gas Turbine	Natural Gas	Portable & temporary	June
	Danville Tilton GM	176	Gas Turbine	Natural Gas	New	June
	DePere IPP, WI	170	Gas Turbine	Natural Gas	New	June
	Elmhurst	30	Gas Turbine	Natural Gas	Portable & temporary	June
	Elwood IPP, IL	300	Gas Turbine	Natural Gas	New	June[1]
	Huiskamp No. 1	10	Int. Combustion	No. 2 Fuel Oil	Portable & temporary	June
	Interstate	10	Gas Turbine	Natural Gas/ No. 2 Fuel Oil	Uprate	June
	Itasca	30	Gas Turbine	Natural Gas	Portable & temporary	June
	Libertyville	30	Gas Turbine	Natural Gas	Portable & temporary	June
	Paris	44	Gas Turbine	Natural Gas	Uprate	June
	Point Beach	22	Nuclear	Uranium	Uprate	May
	Prospect Heights	31	Gas Turbine	Natural Gas	Portable & temporary	June
	Rocky Road IPP, IL	125	Gas Turbine	Natural Gas	New	June[2]
	Skokie	32	Gas Turbine	Natural Gas	Portable & temporary	June
	Taum Sauk	100	Pumped Storage	Water	Uprate	June
	West Middleton No. 1	10	Int. Combustion	No. 2 Fuel Oil	Portable & temporary	June
	Winchester (Alsey) Nos. 1-5	100	Gas Turbine	Natural Gas	New	June

1 May be 600 MW by the end of summer.
2 Ultimate capacity of 250 MW.

TABLE 4 (CONT.): GENERATING UNIT ADDITIONS SCHEDULED FOR INITIAL SERVICE, RETIREMENT, OR RERATING — MARCH 1999 THROUGH SEPTEMBER 1999

Region	Unit	MW Change	Unit Type	Fuel	Action	Effective Operating Date
MAPP – U.S.	Atlantic No. 2	10	Gas Turbine	Natural Gas	New	May
	Muscatine Plant 1, No. 8	-39	Steam Turbine	Coal	Derate	August
	Nebraska City No. 1	10	Steam Turbine	No. 2 Fuel Oil	Uprate	May
	Rokeby No. 1	3	Gas Turbine	Natural Gas	Uprate	June
	Rokeby No. 2	12	Gas Turbine	Natural Gas	Uprate	June
NPCC – Hydro-Québec	Chute Bell	10	Hydro	Water	Reactivate	April
	Sept Chute	20	Hydro	Water	Reactivate	April
NPCC – New England	EMI Dighton Power	168	Combined Cycle	Natural Gas	New	June
	Berkshire Power Dev.	272	Combined Cycle	Natural Gas	New	September
	Bridgeport Energy (Phase 2)	186	Combined Cycle	Natural Gas	New	July
SERC – Southern	Burkville	97	Combined Cycle	Natural Gas	New	July
	Lee County No. 1	108	Gas Turbine	Natural Gas	New	June
	Smarr No. 1	109	Gas Turbine	Natural Gas	New	June
	Smarr No. 2	109	Gas Turbine	Natural Gas	New	June
	Sowega No. 1	47.5	Gas Turbine	Natural Gas	New	June
	Sowega No. 2	47.5	Gas Turbine	Natural Gas	New	June
SERC – TVA	Browns Ferry No. 3	53	Nuclear	Uranium	Uprate	April
	Various Hydro	72	Hydro	Water	Uprate	June
SERC – VACAR	Asheville Combustion Turbine	165	Gas Turbine	Natural Gas	New	June
	Canadys Steam No. 2	15	Steam Turbine	Coal	Uprate	May
	Canadys Steam No. 3	20	Steam Turbine	Coal	Uprate	May
	CoGen South	55	Steam Turbine	Coal	New	May
	McMeekin Unit No. 1	2	Steam Turbine	Coal	Uprate	May
	McMeekin Unit No. 2	2	Steam Turbine	Coal	Uprate	May
	USDOE SRS (D-area)	-5	Steam Turbine	Coal	Derate	May
WSCC – NWPP	Foote Creek No. 1	14	Wind Turbine	Wind	New	June
	Fort Nelson	45	Gas Turbine	Natural Gas	New	April
	Fourmile Hill No. 1	45	Geothermal	Geothermal	New	July
	Rainbow No. 4	45	Gas Turbine	Natural Gas	New	March
WSCC – RMPA	Ray D Nixon GT No. 1	32	Gas Turbine	Natural Gas	New	July
	Ray D Nixon GT No. 2	32	Gas Turbine	Natural Gas	New	July

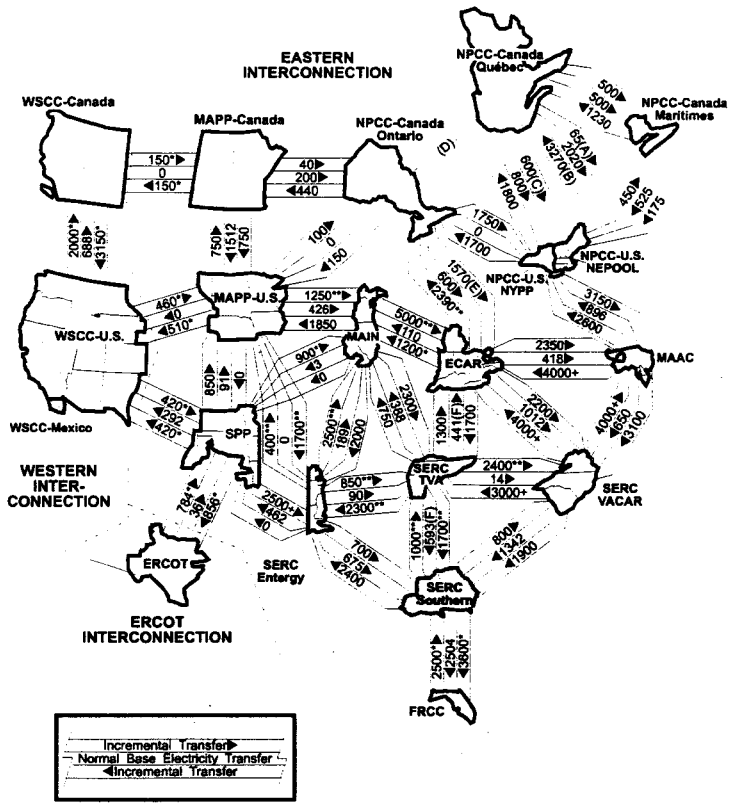
TABLE 5: TRANSMISSION SYSTEM ADDITIONS AND UPGRADES (230 KV AND ABOVE) — MARCH 1999 THROUGH SEPTEMBER 1999

Region	Facility	Length (Miles)	Capacity (MVA)	Voltage (kV)	Action	Expected Operating Date
ECAR	Gaines Transformer	–	500	345/138	New	March
	Quaker Tap/Wixom – Wayne	–	–	230 to 345	Conversion	May
	Quaker Transformer	–	500	345/120	New	May
	Whitley Tap/Sorenson – Twin Branch	–	–	345	New	July
	Whitley Tap – SDI (WVPA)	7.5	1,452	345	New	July
ERCOT	Frontier Sub	0.25	1,375	345	New	July
	Garfield Autotransformer No. 2	–	480	138/345	New	July
	West Levee Sub Autotransformer	–	600	345/138	New	June
FRCC	Andytown – Pennsuco	8.5	595	230	New	July
	Cape – Indian River A	2.3	478/587	230	Rerating	June
	Cape – Indian River B	2.3	596	230	New	June
MAAC	Steele – Vienna	28.3	400	138 to 230	Conversion	June
MAIN	Dead River Transformer No. 1	–	250	345/138	New	June
	Dresden – Elwood (IPP) – Goodings Grove	1	–	345	New	June
	Electric Junction Transformer No. 82	–	300	345/138	New	June
	Goodings Grove Transformer No. 81	–	300	345/138	New	June
	Joppa Series Inductor	–	306	161	New	June
	Lisle – Lombard Blue	–	1,740	345	Rerating	June
	Lisle – Lombard Red	–	1,740	345	Rerating	June
	Morgan Transformer No. 1	–	500	345/138	New	June
	Oak Creek Transformer	–	500	345/138	New	June
	Plains – Morgan	72	500	138 to 345	Conversion	June
	Sioux – Roxford	13	1,061	345	New	May
MAPP-U.S.	Bunker Lake Transformer	–	112	230/69	New	May
	Elk River Transformer	–	187	230/69	New	May
	Ft. Calhoun Sub 13451/1251 Transformer No. 1	–	560	345/161	New	June
	Ft. Calhoun Sub 13451/1251 Transformer No. 2	–	560	345/161	New	June
	Split Rock/Wapa Sioux Falls	1	400	230	New	May
	Split Rock Transformer	–	336	230/115	New	May
	Sub 3451/Sub 3454	30.6	717	345	New	June
	Sub 3454/Sub 3455	6.7	717	345	New	June
	Sub 3454/Wagener	33.6	717	345	New	June
NPCC – New York	Pannell Road Transformer Bank No. 3	–	308	345/115	New	June

TABLE 5 (CONT.): TRANSMISSION SYSTEM ADDITIONS AND UPGRADES (230 KV AND ABOVE) — MARCH 1999 THROUGH SEPTEMBER 1999

Region	Facility	Length (Miles)	Capacity (MVA)	Voltage (kV)	Action	Expected Operating Date
SERC – Southern	Anthony Shoals – Russell Dam	4	602	230	New	June
	Ellicott to Barry – W. McIntosh	1	1,614	230	New	June
	Ellicott to Barry – Big Creek	0.3	485	230	New	June
	N. Tifton – East Moultrie	25	602	230	New	June
	Oneonta – Gadsden SP	38.6	602	230	New	June
SERC – TVA	Haywood Switching Station	–	–	500	New	April
	Pleasant Hill Switching Station	–	–	500	New	April
SERC – VACAR	Burton 230/115 kV	–	224	230/115	New	May
	Burton – Yemassee	21	480	230	New	May
	Henderson – VP Kerr Dam 115 kV	5.1	200	115	Uprate	June
	Morrisville – Remington	5	608	230	New	May
	North Pole – Short Pump	25	797	230	New	May
	VP Halifax 230 kV	5	608	230	Uprate	June
WSCC – AZ-NM-SNV	Crystal Cut-in to Navajo – McCullough Line	–	1,400	500	New	June
	Crystal Phase-shifting Transformer No. 1	–	716	500	New	June
	Crystal Phase-shifting Transformer No. 2	–	716	500	New	June
	Crystal Autotransformer No. 1	–	716	500/230	New	June
	Crystal Autotransformer No. 2	–	716	500/230	New	June
	Crystal – Harry Allen No. 1	8	875	230	New	June
	Crystal – Harry Allen No. 2	8	875	230	New	June
	Harry Allen Cut-in to Reid Gardner – Pecos No. 1 Line	4	875	230	New	June
	Harry Allen Cut-in to Reid Gardner – Pecos No. 2 Line	4	875	230	New	June
	Merchant – Arden	1	637	230	New	August
	Merchant – Eldorado	1	637	230	New	August
	Merchant – McCullough	1	637	230	New	August
	Northwest Cut-in to Harry Allen – Westside Line	1	875	230	New	June
	Pecos – Northwest	17	875	230	New	June
	Topock Substation	–	100	230	New	June
WSCC – CA-MX	Metcalf – Monta Vista	28	1,097	230	New	June
	Metropoli – Rumarosa	3	442	230	New	July
	Metropoli II – La Rosita	3	442	230	New	July
	Rosarito II – Tijuana No. 1	19	442	230	New	July
	Rosarito II – Metropoli	14	442	230	New	July
	Tesla Transformer Bank	–	1,122	500	New	June
WSCC – NWPP	Ladd Phase-shifting Transformer	–	300	230	New	June

FIGURE 1: NORMAL BASE ELECTRICITY TRANSFERS AND FIRST CONTINGENCY INCREMENTAL TRANSFER CAPABILITIES (NONSIMULTANEOUS), MW



Definitions and Notes to Figure 1

The nonsimultaneous transfer capabilities shown represent the ability of the transmission network to transfer electricity from one area to another for a single demand and generation pattern. Different patterns of demand and generation cause variations in transfer capabilities on a day-to-day (or hour-to-hour) basis. Therefore, the numbers given in this diagram are as representative, not definitive. Refer to the interregional studies for this peak demand season for more information.

First Contingency Incremental Transfer Capability (FCITC) is the amount of electricity (incremental above normal base electricity transfers) that can flow over the transmission network in a reliable manner based on the following conditions:

1. With all transmission facilities in service, all facility loadings are within normal ratings and all voltages are within normal limits.

2. The bulk electric system is capable of absorbing the dynamic electric swings and remaining stable following a disturbance resulting in the loss of any single generating unit, transmission circuit, or transformer.

3. After the dynamic swings following a disturbance (resulting in the loss of any single generating unit, transmission circuit, or transformer), but before operator-directed system adjustments are made, all transmission facility loadings are within emergency ratings and all voltages within emergency limits.

First Contingency Total Transfer Capability (FCTTC) is the total amount of electric power (net of normal base power transfers plus FCITC) that can be transferred between two areas of the interconnected transmission systems in a reliable manner based on conditions 1, 2, and 3 in the FCITC definition above.

Specific Diagram Notes

Please note that at its July 1998 meeting, the NERC Operating Committee concluded that Hydro-Québec should be considered part of the Eastern Interconnection.

A. The base limit for the Phase II tie HVDC facility between New England and Hydro-Québec ranges between 1,200 and 1,800 MW, and can be increased when west-to-east transfers in the MAAC Region and New York Power Pool (NYPP) are below their limits.

   The transfer capability from Hydro-Québec to New England is expected to total 2,085 MW (60 MW through the Stanstead-Derby tie, 225 MW through Highgate, and 1,800 MW through Phase II).

B. Transfer on the Phase II HVDC facility from New England to Hydro-Québec is in the range of 700 to 1,500 MW and is limited by the ability of the New England, New York, or PJM systems to reliably sustain a loss of load contingency or by the ability of the Hydro-Québec system to reliably sustain a source contingency.

   The transfer capability from New England to Hydro-Québec is expected to total 1,250 MW (zero through the Stanstead-Derby tie, 50 MW through Highgate, and 1,200 MW through Phase II).

C. The maximum approved limit for total transfers from Hydro-Québec to the New York Power Pool (NYPP) is 2,370 MW. The FCTTC is about 1,400 MW over the Châteauguay-Massena 765 kV interconnection #7040, on which the power flow is controlled by the HVDC facility at Châteauguay and radial generation. However, this limit is highly dependent on internal NYPP schedules and flows through the Central East and Total East NYPP interfaces.

The 1,400 MW FCTTC does not include the Hydro-Québec generation that can be radially isolated to the Niagara Mohawk system.

D. Under normal operating conditions, the only transactions between Ontario and Hydro-Québec consist of isolated demand and generation; there are no synchronous AC ties or HVDC interconnections between the two systems. A maximum of nearly 1,200 MW can be isolated onto the Ontario system by Hydro-Québec, and about 500 MW can be isolated onto the Québec system by Ontario.

   Under extreme emergencies, on either one of the two systems, additional loads can be transferred to the neighboring system. Thus an additional 200 MW of Ontario loads can be isolated onto the Québec system and 400 MW can be isolated onto the Ontario system.

E. Transfer capability from NPCC-Canada, Ontario to ECAR is based on the assumption that Ontario's Lambton generating station is generating 1,500 MW.

F. Base transfer includes 100 MW Big Rivers to Oglethorpe Power Corporation, wheeled through TVA.

---

* Indicates that First Contingency Total Transfer Capability is listed.

** Indicates that an operating procedure must be in effect to allow the noted capability to be used.

\+ Indicates no significant transmission limit found at this level.

++ Requires an emergency operation procedure to be in place.

Regional Assessments

Brief summary tables are provided for each Region in this section to provide a quick reference of projected demand and resources for the coming summer. The following definitions are used in the tables:

Projected Total Internal Demand	Internal Demand plus Standby Demand (monthly coincident)
Interruptible Demand & DCLM	Interruptible Demand and Direct-Control Load Management (DCLM)
Projected Net Internal Demand	Projected Internal Demand less Interruptible Demand and Direct-Control Load Management (monthly coincident)
Last Summer's Peak Demand	Last summer's Actual Peak Demand
% Change	Change in Projected Internal Demand compared to last summer's Actual Peak Demand
All-time Summer Peak Demand	All-time summer Peak Demand
Net Operable Capacity & IPPs	Net Operable Capacity plus Independent Power Producer Capacity
Projected Purchases	Total Projected Firm Capacity Purchases
Projected Sales	Total Projected Firm Capacity Sales (adjusted for joint-ownership transfers)
Net Capacity Resources	Net Operable Capacity plus Projected Purchases less Projected Sales
% Capacity Margin	Net Capacity Resources less Projected Net Internal Demand divided by Net Capacity Resources, expressed as a percent

Monthly noncoincident projections were used for these tables, selected for the month with the highest projected net internal demand for the summer.

Historical demands are a mixture of seasonal and monthly noncoincident values.

ECAR

Projected Total Internal Demand (MW)	93,991
Interruptible Demand & DCLM (MW)	3,316
Projected Net Internal Demand (MW)	90,675
Last Summer's Peak Demand (MW)	91,605
Change (%)	2.6
All-time Summer Peak Demand (MW)	91,605
Net Operable Capacity & IPPs (MW)	101,760
Projected Purchases (MW)	3,882
Projected Sales (MW)	2,284
Net Capacity Resources (MW)	103,358
Capacity Margin (%)	12.3

This summer's total internal demand is forecasted to be 93,991 MW, which is 2.6% higher than ECAR's 1998 all-time summer peak demand of 91,605 MW. Cook Nuclear Units Nos. 1 and 2 (2,060 MW total) are expected to remain out of service this summer and have been modeled as such in the reliability assessments performed by ECAR. A recently announced load reduction by a major customer within the Region, together with the recent reactivation of capacity, has improved the Region's expected capacity margin. Although the capacity situation is still tight for this summer, capacity margins on an intraregional basis should be slightly better than the conditions during the summer of 1998. Overall, the situation is improved further since last summer because of the greater likelihood that assistance will be available from adjacent Regions if random capacity outages exceed the capacity margin in ECAR.

The bulk electric transmission system is expected to perform adequately over a wide range of system conditions. Portions of the transmission system in ECAR could become constrained as a result of generation dispatches and power transfers into and across the Region. It is anticipated that an East-to-West transfer bias across ECAR will be evident again this summer. Should such a flow pattern materialize, constraints in Ontario, northern Ohio, and northern Indiana could limit electricity transfers to and through northwest ECAR. The addition of more than 1,000 MW of generation in Michigan will help mitigate these constraints. The ability of ECAR members to import electricity to maintain reliability may be restricted if system capacity needs and heavy transmission loading due to transactions across the Region occur simultaneously. Provided operating limits are observed and established operating procedures are applied as needed, uncontrolled area-wide electricity interruptions are not anticipated.

There are two specific transmission concerns in ECAR for this summer. The central Ohio area is susceptible to voltage drops should there be a loss of the Marysville 765/345 kV transformer concurrent with generation outages at the Conesville (American Electric Power, AEP) generating plant. In addition, electricity transfers to the North and West through ECAR also affects the voltage in central Ohio. To deal with this situation, which first emerged as a serious concern last summer, AEP has begun a major reinforcement program to be completed by the summer of 2001. The first phase of the program involves the installation of more than 500 Mvar of transmission shunt capacitors by June 1999. Although the voltage support provided by these capacitors will increase transfer capabilities across central Ohio by 1,500 to 3,000 MW for transfers to the North or West, respectively, all firm monthly ATCs on those paths again have been fully reserved for this summer. In addition, the failure last July of Cinergy's Greentown 765/230 kV transformer has reduced local transmission reliability margins in the central Indiana area. Under certain contingencies, Cinergy and AEP would have to invoke long-established operating procedures to mitigate potential overloads and low voltage conditions. This concern will be resolved once the replacement transformer, currently scheduled for mid-July 1999, is placed in service.

Total transfer capability into ECAR has increased slightly for 1999 summer compared to 1998. The changes in import FCTTC are:

- effectively unchanged from MAIN (4,900 MW) and the VACAR subregion of SERC (3,000+ MW),
- increased by 1,050 MW from MAAC to 3,600 MW, and from NPCC (Ontario) by 200 MW to 2,200 MW, and
- decreased by 1,000 MW from the TVA subregion of SERC to about 1,750 MW.

Three Security Coordinators maintain reliability of the transmission system in ECAR by monitoring and

controlling critical transmission interface loading. AEP is the Security Coordinator in the southern, central, and western portions of ECAR, Allegheny Power (AP) is the Security Coordinator in the eastern portion of ECAR, and the Michigan Electric Coordinated Systems (MECS) is the Security Coordinator in the northern portion of ECAR. Each of these Security Coordinators works with Security Coordinators from surrounding Regions and uses the NERC Transmission Loading Relief (TLR) procedures to maintain the reliability of the interconnected transmission network. Critical transmission interface loadings within ECAR also are monitored and controlled by ECAR members.

In addition to NERC TLR, other significant operating procedures are available to maintain reliable system operations. These include:

- The Reliability Coordination Plan (RCP), used by systems in eastern ECAR, MAAC, and the VACAR subregion of SERC to curtail or limit west-to-east transfers to ensure adequate reliability in that part of the system.
- Recently, several ECAR members entered into a multiregional agreement (Lake Erie Emergency Redispatch Procedure) involving control areas located around Lake Erie to use generation redispatch to minimize the need for applying emergency TLR procedures and curtailments that would require the affected system(s) to curtail firm demand.
- The AEP Security Coordinator will employ a series of operating procedures to control flows on AEP's Kanawha River–Matt Funk 345 kV circuit to reduce the risks of potential widespread interruptions in southeastern ECAR and surrounding areas. AEP has proposed the construction of the Wyoming–Cloverdale 765 kV line (earliest possible completion of June 2004) to address this problem.

ERCOT

Projected Total Internal Demand (MW)	53,569
Interruptible Demand & DCLM (MW)	3,090
Projected Net Internal Demand (MW)	50,479
Last Summer's Peak Demand (MW)	53,689
Change (%)	-0.2
All-time Summer Peak Demand (MW)	53,689
Net Operable Capacity & IPPs (MW)	57,699
Projected Purchases (MW)	161
Projected Sales (MW)	0
Net Capacity Resources (MW)	57,860
Capacity Margin (%)	12.8

The Region's forecast total internal demand, assuming normal summer temperatures, is 53,569 MW, which is slightly less than last summer's peak demand of 53,689 MW. The forecast demands for this summer include interruptible demand of about 2,900 MW. Last summer's peak occurred during what is reported to be the hottest summer on record, with many areas experiencing temperatures of 105–109 degrees. Temperatures of over 100 degrees were recorded in some areas of ERCOT in early May 1998.

Transmission capability in ERCOT may have some limitations during the summer season. Generation transfers from the Western region of the TXU control area may be limited to about 725 MW by a stability limit. TXU is installing a power system stabilizer to reduce the impact of this limit. This work is expected to be complete by summer peak. Under some adverse unit outage conditions, other portions of ERCOT may need this generation to support firm demand during the summer.

Limitations in the South-to-North transmission path also may prevent some areas from operating in their most economic generation dispatch. Additional operating procedures have been put in place to control this situation. These limitations are not expected to prevent ERCOT from serving all firm demand, but may result in some interruption of interruptible loads.

ERCOT does not anticipate fuel limitations during the summer season unless hurricanes in the Gulf of Mexico limit fuel supplies from offshore wells. ERCOT regards storage capability in service as adequate for this possibility.

ERCOT has a 30 MW generation capacity restriction related to an environmental restriction region. An air quality permit is pending before the Texas Natural Resource Commission, and ERCOT expects the permit to be issued without restriction.

The total available generating capacity of 57,860 MW results in a capacity margin of 12.8% and a reserve margin of 14.6%. ERCOT is aware of an additional 320 MW of new generation, not reported by the Load Serving Entities, scheduled to be in commercial operation in ERCOT by the 1999 peak period.

FRCC

Projected Total Internal Demand (MW)	37,060
Interruptible Demand & DCLM (MW)	2,765
Projected Net Internal Demand (MW)	34,295
Last Summer's Peak Demand (MW)	37,153
Change (%)	-0.3
All-time Summer Peak Demand (MW)	37,153
Net Operable Capacity & IPPs (MW)	38,068
Projected Purchases (MW)	1,962
Projected Sales (MW)	322
Net Capacity Resources (MW)	39,708
Capacity Margin (%)	13.6
Reserve Margin[1] (%)	15.8

[1] FRCC uses Reserve Margin, not Capacity Margin, as one of its guidelines in assessing adequacy.

FRCC is forecast to reach its 1999 summer net internal peak demand of 34,295 MW in August. This projection is consistent with historical weather-normalized FRCC demand growth, and includes an estimated 2,765 MW of direct control demand reductions, load management, and interruptible demand capabilities. FRCC does not depend on external recallable transactions for meeting its summer peak demand or operating reserve obligation.

The net capacity resources within FRCC are expected to meet adequately the forecast net internal peak demand with a 15.8 % reserve margin. No scheduled generation maintenance outages of any significance are planned for the peak period. An additional 687 MW of new generation and 25 MW capacity increase as a net of upgrades and retirements will be in place in the Region prior to the summer peak.

The FRCC bulk transmission system is expected to perform adequately over various system conditions. The results of the *1999 Summer FRCC Transmission Study*, which evaluated three different operating scenarios, indicate that any thermal or voltage violations can be managed successfully by operator intervention. Such interventions include generation redispatch, system sectionalizing, reactive device control, and transformer tap adjustments.

Problems are not expected in obtaining fuel on the open market, nor has fuel supply delivery infrastructure historically been a problem within FRCC.

An event occurred during the 1998 summer when lightning struck a Florida Gas Transmission (FGT) natural-gas pipeline, interrupting natural gas flowing into the central and southern portions of Florida. FRCC members and staff coordinated with the Florida Public Service Commission and FGT during the days following the event to ensure the reliability of the electric system in the Region. Adequate supplies of alternate fuels were available. Regular conference calls among the parties contributed to excellent coordination throughout the days following the interruption and no events occurred on the electric system because of the pipeline interruption. The experience leads FRCC to believe that fuel supply should not pose a threat to reliability for the Region during this summer peak period.

MAAC

Projected Total Internal Demand (MW)	49,807
Interruptible Demand & DCLM (MW)	2,181
Projected Net Internal Demand (MW)	47,626
Last Summer's Peak Demand (MW)	48,445
Change (%)	2.8
All-time Summer Peak Demand (MW)	49,406
Net Operable Capacity & IPPs (MW)	56,188
Projected Purchases (MW)	649
Projected Sales (MW)	1,326
Net Capacity Resources (MW)	55,511
Capacity Margin (%)	14.2

The MAAC 1999 summer forecast peak net internal demand is 47,626 MW. The forecast total internal demand is 2.8% above the actual July 1998 summer peak. Installed capacity margin is forecast to be 14.2%.

MAAC served an all-time summer peak of 49,406 MW on July 15, 1997. The peak was served without instituting any load management measures or interrupting any interruptible customers.

Since last summer, MAAC's net summer generating capacity is expected to decrease by 644 MW due to reduced capacity purchases and capacity reratings and retirements by utilities and independent power producers (IPPs).

MAAC expects to have sufficient generating capacity to serve the 1999 forecast peak demand, which assumes normal summer weather conditions. Preparations have been made to handle above-normal demand situations for the upcoming summer. An unusually warm summer, along with unavailability of large generating units, could result in tight operating conditions.

MAAC has energy sales of about 3,000 MW, over firm transmission reservations, in place to the West and South through the summer peak period. These transactions are not capacity backed and, therefore, can be curtailed in case of a PJM Capacity Emergency. MAAC does not have significant dependence on external capacity resources.

The bulk transmission system is expected to perform adequately over various system conditions including high atypical transfers from MAAC to ECAR such as those that occurred at times last summer.

MAIN

Projected Total Internal Demand (MW)	48,157
Interruptible Demand & DCLM (MW)	2,661
Projected Net Internal Demand (MW)	45,496
Last Summer's Peak Demand (MW)	46,824
Change (%)	2.8
All-time Summer Peak Demand (MW)	47,593
Net Operable Capacity & IPPs (MW)	51,078
Projected Purchases (MW)	3,325
Projected Sales (MW)	1,956
Net Capacity Resources (MW)	52,447
Capacity Margin (%)	13.3

MAIN shows significant improvement in the expected ability of its members to forecast demand during the summer of 1999 compared to the projections for 1997 and 1998.

All nuclear plants in MAIN are in service or expected to be in service before the summer peak period and more than 1,300 MW of additional capacity is scheduled to be added in various locations throughout the Region. MAIN import capability, together with reduced dependence on external resources, indicates improved reliability for the Region.

MAIN import capabilities from ECAR and from TVA continue to be of concern as they are significantly lower than historical levels of the mid-1990s.

Expected Demand

The 1999 summer peak total internal demand in MAIN is projected to be 48,157 MW, about 2.3% higher than the 1998 summer peak projection. The actual 1998 summer peak was 46,824 MW, about 0.6% below the estimate. MAIN estimates that load management and interruptibles can reduce the 1999 summer demand by 2,661 MW.

Available Capacity Resources

MAIN has developed and studied three capacity scenarios for the 1999 summer period to assess the adequacy of its bulk power supply system. These scenarios are described in detail in this report.

The scenarios studied by MAIN this year are:

Base Scenario	2 - 1,000 MW class nuclear units unavailable (neither in MAIN)
Scenario 1	3 - 1,000 MW class nuclear units unavailable (one in MAIN)
Scenario 2	4 - 1,000 MW class nuclear units unavailable (two in MAIN)

Available resources, including those from imports and IPPs, total 52,447 MW. This includes net contracted purchases of 1,499 MW, a level of external dependence that is less than half of last year's value of 3,318 MW. The resulting Regional capacity resource margin is 13.3%. This scenario is referred to as the Base Scenario in this report. In last year's report, about 2,100 MW of capacity was expected to

be unavailable for a significant part of the summer period. In addition, there was concern about the availability of an additional 3,557 MW of capacity, mostly nuclear.

This year uncertainty about available capacity is greatly diminished. All major generating units in MAIN are expected to be operational and this is assumed in the base case; other plausible outages are addressed in the alternate scenarios.

MAIN's monthly capacity margins (June through September) for the base and alternate scenarios are shown in MAIN Table 1. Except for the assumed external purchases (see MAIN Table 1), all other transactions are firm capacity (not curtailable for reasons of economics) on firm transmission.

It should be recognized that the data published in this report was compiled very early in 1999 and resources may be purchased or sold between that time and the summer period. It is important to all MAIN members that each member load serving entity has adequate reserves for the peak period. Therefore, MAIN has conducted a "reserve audit" during April to report an updated reserve status for each member and the Region as a whole to the MAIN board of directors in May. This report is available on MAIN's home page at www.maininc.org.

MAIN TABLE 1

Expected MAIN Resources, Demand, and Available Capacity Margin

Month	Information	Base Scenario	Scenario 1	Scenario 2
All	Inoperable Generation (MW)	30	960	2,008
	Utilization of New MAIN Generation (MW)	673	799	1,224
	Assumed External Purchases (MW)	150	150	573
June	Available Resources (MW)	51,699	50,946	50,745
	Net Internal Demand (MW)	42,046	42,046	42,046
	Available Margin (%)	18.67	17.47	17.14
July	Available Resources (MW)	52,447	51,693	51,493
	Net Internal Demand (MW)	45,496	45,496	45,496
	Available Margin (%)	13.25	11.99	11.65
August	Available Resources (MW)	52,447	51,693	51,493
	Net Internal Demand (MW)	45,185	45,185	45,185
	Available Margin (%)	13.85	12.59	12.25
September	Available Resources (MW)	51,508	50,754	50,554
	Net Internal Demand (MW)	38,265	38,265	38,265
	Available Margin (%)	25.71	24.61	24.31

Five new generating facilities and a number of upgrades and temporary facilities are expected to be in service for the 1999 summer period, adding an estimated 1,324 MW to MAIN's available resources. IPPs own nearly half of this new capacity. MAIN is closely monitoring the status of these units and has determined that each unit is likely to be available at the time of the peak. These facilities are listed under MAIN in NERC Table 4 in this report.

After the analytical work for this assessment was completed, ComEd announced completion of negotiations to sell 9,772 MW of coal-fired, oil-fired, and combustion turbine generating capacity to a unit of Edison International, parent of both Edison Mission Energy (new owners and operators) and Southern California Edison Company. This sale is expected to be complete during the fourth quarter of 1999, and is not expected to affect available resources within MAIN this summer.

Impact of Generation Outages

Scheduled Maintenance

MAIN regularly evaluates the potential for late spring generation maintenance outages to extend into the summer period and impact reliability. The

weekly maintenance outages scheduled for the period just prior to the peak period are shown in MAIN Table 2 below.

MAIN TABLE 2

Capacity on Scheduled Maintenance Outage

Month	Week Number	MW Scheduled Out of Service
May	3	6,492
	4	4,129
June	1	2,961
	2	732
	3	732
	4	732
July	1	175
	2*	0

* No maintenance is scheduled during the remainder of July and August.

Most generator maintenance is scheduled to be complete by June 1 and all maintenance is expected to be complete by the second week of July. Even if some slippage were to occur, the greatest impact for the summer would likely be felt in June where expected capacity margins are in the range of 17.1 to 18.7% for the scenarios evaluated.

Even if maintenance outage extensions occur, reserves are expected to be adequate to cover forced outages, operating reserve requirements, and higher-than-forecast demand.

Forced Outages

In addition to the unlikely but possible outage extensions, which distinguish the Base and two alternative Scenarios, and scheduled maintenance outages that might extend into the summer, additional forced generator outages on the MAIN systems during the summer period must be anticipated. The weighted-average forced outage rate of all MAIN generating units is 8.1%.

Import Capabilities

MAIN Table 3 compares the nonsimultaneous First Contingency Total Transfer Capability (FCTTC) for 1998 and 1999 imports. This comparison shows the base system to have very nearly the same FCTTC for both years. Alternative scenarios studied for 1999 show slightly improved capabilities. These transfer capabilities, together with the reduced dependence on external resources, indicates improved reliability for the Region for 1999.

MAIN TABLE 3

MAIN Nonsimultaneous First Contingency Total Transfer Capability for Import Long-term Operating Guides Used as Required (MW)

(In MW)	1998				1999		
	Base Scenario	Scenario 1	Scenario 2	Scenario 3	Base Scenario	Scenario 1	Scenario 2
ECAR	1,400	1,200	1,100	400	1,400	1,500	1,650
TVA	50	250	0	0	1,100	1,200	1,000
SERC W	NA (1)	NA (1)	NA (1)	NA (1)	2,700 (2)	2,700 (2)	2,700 (2)
SPP	750	1,000	550	0	900	950	900
MAPP	1,800	1,850	1,700	1,100	1,750	1,700	1,650

(1) In 1998, SERC W was within SPP.
(2) Without generation redispatch guides, FCTTC would be zero (0).

Since MAIN total import capabilities are essentially unchanged from last year and MAIN reserve margins are better, incremental import capability is expected to be higher than in 1998. MAIN import capabilities from ECAR and TVA continue to be of concern. Those capabilities are significantly lower than the historical levels of the mid-1990s.

Operating Guides Assumed Available to Achieve Import Capabilities in MAIN Table 3

MAIN employs operating guides when necessary to maximize its import capabilities from neighboring regions. MAIN used two types of operating guides in this year's study, "unconditional" and "emergency" guides. The latter were referred to as "long-term emergency guides" in last year's report. Unconditional guides are operating procedures that can be used to increase transfer capability at any time and usually result only in system reconfiguration. MAIN emergency guides are operating procedures that may be implemented if any MAIN member is at risk of dropping firm demand. The use of emergency operating guides usually results in a decreased reliability state in the implementing system, generally through eliminating diversity of supply to certain load points. However, there is no specific time constraint on the period of use.

MAIN has not developed any new guides for this summer. The short-term emergency guides developed by ComEd last year for the Lockport-Lisle-Lombard lines are not expected to be needed this year.

Operating guides used to achieve the import capabilities shown in MAIN Table 3 are:

- Imports from ECAR under the Base and Alternate 1 Scenarios required two guides, one of which is an emergency operating guide. ECAR imports under Alternate Scenario 2 use no operating guides.
- There are no guides available to improve the import capability from TVA.
- Imports from SPP require simultaneous use of two unconditional, nonemergency guides.
- Imports from MAPP require simultaneous use of three unconditional, nonemergency guides.
- Imports from SERC-W use four new SERC guides for generation redispatch and one older guide:
  - Brasswell Emergency Operating Guide – New
  - Little Gypsy-Madisonville Emergency Operating Guide – New
  - McKnight-Franklin Emergency Operating Guide – New
  - Michoud-Slidell Emergency Operating Guide – New
  - Arklahoma Emergency Operating Guide – Old

Without the generation redispatch guides, SERC W-to-MAIN FCTTC would be zero for all scenarios studied.

Limiting Facilities

The FCITC is the import capability available after the worst-case generation or transmission contingency occurs. MAIN Table 4 lists the transmission elements, which appear as limiting for each of the interregional transfer directions reviewed in the MAIN seasonal study. The limiting facilities were identical for all three scenarios.

MAIN TABLE 4

Most Limiting Facilities to Interregional Transfer Capability

Import From	Limiting Facility	Voltage (kV) Level (s)	Region Where Located
ECAR	Lisle – Lockport (R) line	345	MAIN
TVA	Smith transformer	500/161	SPP
SPP	Colfax – Rodemacher line	230	SPP
MAPP	Arpin – Eau Claire interface	345, 115, 69	MAIN/MAPP

Voltage Stability
AC power flow runs were made for each transfer direction to verify that system voltages were acceptable under the most limiting contingencies determined in the transfer capability studies. All cases converged with no low voltage on any bulk electric system buses.

MAIN is planning to purchase a program to perform real-time voltage stability analysis for integration into the regional on-line security system as early as practical during the summer of 1999.

System Additions and Reinforcements Since 1998
LaSalle Nuclear Station — Both LaSalle units were unavailable during the summer of 1997 and part of the summer of 1998. LaSalle Unit 1 (1,040 MW) returned to service about August 1, 1998 and has been in normal operation since that date. Unit 2 (1,040 MW) was returned to service in May 1999.

ComEd Capacity Additions — ComEd is installing 213 MW of portable, temporary combustion turbine capacity at seven locations on its system (listed in NERC Table 4). Additionally, new IPP generation in the ComEd service territory of up to 850 MW is expected on line during 1999.

Clinton Nuclear Station — Clinton Nuclear Station (one 930 MW unit) has been unavailable since September 1996, but is currently in start-up and is anticipated to be available for service prior to the 1999 summer peak demand period.

Havana Units 1–5 — In August 1998, Illinois Power reactivated Havana Units 1–5, 238 MW of oil-fired generation capacity.

Tilton Generation — Illinois Power is installing combustion units with a total capacity of 176 MW near Tilton. The location of these units is expected to improve import capabilities into the MAIN Region from ECAR.

Alsey Generation — Soyland Power Cooperative is installing four combustion turbine units totaling 100 MW near Alsey.

CWLP Capability Increase — 10 MW of additional capacity at the Interstate combustion turbine will be available.

Ameren Capacity Increase — 100 MW of increased capacity at the Taum Sauk pumped storage plant will be available.

Wisconsin Generation Additions — 300 MW of additional capacity will be available in Wisconsin for 1999: 190 MW of new generation and an additional 110 MW from capacity uprates.

Zion Synchronous Condensers — Zion Nuclear Station (two 1,048 MW units) was retired from generating service in 1998. Both units were successfully converted to synchronous condensers (825 Mvar each) by early summer 1998, and are fully operational.

Transformer Additions — Three new 345/138 kV transformers will be installed by Wisconsin Electric for the summer of 1999. These new units are located at Dead River in the Upper Peninsula of Michigan, at Morgan in northeastern Wisconsin, and at Oak Creek near Milwaukee. Two new 345/138 kV autotransformers will be installed by ComEd for the summer of 1999 as well. These new units are located at Electric Junction and Goodings Grove.

Transmission Line Additions and Changes — The following transmission lines are expected to be in service prior to this summer:

- The Plains-Morgan 345 kV line. This line was previously operated at 138 kV. Morgan is a new substation in northeast Wisconsin north of Green Bay.
- The Sioux-Roxford 345 kV line.
- Series reactors at Joppa (161 kV) and South Albion (138 kV).
- ComEd will increase line ratings by reducing sag limits on several 345 kV lines, installing new 345 kV circuit breaker bushings at Lisle Transmission Substation, eliminating relay limitations on the LaSalle-Plano 345 kV circuits, installing an automatic reclosing system at Lisle, and upgrading several 138 kV lines.

Operational Preparation
As it did last year, ComEd will perform a transmission, distribution, and generation system drill to test intracompany communication for a simulated system event.

Illinois Power is reviewing and updating its emergency plans and will perform a drill in mid-May. The drill will focus on generation, transmission, distribution, and external communications.

The MAIN Coordination Center has undertaken several initiatives, which are expected to be in place as well. The morning Control Area teleconference will be reinstated. This conference call provides an early morning discussion of the status and capabilities of facilities in the Region. Additional calls are available throughout the day as the need arises. Backup satellite communications, including teleconferencing, became available in April 1999. Afternoon security cases will be analyzed for the next day's peak conditions along with an associated voltage contingency screening review.

The real-time MAIN Regional security system, including SCADA, State Estimation, and on-line Contingency Analysis will be operational by June 1, 1999. This system will allow MAIN to:

- Monitor voltage, flow, and status values within and outside the Region using SCADA. The SCADA capability has been available since spring of 1998.
- Display through Internet (on the MAIN private network) real-time one-line diagrams for MAIN critical areas and for the 345 kV regional network.
- Calculate and report real-time MW and Mvar reserves to better anticipate and analyze loading problems.
- Anticipate and identify problems using the SCADA alarm and trend analysis.
- Analyze contingencies on line using the State Estimator output.

The Optimal Power Flow (OPF) will be implemented in the fall of 1999. In lieu of OPF, MAIN will support market redispatch by posting generator shift factors and other related quantities for selected generators and flowgates, as part of the NERC market redispatch pilot program.

MAPP

Projected Total Internal Demand (MW)	36,779
Interruptible Demand & DCLM (MW)	2,246
Projected Net Internal Demand (MW)	34,533
Last Summer's Peak Demand (MW)	36,024
Change (%)	2.1
All-time Summer Peak Demand (MW)	36,024
Net Operable Capacity & IPPs (MW)	41,154
Projected Purchases (MW)	6,563
Projected Sales (MW)	5,983
Net Capacity Resources (MW)	41,734
Capacity Margin (%)	17.3

The 1999 combined MAPP-U.S. and Canada forecast summer peak net internal demand of 34,533 MW is expected to occur in July. Hydroelectric conditions in MAPP-U.S. and MAPP-Canada are expected to be normal for the coming summer. Generation is expected to be average for the season.

Sufficient on-site fuel reserves are available for fossil-fired generation during the projected peak.

Several transmission upgrades, scheduled to be completed this summer at or near the Ft. Calhoun interface, will significantly increase the rating of the interface. Strengthening this interface also will increase the transfer capabilities on several other interfaces in MAPP. No significant generation changes are planned during the summer.

Historically and into the projected future, MAPP has been an exporting Region and does not rely on other Regions to meet its peak demand. The interregional transfer capability of the MAPP transmission system is adequate for Region import requirements for the 1999 summer season. However, heavy transfers to the East (MAPP-MAIN interface) and South (MAPP-SPP interface) continue to be a concern to MAPP members. MAPP will use the NERC TLR procedures in coordination with MAIN and SPP on an as-needed basis to relieve heavy loading on particular facilities.

NPCC

Projected Total Internal Demand (MW)	94,744
Interruptible Demand & DCLM (MW)	3,010
Projected Net Internal Demand (MW)	91,734
Last Summer's Peak Demand (MW)	92,772
Change (%)	2.1
All-time Summer Peak Demand (MW)	102,640
Net Operable Capacity & IPPs (MW)	114,436
Projected Purchases (MW)	7,112
Projected Sales (MW)	4,046
Net Capacity Resources (MW)	117,502
Capacity Margin (%)	21.9

The Areas of the NPCC Region anticipate adequate capacity margins to meet their own internal demand and fulfill all external commitments for the 1999 summer operating period. Among the five Areas comprising NPCC, the three Canadian subregions, Hydro-Québec, the Ontario Independent Electricity Market Operator (IMO), formerly a part of Ontario Hydro, and the Maritime Area are winter peaking systems and forecast surplus capacity margin for the summer. Although the summer capacity margins in the Ontario IMO are lower than historical averages due to the ongoing "lay-up" of several nuclear units in Ontario, the IMO projects capacity margins of 19 to 24%, and these margins will be continuously monitored and updated.

In ISO New England, Millstone 2 (860 MW) is expected to return to service before the summer peak.

Ontario and New York, together with other operating entities around Lake Erie, participate in the Lake Erie Emergency Redispatch (LEER) procedure. The LEER procedure is used to facilitate emergency generation redispatch among participants within the control areas surrounding Lake Erie to relieve transmission constraints. LEER is used only in emergencies when other transmission load relief procedures could require firm demand curtailment.

Numerous other operating procedures, refined over the last two summers of tight capacity conditions in New England, remain in place should operating capacity deficiencies develop.

Québec

As a strong winter peaking system, a margin of 8,159 MW is expected at summer peak conditions. The forecast summer peak total internal demand is 19,043 MW and is expected to occur during the last week of September 1999. This would be 580 MW (3.1%) above last summer's peak demand. Hydro-Québec's all-time summer peak demand of 19,230 MW occurred on September 24, 1997.

Hydroelectric conditions are anticipated to be adequate throughout the summer period.

The Hydro-Québec transmission system, having sustained extensive damage during the ice storm of January 1998, was fully restored prior to the 1998/99 winter peak. Further system reinforcements, designed to mitigate the impact of extreme weather conditions, were initiated in 1998, and will continue in 1999, without significantly affecting the Hydro-Québec transfer capability to neighboring subregions.

Maritimes

The forecast summer peak total internal demand is 3,284 MW, which is a 0.6% decrease from the 1998 summer peak demand.

The Maritime Area has sufficient margins throughout the summer. Through its own resources together with its import capability from Hydro-Québec, if required, the Maritime Area will be able to provide the full export capability to New England over the 345 kV interconnection.

In addition to the above, the Maritime Area does not anticipate any restrictions in its available capacity due to fuel supply or environmental restrictions, nor are there any interchange limitations anticipated due to external transactions.

New England

The New England 1999 summer peak total internal demand is forecast to be 22,450 MW. Last summer was warmer than the previous summer and quite humid, resulting in an all-time system peak demand of 21,406 MW. The projected 1999 summer peak demand is nearly 1,050 MW (4.7%) higher than the

actual peak for last summer. The Net Internal Demand reflects reductions for DCLM (67 MW) and Interruptible Demand programs (14 MW).

Net Operable Capacity resources from utilities and IPPs total 23,550 MW (August), including 860 MW from the expected return to service of Millstone No. 2 and 348 MW from new IPPs. The forecast of average monthly summer external capacity purchases is about 1,100 MW, which includes 304 MW of NEPOOL Participant Entitlement Contracts from Hydro-Québec, 650 MW from New Brunswick, and about 150 MW from New York. Of the 150 MW of capacity purchases from New York, 114 MW are "full-responsibility purchases."

Also not reflected above is a purchase of firm energy from Hydro-Québec. This firm energy purchase is expected to be available every day during the 1999 summer, for over 12 hours per day, at a transfer capacity rate of at least 1,200 MW per hour (up to 1,800 MW during an emergency), which will also help to mitigate any capacity shortage conditions. If the equivalent capacity benefit of that firm energy purchase were to be included in New England's capacity margin, the margin would increase to about 11.1%.

On July 17, 1998, Northeast Utilities (NU) announced that it was ceasing efforts to restart the Millstone No. 1 nuclear unit (660 MW). Currently, the Millstone No. 2 nuclear unit (860 MW) is returning to service (Millstone No. 3 returned to service in July 1998). Even with the return of Millstone No. 2, ISO New England projects that there may be instances when New England will have insufficient internal operable capacity to meet the Region's anticipated peak demand and operating reserve requirements. Therefore, ISO New England expects to invoke operating procedures to mitigate any short-term capacity deficiency.

One of the operating procedures included in NEPOOL's reliability criterion is NEPOOL Operating Procedure No. 4 — Action During a Capacity Deficiency (OP 4), which is used by ISO New England system operators to mitigate capacity shortages. Actions in this operating procedure include utilizing emergency ratings of the generating units, purchasing emergency energy from the interconnected grid, interrupting interruptible demand customers, implementing voltage reductions, etc. The total amount of estimated additional generation and demand relief available from OP 4 is estimated to be between 3,480 and 3,980 MW. However, this amount is not reflected in the Available Resources reported above.

There are no critical transmission circuits scheduled to be out of service, and there are no fuel supply problems projected. Both generator and transmission maintenance schedules are continuously being reviewed to ensure that the necessary facilities are available during the summer months.

New York

The forecast peak total internal demand for the 1999 summer period is 29,700 MW, which is 5.5% higher than the 1998 summer peak of 28,160 MW (July 22, 1998), and 3.5% higher than the New York Power Pool (NYPP) all-time summer peak of 28,700 MW (July 15, 1997). Last summer's peak of 28,160 MW was 2.5% lower than the forecast of 28,900 MW due to mild temperatures.

NYPP's net available capacity resources of 31,650 MW are expected to be sufficient to meet NYPP demand and reserve requirements during the summer.

The NYPP bulk power transmission system expects to operate in a reliable and secure manner during the period with no emergency conditions anticipated.

Ontario

Ontario's forecast hourly peak summer demand is 21,900 MW, which is a 2.2% decrease from the 1998 hourly summer peak demand of 22,403 MW. The 1998 hourly summer peak demand of 22,403 MW, which occurred on July 15, 1998, is the all-time record hourly summer peak demand.

No unusual operating conditions were experienced during the previous summer or the past winter. Adequate resources are projected to be available to meet the forecast demand and energy requirements during the summer peak period. Summer resource capacity margins range from 19–24% of firm peak demand.

Uncertainties associated with these projections are being continuously evaluated, including a review of generator outage plans to identify outages that may be rescheduled out of the peak demand period. Purchases are being arranged as required to supplement Ontario's internal capacity.

No new transmission facilities are expected in service prior to the summer peak period. However, transfer limits on all transmission paths are projected to be adequate. Interregional transmission transfer capability has been studied and is adequate to support anticipated external transactions.

A number of control actions are in place, as standard procedure, to manage any resource deficiency as required. They include withdrawing of interruptible loads and firm exports, customer appeals (voluntary load reduction), voltage reduction, and rotating load cuts. Operational plans are reviewed on a regular basis to ensure the overall integrity of the interconnected system.

SERC

Projected Total Internal Demand (MW)	143,058
Interruptible Demand & DCLM (MW)	9,152
Projected Net Internal Demand (MW)	133,906
Last Summer's Peak Demand (MW)	139,737
Change (%)	2.4
All-time Summer Peak Demand (MW)	140,654
Net Operable Capacity & IPPs (MW)	149,667
Projected Purchases (MW)	6,895
Projected Sales (MW)	4,260
Net Capacity Resources (MW)	152,302
Capacity Margin (%)	12.1

The projected capacity margin for the Region continues to be less than for the previous year. However, SERC resource adequacy analysis indicates that resources will be adequate to meet the expected demand if the forecast projections are not exceeded, and if generator unit availability remains at levels consistent with previous years.

The summer forecast peak net internal demand is 4.2% below the 1998 actual summer peak demand, when several systems set all-time peak demand records. Demand growth within SERC continues to be slightly higher than 2.0% per year.

The VACAR Subregion has two new generating facilities scheduled for service this summer, totaling 220 MW. TVA has 72 MW of hydroelectric capacity, and 53 MW of nuclear capacity increases scheduled for 1999 summer. Southern has 322 MW of new gas-fired capacity for the summer. As is customary, a number of units within SERC are scheduled for outage in mid-September. Should demand dictate, some of these scheduled outages could be delayed.

The Region's members do not anticipate any fuel or fuel supply disruption problems. Hydro storage reservoirs are at or above normal levels, and capacity and energy production should be normal for the season.

Transmission additions for the summer within SERC include 120 miles of 230 kV lines. These facilities will enhance the bulk electric system and improve reliability within the Region.

Intra- and interregional transmission transfer capabilities have been evaluated for the summer season. Several interfaces are expected to operate close to their limits during the summer, but transfer capabilities are judged to be adequate with two possible exceptions: Entergy-SPP and TVA-MAIN. Although the total transfer capabilities on these interfaces are adequate to meet the expected planned transactions, the incremental margins remaining are limited. Based on 1998 experience with nonfirm transactions and parallel flow impacts, it is anticipated that some transmission line loading relief procedures will be called upon.

Transfer capability from the North into SERC will be slightly higher than during last summer. The interface capability with Florida is slightly higher for transfers to the North. The interregional capability from SPP to SERC is deemed adequate to meet summer demands, however the SERC-to-SPP interface is very limited. SERC-to-MAIN transfers are also limited. The transfer capabilities between Southern/TVA and Entergy are generally increased over 1998. TVA-to-VACAR transfer capability is improved over 1998. Capability between Southern and VACAR is diminished from 1998, but should be adequate.

Analysis indicates that the TVA-to-Southern interface will be less restrictive than for 1998. Experience indicates, however, that parallel flows from third-party transactions will keep the management of this interface critical for 1999. Electricity transfer capability from Southern to TVA, while adequate, will be more restrictive than for 1998.

SPP

Projected Total Internal Demand (MW)	37,803
Interruptible Demand & DCLM (MW)	1,778
Projected Net Internal Demand (MW)	36,025
Last Summer's Peak Demand (MW)	36,230
Change (%)	4.3
All-time Summer Peak Demand (MW)	36,230
Net Operable Capacity & IPPs (MW)	42,393
Projected Purchases (MW)	5,893
Projected Sales (MW)	5,732
Net Capacity Resources (MW)	42,554
Capacity Margin (%)	15.3

The noncoincident total internal demand forecast for August is 37,803 MW, which is 4.3% above the coincidental 1998 actual summer peak demand of 36,230 MW. Actual peak demand has grown at 1.7% per year from 1994 to 1998. The annual forecast peak demand compound growth rate over the next ten years is 2.0%. Members continue to forecast similar growth rates for future demand requirements compared to previous years.

Only 196 MW of generating capacity will be added in the Region during the summer. SPP will be importing a net of 161 MW during the summer. The forecast Regional capacity margin for August is 15.3%, 3.3% above the SPP Criteria minimum requirement of 12.0%. Due to a recent explosion, a 479 MW coal unit will not be back in service for the summer. Even with that loss, Regionally, SPP will still be able to meets its capacity margin requirement. Though capacity margins decline, probabilistic studies indicate adequate margin to meet reliability standards.

Fuel supply for SPP generating units is expected to be adequate for the summer months. There are no environmental or regulatory restrictions expected to impede reliability during the summer months.

No Regionally significant transmission additions will be made in SPP during the upcoming summer. Transmission studies, which determine Regional and subregional transfer capability, are showing consistently low Regional values from season to season, but remain adequate to handle planned electricity transfers.

SPP members experienced heavy transmission loading during 1998 caused by electricity transfers in and around the Region. Heavy line loadings in adjoining Regions are occurring more often, which result in Regions invoking the NERC TLR Procedure. When responding to the NERC TLR Procedure, SPP has found many of its interfaces restricted, which limit the scheduling of electricity into and out of SPP.

SPP's Regional Security Coordinator is responsible for administering the Regional open-access tariff for all firm and nonfirm point-to-point transmission service. The Regional security center administers the tariff along with the reliability functions for the Region. Line loading relief and redispatch are provided on a Regional basis.

WSCC

Projected Total Internal Demand (MW)	132,261
Interruptible Demand & DCLM (MW)	4,622
Projected Net Internal Demand (MW)	127,639
Last Summer's Peak Demand (MW)	131,579
Change (%)	0.5
All-time Summer Peak Demand (MW)	131,579
Net Operable Capacity & IPPs (MW)	156,396
Projected Purchases (MW)	318
Projected Sales (MW)	0
Net Capacity Resources (MW)	156,714
Capacity Margin (%)	18.6

The aggregate 1999 summer peak total internal demand for the Region is forecast to be 132,261 MW (U.S. systems 115,901 MW, Canadian systems 14,924 MW, and Mexican system 1,436 MW). The forecast is based on average weather conditions, and is 0.5% above last summer's actual peak demand.

Projected capacity margins for the Region of 18.6 to 23.7% for the summer are anticipated to be adequate, and reliability, as measured by installed resources and system security, is expected to be ade-

quate in WSCC this summer for average temperatures. However, if multiple areas peak simultaneously, portions of the Region may need to issue public appeals for customers to reduce their electricity consumption, and other measures may be instituted as necessary to ensure that adequate operating reserves are maintained.

The southwest portion of WSCC (New Mexico, Arizona, southern Nevada, California, and Baja California Norté, Mexico) may not have adequate resources to accommodate a widespread severe heat wave or a significantly higher-than-normal forced outage rate for generation. The possible inability to serve all of the firm peak demands under those conditions is a result of the continuing trend of peak demand growth exceeding the addition of new generation facilities. From summer 1997 through summer 1999, WSCC's peak demand is expected to increase by about 7,300 MW while resource additions are expected to total only about 1,300 MW.

Fuel supplies are expected to be adequate in all areas of the Region, and the transmission system is considered adequate for projected firm and expected economy energy transfers.

Arizona–New Mexico–Southern Nevada Power Area

The 1999 summer peak total internal demand forecast of 20,502 MW is 0.8% above last summer's actual peak demand. The forecast for the area includes 632 MW of interruptible demand capability. The Arizona – New Mexico – Southern Nevada Power Area is summer peaking.

The projected capacity margin for the peak month is a marginal 11.3%, including 1,685 MW of firm purchases that are not yet under contract. If that capacity were not available from neighboring systems, the capacity margin would be 3.8%. Under those circumstances, public appeals would be issued within the subregion for customers to reduce their electricity consumption, and other measures would be instituted as necessary to ensure that adequate operating reserves are maintained.

Numerous actions have been taken to improve reliability and security in the area. These actions include shunt capacitor additions, increased underfrequency load shedding capability, and increased under-voltage relaying to prevent voltage collapse. Internal transfer capability will be increased with the addition of the Crystal-Allen 230 kV interconnection in southern Nevada in June. The Crystal-Allen line connects Nevada Power Company with the Navajo-McCullough line, allowing increased imports from either southern California or Arizona.

The transmission system is considered adequate for projected firm and expected economy energy transfers. If necessary, phase-shifting transformers in the southern Utah/Colorado/Nevada transmission system will be used to help control unscheduled flows. Reactive reserve margins are expected to be adequate.

California–Mexico Power Area

The 1999 summer peak total internal demand forecast of 55,372 MW is 1.4% above last summer's actual peak demand. The forecast peak demand includes 2,940 MW of load management capability. The California–Mexico Power Area is summer peaking.

The projected capacity margin for the peak month is only 13.1%, including 2,750 MW of firm purchases that are not yet under contract. If that capacity were not available from neighboring systems, the capacity margin would be 8.5%. Under those circumstances, public appeals would be issued within the subregion for customers to reduce their electricity consumption, and other measures would be instituted as necessary to ensure that adequate operating reserves are maintained.

Last year the California Independent System Operator (CISO) assumed operational control of significant portions of the transmission grid within the state. During last summer, California experienced warmer-than-normal temperatures in August. The hot weather resulted in a new all-time peak demand and activation of voluntary demand curtailment procedures. CISO's first summer operating period exposed some reliability and market issues that have been addressed in an ancillary services redesign.

One of the issues that had an impact on system reliability was the failure of generating units designated for replacement reserves to increase output when called for by the energy management system. Another issue that has been addressed by the CISO is the practice of scheduling coordinators underestimating the forecasted demand to keep the power exchange day-ahead market-clearing price at a low level.

Various parts of the CISO control area exhibit the potential for voltage instability. To address this potential problem, the CISO is developing operating procedures to maintain adequate reactive reserve margins throughout California for the summer.

Northwest Power Pool Area

The 1999 summer peak total internal demand forecast of 48,760 MW for the combined Northwest United States and Canadian areas is 1.5% below last summer's actual peak demand due to warmer-than-normal temperatures last summer. The Northwest Power Pool Area is winter peaking. NWPP's forecast includes 175 MW of load management and 630 MW of interruptible demand capability. A capacity margin of 30.5% is projected for the peak month, assuming that 59 MW of new generation enters service as expected and that 400 MW of firm purchases that are not yet under contract are available from neighboring systems.

Hydroelectric energy is expected to be above normal this summer. The May preliminary forecast for the January–July Columbia River runoff at The Dalles is about 124 million-acre feet or about 117% of the most recent 30-year average. The record runoff of 159 million-acre feet or about 150% of average occurred in 1997. Northwest reservoirs are expected to refill to full by the end of July.

Studies have demonstrated the north-to-south operating transfer capability of the combined California-Oregon Intertie, the Northwest-to-Sierra Intertie, and the Pacific DC Intertie to be 7,570 MW for this summer. Transfer capability studies on additional major Northwest transmission paths are being prepared for approval before the summer operating period. Reactive margins are expected to be adequate.

Alberta

The province of Alberta has adopted legislation, which only permits resource additions to its system that are responsive to market driven price signals. Should resources at a given time prove insufficient, firm customer demand is disconnected by the distribution companies to preserve necessary operating reserves. In the transition, high demand growth resulted in the province of Alberta having very low capacity margins for the last two seasons as the market evolved to meet the electrical needs of Alberta. This situation prompted special assessments by the NERC Reliability Assessment Subcommittee of the adequacy situation in Alberta for both the 1998 summer and the 1998/99 winter seasons.

For the summer of 1999, an additional 362 MW of price-elastic interruptible demand has been contracted, and, if necessary, up to 200 MW of operating reserve may be purchased from the Bonneville Power Administration. With these measures in place, Alberta's capacity margin will be manageable for the summer, with capacity margins of 18.6 to 20.2% projected for June through September. It should be noted that those margins include 400 MW of purchases from neighboring systems that are not yet under contract over its two ties. Without those purchases, Alberta's projected capacity margins would be reduced to a range of 13.8 to 15.5% during the summer.

Rocky Mountain Power Area

The 1999 summer peak total internal demand forecast of 8,063 MW is 1.1% above last summer's actual peak demand. The forecast peak demand includes 90 MW of load management and 206 MW of interruptible demand capability. The Rocky Mountain Power Area's peak demand may occur in either summer or winter. Assuming that 64 MW of new generation enters service on schedule and 100 MW of planned firm purchases (not yet under contract) are available from neighboring systems, the Area will have a capacity margin of 23.1% for the peak month.

The Denver, Colorado area experienced localized firm demand reductions last summer due to the unscheduled outage of 408 MW of generation during several consecutive days of hot weather, and the outage of two 230 kV transmission lines that contacted trees, even though the lines were not near rated capacity at the time. These outages forced the Denver area into a resource deficit condition with resultant low voltages. Manual load shedding was used to reduce import levels and to restore voltage levels in parts of the system.

To lessen the likelihood of similar events happening this summer, the rights-of-way of the two lines have been cleared and additional tree trimming has continued to be a priority. Also, generation capability for the Denver area has been increased by 325 MW, and arrangements have been made for increased power purchases.

Hydroelectric generation is expected to be normal in the area this summer. Water inflows into the South Platte, North Platte, Colorado, Big Thompson, and Green Rivers are expected to be near normal this year as snowpack is about 100% of normal in these river basins. Reservoir storage is in good condition and hydroelectric generation is expected to be near the long-term average. The Glen Canyon power plant is operating under environmental impact restrictions that limit water releases. The release limitations reduce peaking capability, but the plant will be able to respond to short-term emergency conditions.

The transmission system is expected to be adequate for all firm loads. Most expected economy energy transfers can also be accommodated. However, the transmission path between southeastern Wyoming and Colorado often becomes heavily loaded. It is anticipated that the WSCC Unscheduled Flow Mitigation Procedure will be invoked on numerous occasions this summer to provide line load relief for this path.

Reactive reserve margins are expected to be adequate for peak demand conditions. However, local voltage problems could occur in southeastern Wyoming, southwestern Colorado, and the San Luis Valley in southern Colorado. Those areas will be closely monitored.

A Look Back at 1998/99 Winter

Alberta

The 1998/99 winter seasonal peak demand for Alberta was recorded at 7,209 MW on December 17, 1998 as compared to 7,250 MW for 1997/98. The Alberta system had sufficient operating reserve on line at the time of peak. Alberta's market-based system allowed the marketers to import 415 MW into the province at the time of system peak and consumers to participate in the reduction of demand through contracts during times of supply constraints. There were several instances when supply was tight due to unplanned generation outages. However, no non-price-responsive (firm) demand was shed during the winter months of December 1998, and January and February 1999.

Ontario (NPCC)

Ontario exceeded both its 1998/99 winter peak forecast as well as its actual 1997/98 peak with no operational difficulties. The previous winter peak demand of 21,494 MW was exceeded by 7.7%; the winter's projected peak of 23,100 MW was slightly exceeded by its January 1999 peak of 23,150 MW.

New England (NPCC)

New England met its winter peak demand of 23,150 MW (January 1999) without problems, exceeding its projected peak of 23,100 MW by 1.1% and the 1997/98 winter peak of 18,610 MW by 9.2%.

Definitions, Assumptions, and Abbreviations

How NERC Defines Reliability

NERC defines the reliability of the interconnected bulk electric systems in terms of two basic and functional aspects:

- Adequacy — The ability of the electric system to supply the aggregate electrical demand and energy requirements of the customers at all times, taking into account scheduled and reasonably expected unscheduled outages of system elements.
- Security — The ability of the electric system to withstand sudden disturbances such as electric short circuits or unanticipated loss of system elements.

Assumptions

In preparing its independent assessment, RAS reviewed the individual Regional self assessments. Summaries of supporting data are contained in Tables 1, 2, and 3, and Figure 1. RAS did not independently verify the information contained in the individual Regional self assessments. Additional supporting documentation is available through the Regional offices.

This assessment contains electricity supply and demand projections submitted by electric utilities through their Regional Councils for February 1999 through September 1999 and is based on several assumptions:

- Weather will be normal.
- Economic activity will occur as assumed in the demand forecasts.
- Generating and transmission equipment will perform at average availability levels.
- Generating units that are undergoing planned outages will return to service as scheduled.
- Generating unit and transmission additions and upgrades will be in service as scheduled.
- Demand reductions expected from direct control load management and interruptible demand contracts would be effective, when they are needed.
- Electricity transfers will occur as projected.

Abbreviations Used in This Report

AC	Alternating Current
ACE	Area Control Error
AEP	American Electric Power
AP	Allegheny Power
AZ-NM-SNV	Arizona-New Mexico-Southern Nevada Subregion of WSCC
CA-MX	California-Mexico Subregion of WSCC
CISO	California Independent System Operator
COI	California-Oregon Intertie
CP&L	Carolina Power & Light Company
DOE	Department of Energy (United States)
DSM	Demand-Side Management
DCLM	Direct-Control Load Management
ECAR	East Central Area Reliability Coordination Agreement

EHV	Extra High Voltage
ERCOT	Electric Reliability Council of Texas
FCITC	First Contingency Incremental Transfer Capability
FCTTC	First Contingency Total Transfer Capability
FRCC	Florida Reliability Coordinating Council
HQ	Hydro-Québec
HVDC	High Voltage Direct Current
iIDC	interim Interchange Distribution Calculator
IDC	Interchange Distribution Calculator
IIPA	Integrated Independent Performance Assessment
IMO	Ontario Independent Electricity Market Operator
IPP	Independent Power Producer
ISN	Interregional Security Network
ISO	Independent System Operator
iTIS	interim Transaction Information System
kV	kilovolts (thousands of volts)
MAAC	Mid-Atlantic Area Council
MAIN	Mid-America Interconnected Network, Inc.
MAPP	Mid-Continent Area Power Pool
MECS	Michigan Electric Coordinated Systems
MEN	MAAC-ECAR-NPCC
MET	MAIN-ECAR-TVA
MVA	Megavoltamperes
Mvar	Megavoltamperes reactive
MW	Megawatts (millions of watts)
NEL	Net Energy for Load
NEPOOL	New England Power Pool
NERC	North American Electric Reliability Council
NPCC	Northeast Power Coordinating Council
NRC	Nuclear Regulatory Commission (United States)
NU	Northeast Utilities
NUG	Non-Utility Generator
NWPP	Northwest Power Pool Subregion of WSCC
NYPP	New York Power Pool
OCSG	Operating Capability Study Group
OH	Ontario Hydro
OP 4	NEPOOL Operating Procedure 4 — Action During a Capacity Deficiency
OPF	Optimal Power Flow
OTC	Operating Transfer Capability
PDCI	Pacific DC Intertie
PJM	Pennsylvania-New Jersey-Maryland

RAS	Reliability Assessment Subcommittee
RCP	Reliability Coordination Plan
RMPA	Rocky Mountain Power Area Subregion of WSCC
RMS	Reliability Management System
SDX	System Data Exchange
SERC	Southeastern Electric Reliability Council
SMAIN	Southern MAIN
SPP	Southwest Power Pool
TIS	Transaction Information System
TLR	Transmission Loading Relief
TVA	Tennessee Valley Authority
TXU	Texas Utilities
VACAR	Virginia and Carolinas Subregion of SERC
VAST	Virginia-AEP-Southern-TVA
VEM	VACAR-ECAR-MAAC
VP	Virginia Power
WSCC	Western Systems Coordinating Council
WUMS	Wisconsin-Upper Michigan Systems Subregion of MAIN

Reliability Assessment Subcommittee

Frank J. Koza, Jr.
Subcommittee Chairman
General Manager, Ventures
PECO Energy Company

Edward P. Weber
Subcommittee Vice Chairman
Resources and Planning
Western Area Power Administration

Bernard M. Pasternack
ECAR Representative
Director - Transmission System Analysis & Planning
American Electric Power

Howard Daniels
ERCOT Representative
Manager, Transmission Planning and Control
Reliant Energy

Peter M. O'Neill
FRCC Representative
Staff Engineer, Transmission Planning
Florida Power Corporation

Esam A.F. Khadr
MAAC Representative
Planning Interconnection Engineer
Public Service Electric and Gas Company

Donald R. Carlson
MAIN Representative
Manager - Energy Supply and Control
Wisconsin Public Service Company

Hoa Nguyen
MAPP Representative
Power Supply Coordinator
Montana - Dakota Utilities Company

John G. Mosler, Jr.
NPCC Representative
Manager, Operations
Northeast Power Coordinating Council

Gary P. Garrett
SERC Representative
Manager, Energy Resource Planning
Tennessee Valley Authority

James A. Bruggeman
SPP Representative
Senior Consultant
Central and South West Services, Inc.

Dillwyn H. Ramsay
WSCC Representative
Power System Planning Manager
Tri-State Generation & Transmission Association, Inc.

Julien Gagnon
Canada Member-at-Large
Manager, System Control Scheduling
Hydro-Québec

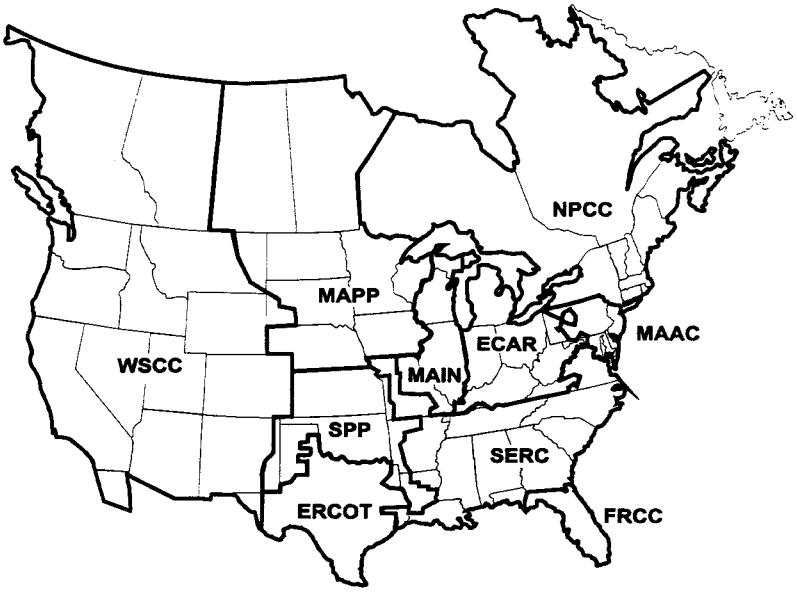
To Be Announced
NERC Security Committee Representative

John Conti
DOE Liaison
Deputy Director, Office of Economics, Electricity and Natural Gas Analysis
U.S. Department of Energy

John D. Osborn
ECAR Alternate
Manager, Transmission Services
East Central Area Reliability Coordination Agreement

Donald R. Volzka
MAIN Alternate
Manager of Transmission Planning
Wisconsin Electric Power Company

Robert W. Cummings
Staff Coordinator
Director-Transmission Services
North American Electric Reliability Council



ECAR
East Central Area Reliability Coordination Agreement

ERCOT
Electric Reliability Council of Texas

FRCC
Florida Reliability Coordinating Council

MAAC
Mid-Atlantic Area Council

MAIN
Mid-America Interconnected Network, Inc.

MAPP
Mid-Continent Area Power Pool

NPCC
Northeast Power Coordinating Council

SERC
Southeastern Electric Reliability Council

SPP
Southwest Power Pool

WSCC
Western Systems Coordinating Council

Copyright © 1999 by the North American Electric Reliability Council. All right reserved.

RESPONSE OF DAVID R. NEVIUS, VICE PRESIDENT, NERC TO QUESTIONS FROM HON. JOHN D. DINGELL

Question 1. In its *Reliability Assessment: 1998-2007,* the North American Electric Reliability Council (NERC) specifically raises concerns about the impact of the Environmental Protection Agency's (EPA) September 24, 1998 final rule for reducing regional transport of ground-level ozone (also known as the NO_x SIP call) upon reliability.

(a) In developing the NO_x SIP call, did EPA consult with NERC regarding the impact of the SIP call on the supply adequacy and overall reliability of our nation's electric system?

Answer: NERC was not consulted by EPA concerning the potential supply adequacy and overall reliability of the electric system in developing the NO_x SIP Call.

(b) If NERC was consulted, which of NERC's views incorporated into EPA's rule and which were not?

Answer: NERC was not consulted.

Question 2. I understand that NERC has been studying the potential effect of the NO_x SIP call upon adequacy and reliability.

(a) At this time, does NERC believe the SIP call will affect supply adequacy and overall reliability in the 22 state-region covered by EPA's rule, and, if so, will the effect be negative or positive?

Answer: NERC's reliability analysis has yet to be completed (see answer to Question 2d below). However the primary impact on supply adequacy and overall electric system reliability would result from changes in the availability of generation. Generally speaking, if generation availability is increased, reliability of the power supply is improved, and if availability is decreased, reliability suffers. One of the issues being investigated in the study is the validity of EPA estimates of the amount and location of generation that will be unavailable to accommodate the retrofits needed to comply with the May 1, 2003 deadline for meeting the EPA regulations.

One of the primary NO_x reduction technologies is the use of selective catalytic reduction (SCR) equipment. Retrofitting generators with SCR equipment may require extensions to scheduled outage times and therefore increase generation unavailability.

A survey of ECAR Region generation owners concerning their NO_x SIP Call compliance plans indicate that about 20,000 MW more capacity will use selective catalytic reduction (SCR) technology than projected by EPA.

EPA estimated total scheduled outage time of 5 weeks, for generation undergoing SCR retrofits. More recent theoretical studies by the Ozone Attainment coalition (OAC), the Utility Air Regulatory Group (UARG), and Zinder—Cichanowicz (consultants to UARG and Edison Electric Institute) estimate total outage time ranging from 6 to 9 weeks. The ECAR survey results indicate expected total outage times at 6-8 weeks based on quotes from equipment vendors.

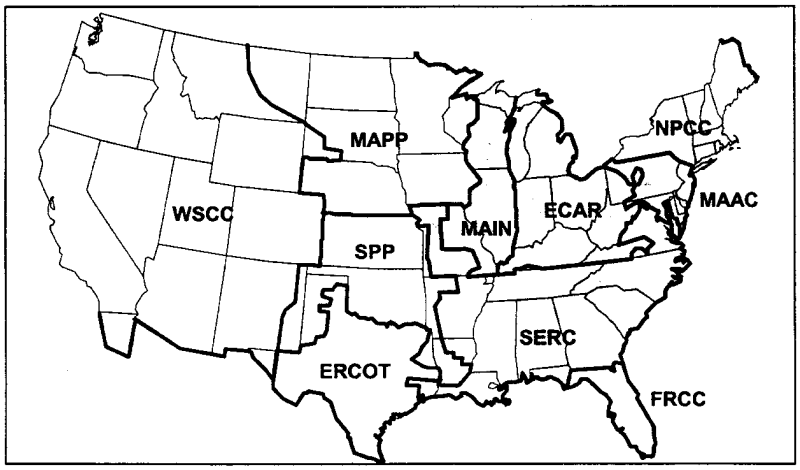
(b) Could the NO_x SIP call have a greater impact on supply adequacy and overall system reliability in some regions of the SIP call area than in others?

Answer: Yes. Each NERC Region has a different generation mix, and each has a different level of generation that would require the installation of NO_x reduction equipment, so the potential for reliability impacts varies from Region to Region. Recent analysis by the MAIN Region on the potential impacts does not indicate any adverse impact to reliability caused by NO_x mitigation retrofits. That work was based on a survey of generation owners in the MAIN Region. However, MAIN's generation mix includes a higher percentage of nuclear generation than ECAR, which is more heavily impacted by the NO_x SIP Call. Therefore, the reliability impacts in the ECAR Region may be more significant.

(c) Could the NO_x SIP call adversely affect supply adequacy and system reliability in states outside the SIP call area?

Answer: Yes. The Eastern Interconnection of North America electrically behaves as one system, without regard to political boundaries of countries, states, or NERC Regions. Movement of generation resources across the Interconnection is subject to the laws of physics and the physical limitations between portions of the Interconnection. What happens in one location of the Eastern Interconnection affects the rest of the Eastern Interconnection.

The below figure shows the states subject to the NO_x SIP Call.

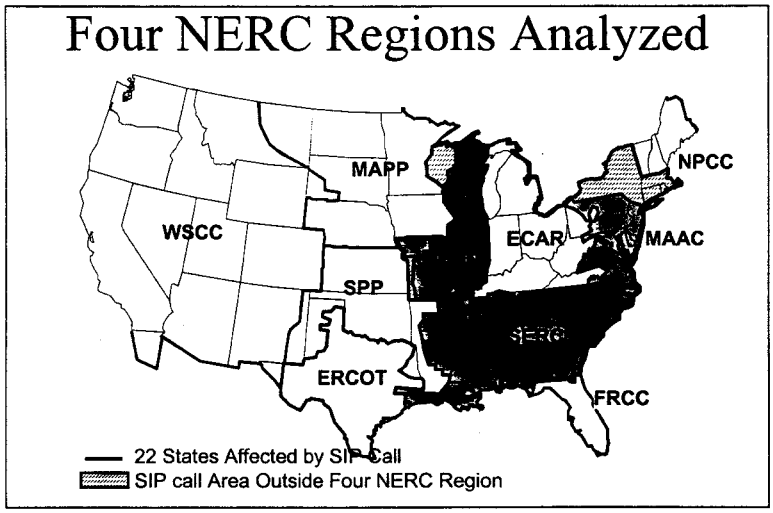


The SERC Region contains a number of states subject to the SIP Call, but also, all or parts of four other states are in the SERC Region. If the reliability of SERC as a whole is adversely impacted, those other states may also feel the impact. The same is true for states in the MAPP and SPP Regions, which are also part of the Eastern Interconnection. As such, the NO_x SIP Call could adversely affect supply adequacy and system reliability in states outside the SIP call area.

(d) Will NERC issue a report on the impact of the NO_x SIP Call on adequacy and reliability? If so, when? If not, why not?

Answer: Yes. The NERC Reliability Assessment Subcommittee (RAS) is in the process of conducting a screening study of the potential impacts to short-term power supply and reliability.

The screening analysis will focus on 4 Regions—ECAR, MAAC, MAIN, and SERC (see figure below).



The study methods will analyze:

- Weekly available installed reserve margin
- Loss-of-load expectation (LOLE)
- Support from remainder of Eastern Interconnection

- Change in LOLE for each scenario
- Available data (NERC Generating Availability Data System, NERC Electricity Supply & Demand)
- Used simplifying assumptions

The goals of the screening study are to:

- Examine range of retrofit level scenarios using probabilistic reliability analysis techniques
- Minimize variation in other assumptions
- Perform a comparative analysis of range of critical assumptions
  —Transfer capability interaction
  —Length of retrofit time
  —Reliance on Interruptibles
- Build groundwork for detailed analysis

The NERC Board of Trustees has also endorsed RAS conducting a detailed study of the short-term power supply impacts of the NO_x regulations in collaboration with the Edison Electric Institute (EEI).

Question 3. For this summer, the Michigan Public Utilities Commission has already stated its official concerns about reliability due to the prospect of electricity supply inadequacy. On June 19, 1997, in testimony before the Energy and Power Subcommittee, you cited NERC's MAIN region, as an area where system adequacy was a concern. Specifically, you cited the projected unavailability of 4,700-6,500 MW of nuclear generating capacity and the limited ability of the region to import power. The following summer, shortages of electricity in the MAIN and ECAR regions, which are comprised of Michigan and other mid-Western states, resulted in spot market price spikes as high as nearly $7,500 MWh.

(a) As the electric utility industry moves closer to a market framework, could such price spikes become more commonplace?

Answer: NERC does not have extensive expertise in markets and the reasons for price spikes. The FERC staff conducted an investigation of the reasons for the price spikes (Staff Report to the Federal Energy Regulatory Commission on the Causes of the Pricing Abnormalities in the Midwest during June 1998). In the Executive Summary of this report the FERC staff said:

"what some have called a price 'spike' was an extraordinarily high, but rather narrow and short-lived increase in wholesale spot market prices." The report goes on to say "... the particular combination of events that led to the magnitude of the June 1998 price increases is not likely to recur, although wholesale prices can be expected to rise and fall as a result of the dynamics of supply and demand." The report also identifies issue areas for policy makers and others to focus on to prevent a recurrence of these events.

(b) Has NERC identified a problem with capacity and system adequacy in its ECAR region?

Answer: In its soon to be issued 1999 Summer Assessment, NERC reports for ECAR that: "With the ongoing outage of the Cook Nuclear Units (2,060 MW total) ECAR's operational capacity margin is only slightly improved from last summer. However, there is a greater likelihood this year that power will be available from neighboring Regions."

ECAR, in its 1999 Assessment of Load and Capacity states: "The ECAR Members expect capacity margins in the region to be 10.8% during peak demand this summer compared with 9.3% last summer. The increase in capacity margin is a result of ECAR Members bringing existing generating capacity back on line and installing new capacity. Under peak load conditions, ECAR will likely need to utilize supplemental capacity resources (contractually interruptible loads) and imports of power from outside of ECAR) to meet its projected peak demand. Severe weather (abnormally hot and humid) or unexpected generator outages and the unavailability of power from outside the region could make it necessary to curtail additional load, beyond contractually interruptible loads and demand side management."

(c) Could EPA's NO_x SIP call, which will result in both short and long-term losses of generating capacity, further exacerbate such price spikes?

Answer: As indicated above, the NO_x SIP call could increase the unavailability of generation in some areas to the point that reliability will be adversely impacted. NERC is not in a position to speculate on whether or not such increased generation unavailability, if it does occur, would result in price spikes.

(d) While curtailment generally refers to the physical loss of power, isn't it possible that EPA's NO_x SIP call could result in effective curtailments by driving the price of electricity so high that it is beyond the ability of the average customer to afford?

Answer: This is not NERC's purview.

Question 4. In your prior testimony before the Subcommittee, you pointed to the inadequacy of the transmission system in the MAIN region, which includes Michigan's upper peninsula, with regard to the ability of that region to import power.

(a) Should EPA's NO_x SIP call result in generation losses that require the import of large amounts of electricity into the MAIN region, are you aware of any EPA proposal to increase the ability of the region to import power?

Answer: NERC is not aware of any EPA proposal to increase the ability of the MAIN Region to import power. However, MAIN's Regional analysis of the potential impacts of the NO_x SIP Call does not find detrimental impacts on power supply that would warrant import of large amounts of electricity into the MAIN Region.

(b) What would it take, in terms of money, time, and effort, to remedy the transmission problems in the MAIN region?

The transmission situation in MAIN is not as critical this summer as indicated in my prior testimony (1997) primarily because of the reduced requirement for imports from outside the region. As stated above, MAIN's Regional analysis of the potential impacts of the NO_x SIP Call does not find detrimental impacts on power supply that would warrant import of large amounts of electricity into the MAIN Region.

Question 5. In its analysis of the costs and benefits associated with the NO_x SIP call, EPA asserts that existing utility boilers can be retrofitted with pollution control equipment during normal planned outages. Others, including affected utilities, contest that assumption, claiming that retrofit activities cannot be completed solely within the scope of normal planned outage periods.

(a) Has NERC assessed the potential for retrofit activities to result in additional outage periods for affected utility boilers? If not, why not?

Answer: The NERC Reliability Assessment Subcommittee (RAS) is currently guiding the screening study on potential reliability impacts of the NO_x SIP Call mentioned in 2(d) above, which assesses the impact of outage extensions on utility boilers NO_x mitigation plans. This detailed study is expected to be completed by September at which time the results will be reported to the NERC Board of Trustees.

(b) If NERC has performed such an assessment, please provide a detailed summary of your analysis.

Answer: NERC will be glad to keep you and your Staff appraised of the results of both the screening study and the detailed study on the potential reliability impacts of the NO_x SIP Call.

FIRSTENERGY
AKRON, OHIO
September 3, 1999

The Honorable JOE BARTON
Chairman, Subcommittee on Energy and Power
U.S. House of Representatives
2264 Rayburn House Office Building
Washington, D.C. 20515

DEAR CHAIRMAN BARTON: On behalf of FirstEnergy Corp., enclosed is my response to the questions posed in your August 11, 1999, letter. Thank you for the opportunity to respond to these important questions. I understand my response will become part of the hearing record from your subcommittee's April 22, 1999, hearing on transmission and reliability.

Let me state again how important I believe transmission is in creating consumer benefits, improving reliability, and spurring competition as you and we envision. Simply put, our nation's transmission infrastructure must grow in order to accommodate the increasing number and the different kinds of transactions occurring in the increasingly competitive electric generation market. There has been little if any significant expansion of our nation's transmission network for decades. For competition to work, the system that delivers the product—the transmission networks—must expand. They will only grow through new investments, not through new regulations. Congress must do its part to create an environment that encourages investment in transmission improvements, reduces regulatory burdens, and allows for the voluntary development of transmission institutions, especially business-oriented institutions that will be motivated to provide the best possible service for their customers.

In the months following your April hearing, transmission has become, for a variety of reasons, an even higher profile issue in the electric industry restructuring debate. For example, the following all occurred after the April hearing:

On May 13, the Federal Energy Regulatory Commission ("FERC" or "the Commission") issued a Notice of Proposed Rulemaking (NOPR) with respect to the for-

mation of regional transmission organizations (RTOs). In essence, the NOPR calls for utilities to voluntarily join RTOs that meet certain minimum criteria, or to justify to FERC why they will not do so.

On June 3, FirstEnergy joined American Electric Power, CMS/Consumers Energy, Detroit Edison and Virginia Power in the "Alliance" filing for what would enable the first-ever independent transmission company or "transco." In our judgement, the Alliance filing has spurred debate both within the FERC and Congress about future transmission entities and sets forth a positive model for the kind of voluntary, business-oriented regional transmission entity my testimony supported. As we discussed when I met with you in July, the Alliance RTO will be: made up of the transmission facilities of all the foregoing companies; privately owned; governed by a board appointed by its owners (as is customary for business enterprises); independent (in ownership and governance) of electric generation companies and other users of the system; and, privately operated. From our perspective, the proposal meets all of the criteria the Commission outlined in its RTO NOPR. This independent entity will generate revenue solely by providing transmission service to generators, marketers and other users of the system, providing it every incentive to support vigorous competition for electric sales by its customers.

On July 28, the Commission granted a request for Declaratory Order by Entergy Corporation for a single-company transco. Entergy would retain passive ownership in the transco, which would be under the control of an independent board.

Throughout this year, concern has steadily increased from industry observers about the returns being permitted on transmission assets. For example, a ruling of an Administrative Law Judge with the Commission, in effect, "penalizing" Southern California Edison Company for having joined the California ISO, has drawn criticism from users of the transmission system and transmission providers alike.

The East, South and Midwest—including your home State of Texas—experienced a record-breaking heat wave that sent demand for energy soaring to all-time highs in numerous cities, affecting service reliability and price in some areas. Without question, expanded and improved transmission networks would have eased constraints.

Several financial analysts commented recently to the Commission on its RTO NOPR. Analysts from Solomon Smith Barney, one of the major investment banking institutions in the world, stressed the need for incentives for new transmission investment: "[t]he problem, as we see it, is that the existing regulatory scheme has contributed to the problems, by inhibiting both capital investment and innovation, and the solution is to apply incentive ratemaking of some sort across the board." I have enclosed a copy of the comments of Solomon Smith Barney for your review.

On August 4, Congressman Tom Sawyer, whose opinion on transmission issues I know you value, introduced H.R. 2786, the proposed "Interstate Transmission Act." The Sawyer bill is consistent with our principles of proposed transmission expansion, allowing voluntary participation in RTOs, allowing for business-oriented transmission entities, and reducing regulation. Among other things, the bill authorizes incentive-based transmission pricing, prohibits FERC from mandating RTO participation, and eliminates FERC's authority to review mergers and condition orders on participation in an RTO.

Voluntary RTO formation continues to work. According to statistics complied by the Edison Electric Institute, more than 60 percent of electric customers in the U.S. are either served by an operating RTO or soon will be. Moreover, as of August 1, 1999, more than 70 percent of the total customers and more than 70 percent of the MWh sales of investor-owned utilities were covered by an RTO that already has been approved or proposed.

In addition, FirstEnergy has worked to educate Members and staff on transmission issues by joining six other utilities in a coalition to promote the principles for transmission growth and improvement outlined in my April 22 testimony. Many other transmission providers not formally part of our coalition are supportive of our efforts. We believe this is the first group devoted solely to transmission issues. We are pleased that you made time to meet with us before the release of your draft legislation. On behalf of the group, let me again formally offer you our assistance in your work.

Thank you for your consideration of my views. Good luck with your efforts.

Sincerely,

STAN SZWED
Vice President

Enclosures

RESPONSES TO QUESTIONS FOR THE RECORD FROM CHAIRMAN BARTON

Question 1. Your testimony suggests there is no need for enforceable reliability standards, and market participants should be free to "devise and implement new arrangements." Do you believe continued reliance on voluntary compliance with reliability standards is a good idea? If not, how can reliability standards be made enforceable without Federal legislation? Can NERC compel market participants to join it? Can NERC assume enforcement powers?

Response. My testimony was intended to address a somewhat different set of issues. In my testimony, I did not specifically address reliability, but was addressing the best way to improve transmission service. Reliability is an important part of transmission service in that customers expect and need electric power to be delivered when they need it. Reliability in a formal definition is the degree of performance of the elements of the bulk electric system that results in electricity being delivered to customers within accepted standards and in the amount desired.[1] Focusing on improving transmission service will result in improved service for customers, including improved reliability. The best way to improve transmission service is to let market participants devise and implement new business structures and arrangements for providing services, new investment, new methods, and new technology.

The evolution of the reliability infrastructure of the North American interconnected electric system from NERC to NAERO to create a self-regulating reliability organization is one example of market participant's ability to be responsive on a voluntary basis to ensure grid reliability in a more regionalized and competitive market.

Although the NERC to NAERO evolution has widespread support, the NERC/NAERO organization cannot compel market participants to join it or to assume enforcement powers. Federal legislation is needed to provide the legislative authority for NAERO under the regulatory jurisdiction of the Federal Energy Regulatory Commission ("FERC" or "the Commission") in the United States. Although FirstEnergy supports the NERC consensus language, with which you are familiar, legislation introduced by Congressman Sawyer (H.R. 2786) contains provisions that are shorter and less prescriptive than the NERC draft.

Question 2. Your testimony calls for a "market-driven and business-oriented resolution to transmission issues." Are you calling for an end to FERC regulation of transmission rates?

Response. No. It is appropriate for FERC to continue to regulate rates for transmission service. Without sufficient competition for bulk delivered power, transmission will continue to have the characteristics of a natural monopoly. However, it may be possible in the future, given sufficient competition for delivered bulk power, to reduce or eliminate transmission rate regulation. Congressman Sawyer's bill, H.R. 2786, envisions that possibility.

FERC should encourage transmission investment to support a robust transmission network to achieve open access goals. Alternatives for encouraging investment in the transmission system could include: allow a higher rate of return for investment in new assets, accelerated depreciation for new transmission investments, eliminate revenue credits for non-firm transmission services, permit an acquisition premium on purchased transmission facilities, "and" pricing for new lines or technological additions, tax advantaged transfer for asset movement, incentive rate recovery and light handed regulation.

Your draft bill released in July and H.R. 2786 both provide for incentive rates. I am grateful that this critical concept of incentive rates has made its way into your legislative language.

What I meant by a "market-driven and business-oriented resolution to transmission issues" is primarily that transmission owners should be free to decide the most appropriate corporate form, structure, geographical shape and ownership that they will need to meet the evolving energy market. Barely two years ago, only 10 States had enacted retail choice laws. Now more than half of all States have done so. Major announcements about electricity generation are being made nearly every day. And no one knows the effect distributed generation will play in the market. It is critical to permit flexibility, experimentation and customization of each transmission entity to reflect regional needs, market variations and transition requirements. Transmission institutions need to be able to adapt quickly in such a volatile marketplace, just as transmission systems are able to adapt quickly to rapid load changes.

---

[1] From definition of reliability in "Glossary of Terms," prepared by the Glossary of Terms Task Force, North American Electric Reliability Council, August 1996.

As the Global Power Group of Salomon Smith Barney, one of the world's leading investment banking institutions, put it in its comments to the Commission in response to the Commission's Notice of Proposed Rulemaking ("NOPR") on Regional Transmission Organizations ("RTOs"), "The real value of the new, commercially-incentivized transmission company might come from its ability to offer an unimagined new set of product offerings or its ability to do so much more with existing assets."

Question 3. The State of Ohio is concerned your transco proposal will split Ohio into two RTOs, the Alliance transco and the Midwest ISO. How do you address the State's concerns?

Response. As I stated at the April 22 hearing in response to a question from Representative Largent, I believe that RTOs need not follow State boundaries and should not be determined by State boundaries. RTOs should develop in response to market dynamics.

Electricity flows according to the laws of physics. It doesn't stop at the State line. Except as to the consequences of the old system of monopoly franchises, State boundaries are almost wholly unrelated to patterns in electric generation, transmission and use.

The operating companies of Ohio's investor-owned utilities are aligned with Regional Transmission Organizations:

Midwest ISO—Cincinnati Gas and Electric (operating company of Cinergy).

Alliance RTO—Ohio Edison, the Cleveland Electric Illuminating Company and the Toledo Edison Company (operating companies of FirstEnergy Corp.) and Columbus Southern Power and Ohio Power Company (operating companies of American Electric Power)

Not Currently Committed to an RTO—Dayton Power and LightAllegheny Power.

As shown on Attachment 1 to this response, approximately 74% of customers served by IOUs in Ohio will take transmission service from the Alliance RTO, 12% will take service from IOUs not now committed to an RTO and 14% will take service from the Midwest ISO.

Ohio's recently enacted electric restructuring legislation imposes a starting date for competitive retail electric service on January 1, 2001. Further, Ohio's electric utilities are required to transfer control to a FERC-approved RTO that would be operational by December 31, 2003. However, the legislation does not require participation in a particular type of RTO. Finally, the legislation does not require the elimination of pancaked transmission rates, rather it requires minimization of these rates.[2]

Question 4. At the hearing you stated you did not see a problem with Ohio transmission systems being operated by two different entities, the Alliance transco and the Midwest ISO. Are these proposals consistent with the FERC proposed rule on RTOs, specifically the provisions relating to scope and regional configuration? The proposed rule favors RTOs that encompass contiguous areas and encompass a highly interconnected portion of the grid.

Response. FERC's draft rule proposes that RTOs must be of sufficient scope and regional configuration to permit the RTO to perform its required functions and to support efficient non-discriminatory power markets. The proposal of Alliance RTO satisfies this proposed requirement.

By any measure, the proposed Alliance RTO is large. The Alliance RTO will serve a combined area of 124,000 square miles in nine states, encompassing a population of 26 million people and representing a load of approximately 67,000 MW. The Alliance RTO would provide "one-stop shopping" for transmission service over 43,000 miles of transmission lines. By these and other measurers, the Alliance RTO, if approved, would be one of the largest RTOs in the nation.

The proposed Alliance RTO is contiguous. It will be of sufficient size and configuration to perform effectively the RTO functions described in the Commission's proposed rule on RTOs.

The proposed Alliance RTO encompasses a highly interconnected portion of the transmission grid.

Further, as the Commission observed in its Notice of Proposed Rulemaking:

> There is likely no one "right" configuration of regions. One particular boundary may satisfy one desirable RTO objective and conflict with another. The industry will continue to evolve, and the appropriate regional configuration will likely change over time with technological and market developments.[3]

---

[2] Section 4928.12.(A)(3) of the Ohio Revised Code.

[3] Notice of Proposed Rulemaking, Regional Transmission Organizations, Docket No. RM99-2-000, IV FERC Stats. & Regs. ¶33,730.

Seams issues are unavoidable unless there is a single RTO for each interconnection. Such an arrangement is impractical at best since the operational requirements for this type of transmission network are beyond today's technology. Even if this problem could be solved, at some point combining additional systems would reduce efficiency and raise costs. The better alternative would be to allow the market place to voluntarily form RTOs in response to the needs of transmission customers with the appropriate incentives. This will result in RTOs that provide the needed services in efficient and cost effective manner.

Question 5. There are different kinds of transmission owners—Federal agencies, State agencies, municipal utilities, rural electric cooperatives, and IOUs. Could a transco be formed with these different kinds of owners? Are there examples of entities that have that kind of mixed ownership? How long would it take to form a transco that had that kind of mixed ownership?

Question 6. How difficult would it be for non-profit entities such as Federal agencies, State agencies, municipal utilities, and rural electric cooperatives to join a transco? If so, is an ISO the only option in regions with large non-IOU transmission systems?

Question 7. In some regions, such as the Pacific Northwest and the Tennessee Valley, the Federal transmission system predominates. Can the Federal government have an ownership interest in a private for-profit transmission company? Does the Federal government have an ownership role in other for-profit ventures?

Response. Based on the similarities and interrelations of the issues they pose, I have taken the liberty of answering questions 5, 6 and 7 in one combined answer.

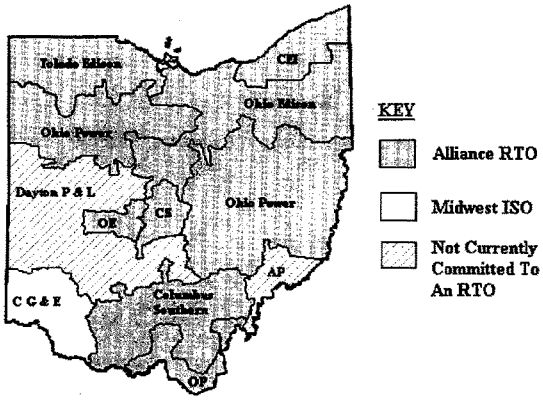
We believe that a Transco can be formed with different types of owners. A transco-based RTO can incorporate passive ownership or limited ownership interests in the RTO in exchange for transmission assets. This could provide an opportunity for some Federal agencies, State agencies, municipal utilities and rural electric cooperatives to participate in an RTO. Governments currently invest in private securities. However, I can see the potential for concerns if a governmental entity with a financial interest also has a regulatory role with respect to the entity or its competitors. Also, I can see the potential for concerns if participation in an RTO by a governmental entity creates an unfair competitive advantage.

While the Alliance RTO has not yet been confronted with this issues, were we to face the question, we would probably consider a non-IOU entity as a potential partner in an RTO generally on the same bases on which we have considered IOUs as potential partners in an RTO. Many of the issues you raised are issues that would have to be resolved by the non-IOU entities.

The current restructuring of the electric industry, i.e. the sale of generation facilities, creation of RTOs and the unbundling of electric service at the state level, begs the question whether the Federal government's ownership in larger power-marketing agencies should be privatized. As I am sure you are aware, privatization of electric facilities, including transmission facilities has been a major feature of electric industry restructuring abroad. At the same time, I recognize the many policy and political questions that are subsumed within the question of privatization.

Attachment 1

PARTICIPATION OF OHIO'S INVESTOR-OWNED UTILITIES IN REGIONAL TRANSMISSION ORGANIZATIONS



PARTICIPATION OF OHIO'S INVESTOR-OWNED UTILITIES IN REGIONAL TRANSMISSION ORGANIZATIONS						
RTO	OHIO IOU MEMBERS	OPERATING COMPANIES	SERVICE AREA		CUSTOMERS	
			sq. m.	%		%
Alliance RTO	FirstEnergy	Ohio Edison	7,500	21.7	960,677	21.7
		Cleveland Eilectric Illuminating	1,700	4.9	751,684	17.0
		Toldeo Edison	2,500	7.2	293,059	6.6
	American Electric Power	Columbus Southern	6,200	18.0	619,448	14.0
		Ohio Power	7,342	21.3	680,336	15.3
	Alliance RTO Total		25,242	73.2	3,305,204	74.5
Midwest ISO	Cinergy	Cinncinnatti Gas & Electric	2,500	7.2	615,282	13.9
	Midwest ISO Total		2,500	7.2	615,282	13.9
Not Currently Committed To An RTO	Allegheny Power	Allegheny Power	750	2.2	28,400	0.6
	Dayton Power and Light	Dayton Power and Light	6,000	17.4	485,145	10.9
	Non-RTO Total		6,750	19.6	513,545	11.6
	Ohio IOU's Total		34,492	100.0	4,434,031	100.0

THE LARGE PUBLIC POWER COUNCIL
November 23, 1999

The Honorable JOE BARTON, *Chairman*
Subcommittee on Energy and Power
Committee on Commerce
U.S. House of Representatives
2123 Rayburn House Office Building
Washington, DC 20515-6115

DEAR CHAIRMAN BARTON: On April 22, 1999, Dr. Matthew Cordaro, former President and CEO of Nashville Electric Service, provided testimony before the Subcommittee on Energy and Power on behalf of the Large Public Power Council (LPPC) regarding "Electricity Competition: Reliability and Transmission in Competitive Electricity Markets." On August 11, 1999, you forwarded follow-up questions to Dr. Cordaro requesting that responses be filed for the record on or before September 3, 1999.

Prior to receipt of your follow up questions, Dr. Cordaro had left Nashville Gas and Electric to become CEO of the Midwest ISO. It has recently come to my attention that responses to your August 11, 1999 questions were not provided to the committee. On behalf of the LPPC, I am submitting the attached responses to your questions. I sincerely apologize for the delay.

Please let me know if I can provide you with any additional information.

Sincerely,

T. GRAHAM EDWARDS
Chairman, Large Public Power Council

RESPONSES OF LPPC TO FOLLOW UP QUESTIONS FROM CHAIRMAN JOE BARTON, SUBCOMMITTEE ON ENERGY AND POWER

The following questions were directed to Dr. Matthew Cordaro, former CEO of Nashville Electric Service, who testified before the Subcommittee on Energy and Power on April 22, 1999. Dr. Cordaro provided testimony on behalf of the Large Public Power Council (LPPC) regarding "Electricity Competition: Reliability and Transmission in Competitive Electricity Markets."

Question 1: Your testimony states a majority of LPPC members have adopted open access tariffs and submitted them to FERC. Please indicate which LPPC members have submitted open access tariffs, and indicate the disposition by FERC of these tariff submissions.

Response: Open access transmission tariffs have been filed with and accepted by FERC for the following LPPC members: South Carolina Public Service Authority; Omaha Public Power District; New York Power Authority; Colorado Springs Utilities; Orlando Utilities Commission; and Salt River Project

For the Committee's information, a number of LPPC members either serve territories outside of FERC's jurisdiction (*i.e.*, in Texas or Puerto Rico), have no significant transmission facilities, or have an open access transmission tariff but have not filed it at FERC.

Question 2: What is LPPC's position on the FERC proposed rule on RTOs?

Response: Set forth below is the executive summary of the comments filed by LPPC in Docket No. RM99-2-000, FERC's proposed rulemaking regarding RTOs.

LPPC supports initiatives that: (1) provide greater access to competitive wholesale power markets; (2) ensure open access, non-discriminatory, transmission service; (3) improve reliability and increase efficiencies in the management and operation of the nation's transmission grid; and (4) ensure delivery of services to consumers at the lowest reasonable cost. To the extent these objectives can be achieved through the voluntary formation of RTOs, LPPC endorses the Commission's proposed rule. The final rule, however, must ensure that RTOs fully accommodate the existing legal obligations of public power utilities, and the Commission will need to provide RTO participants with significant flexibility to design and implement RTOs.

A. Obligations of Public Power Entities that Seek Participation in an RTO Must be Accommodated

Federal, state, and locally-owned electric utilities, which own and operate a significant portion of the nation's interconnected grid, are subject to a number of legal obligations that will substantially affect the scope of their participation in an RTO. These obligations are imposed by, among other things, state constitutions, bond covenants, IRS private use regulations, and federal, state, and local laws. The effect of these legal obligations vary from utility to utility and, in LPPC's view, it would not be feasible for the Commission's final rule to specifically address each of these legal requirements and their potential impact on public power participation in

RTOs. LPPC believes the final rule should, however, set forth a general requirement mandating that all RTOs accommodate the legal and practical constraints applicable to public power entities. LPPC's comments stated that any RTO proposal that cannot demonstrate that a good faith effort was made to accommodate public power participation should be rejected as discriminatory, unjust, and contrary to the public interest.

B. RTOs Must be Independent of Market Participants

LPPC strongly agrees with the Commission's assertion that "[a]n RTO needs to be independent in both reality and perception."[1] Without independence, market participants cannot be assured that an RTO will provide non-discriminatory transmission service. In its comments to FERC, LPPC stated that the Commission should approve only those ownership structures that can be adequately regulated and policed in order to ensure that RTOs will not provide preferential service to affiliated owners of the RTO. Further, although LPPC believes the final rule should provide flexibility to RTO participants to determine an appropriate form of governance, all governing structures must ensure that no class of market participants is treated preferentially or allowed to unduly influence a governing board's decisionmaking processes.

C. RTOs Must Result in Consumer Benefits

Providing incentives for utilities to participate in RTOs requires a balancing of costs and benefits, and the benefits of RTO formation to consumers must outweigh the attendant costs. For that reason, LPPC's comments stated that, if the Commission does provide incentives for utilities to participate in RTOs, these incentives should be provided only if there are demonstrable corresponding public benefits. Similarly, LPPC's comments argued that if the Commission approves performance-based rate proposals, productivity objectives should: (1) reflect achievement of certain public interest outcomes; and (2) be based on performance factors that have been negotiated between the RTO and transmission customers. If proposed performance factors are not the product of consensus, LPPC argued that the Commission should approve such rates only after the RTO has demonstrated that the use of performance-based rates would result in significant consumer benefits.

Question 3: Could municipal utilities join transcos formed by IOUs? Municipal utilities and cooperatives own power plants jointly with IOUs, why can't you own a transco jointly with IOUs?

Response: The state and local laws that created each of LPPC's members and the federal, state, and local laws that continue to regulate them differ significantly both in scope and degree of regulation. Moreover, most relevant federal, state and local laws do not specifically address the authority of public power entities to participate in the large, regional transmission organizations envisioned by the Commission. The application of each of these laws to the issue of public entities' participation in RTOs therefore usually is not clear. To further complicate the matter, a significant body of case law exists in each state construing that state's constitution and statutes with respect to the scope of authority and duties of public power entities. While this case law does not specifically address public power entities' authority to participate in RTOs, it nevertheless may carry precedential weight in determining the scope of that authority under state law. Consequently, to assess its ability to engage in any of these arrangements, each LPPC member must consider the requirements of its state constitution, state and local law, bond covenants, charters, and other legal obligations, as well as the case law that construes these authorities.

Additionally, Section 141 of the Internal Revenue Code ("Code") imposes limitations on the use by non-governmental entities of public power electric facilities financed with tax exempt bonds. These "private use" limitations significantly limit the form and extent of participation by public power systems in RTOs. While the Internal Revenue Service issued regulations in January 1998 that provided some relief from these limitations ("1998 Temporary Regulations"),[2] the regulations are in effect only until January 2001, and they fail to address fully the constraints imposed by the Code's private use limitations on public power entities' RTO participation. For example, the temporary regulations, did not provide the same relief to issuers of *new* tax exempt bonds. Those issuers remain subject to the same constraints on offering open access transmission and RTO membership as were in effect before the 1998 Temporary Regulations. Issuers of new bonds thus are not free to provide open access transmission or join RTOs on the same terms as other public power systems or investor-owned utilities. Moreover, the Temporary Regulations are in fact tem-

[1] RTO NOPR at 33,726.
[2] Treas. Reg. §§ 1.141-7T & -8T.

porary—they expire by their terms on January 21, 2001. No public power system with transmission facilities financed with tax exempt bonds can prudently commit itself to providing unrestricted open access transmission or to surrender control of its transmission system to an RTO without retaining a clear right to terminate open access transmission services to non-governmental entities and to regain control of its transmission system after January 20, 2001.