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ELECTRIC UTILITY INDUSTRY RESTRUCTURING: THE CALIFORNIA MARKET

HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY AND POWER

OF THE

COMMITTEE ON COMMERCE
HOUSE OF REPRESENTATIVES

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ELECTRIC UTILITY INDUSTRY RESTRUCTURING: THE CALIFORNIA MARKET

MONDAY, SEPTEMBER 11, 2000

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON COMMERCE,
SUBCOMMITTEE ON ENERGY AND POWER,
San Diego, CA

The subcommittee met, pursuant to notice, at 9 a.m., in room 310, County Administration Center Building, 1600 Pacific Highway, San Diego, California, Hon. Joe Barton (chairman) presiding.

Members present: Representatives Barton and Shadegg.

Also present: Representatives Bilbray, Filner, and Hunter.

Staff present: Catherine Van Way, majority counsel; Ramsen Betfarhad, economic adviser; and Sue Sheridan, minority counsel.

Mr. BARTON. The Subcommittee on Energy and Power of the Commerce Committee, U.S. House of Representatives field hearing, the situation in the electricity markets in California, will come to order.

Before we have opening statements, a few housekeeping announcements, and then we want to hear from Commissioner Dianne Jacob, who is going to formally welcome us, I believe, to San Diego County.

This is a formal hearing of the subcommittee, so we have an official record. We have got the 16 witnesses that have been scheduled to testify. Their statements will be in the record in their entirety. We will allow the Congressmen to ask questions.

Because of the sensitivity of this issue, we've got a number of Congressmen here from the local area who are not on the committee. They will have full rights to question, make opening statements. Those rights will be honored after the subcommittee members who are in attendance will be heard.

With that, I would like to ask Supervisor Dianne Jacob to come forward, because I'm told that she has a welcoming statement for the subcommittee.

Ms. JACOB. Good morning, Mr. Chairman and members of the committee. I'm here on behalf of the Board of Supervisors and 3 million people and businesses in the San Diego region. And believe me, they are absolutely thrilled and delighted and very thankful that you have come to San Diego to hear our plight, and particularly to our local Congressmen, Congressman Hunter and Bilbray and Filner, for being here today also for their help and support on this issue.

I'd like to set the tone for you, perhaps share in a very vivid way our plight to start the hearings today. San Diego County, without

question, is in a state of emergency, and we are on the brink of human and economic disaster, and there's no question about it.

Over the last 3 months, our electricity rates have jumped from some 3.2 cents per kilowatt hour to over 21 cents per kilowatt hour. That means doubling and in other cases tripling the prices paid for electricity in this region from just a few weeks ago, and with no real end in sight.

Many residents and businesses, frankly, just can't afford to pay these exorbitant rate increases that have been thrust upon our region basically without warning. The increases place an incredible burden on San Diego residents and many particularly who are elderly and on fixed incomes.

The several local residents such as the 100,000 mostly senior citizens who live in mobile home parks have no choice but to pay their full electricity bill or face eviction, because it's a pass-through. Many of these people have had to make some tough choices, such as buying food or medicine or operating life-saving medical devices or to pay their electricity bill. Those are not choices that these folks or anybody should be faced with.

On the other hand, the San Diego region is a $100 billion economy. We rank 37th in the world as far as an economic powerhouse. And these skyrocketing rates threaten to cripple our vibrant economy in this region.

Businesses have already begun to cut back hours, to lay off workers, and to add surcharges to their prices. And the ripple effect has only begun. As the first region in the Nation to experience truly electricity deregulations, San Diegans unquestionably are the guinea pigs in a bold new experiment. And so far, the experiment has failed, and we need a course correction.

People are suffering. Businesses are hurting. San Diego is in a crisis. The people and businesses in San Diego are innocent victims. We did not cause the problem, and we should not have to pay the price. Deregulation so far has not worked in San Diego, for several reasons, including, but not limited to, a lack of market competition which has basically caused an unregulated monopoly to exist.

Also, a California public utilities commission that has failed to provide aggressive oversight and actions to protect consumers, a power exchange that is required to set market price based on the last highest bid, and the inability of the energy service providers to be able to purchase electricity from any and all available sources.

I am hopeful that the information that you receive today will help not only in addressing the problem in San Diego, but also in preventing a similar situation from occurring throughout California and in other States throughout the Nation that are moving toward a deregulated electricity market.

If this problem cannot be solved for 3 million people in San Diego, what are the consequences for the 30 million Californians or others throughout the United States?

In response to the crisis, the County Board of Supervisors and several city councils, including the city of San Diego, declared a state of emergency, and we've asked our State Legislators, the Governor, State regulators, and others to take immediate action to pro-

vide consumers with immediate relief until permanent solutions are found to reduce and stabilize electricity rates in San Diego.

In response, legislators and regulators have put in place a 6.5 cent rate cap for most San Diego consumers. While the action is a welcome action, it is only a temporary stop-gap measure, and in and of itself, this rate cap is simply an installment plan with a big balloon payment at the end of 2003.

We must begin immediately to assure that San Diego consumers are held harmless for the accumulated debt in this balancing account and the more daunting task of deciding what additional actions must be taken to ensure that the energy market throughout California and markets throughout the Nation offer consumers a reliable and reasonably priced electricity supply.

I'm certain that you're going to hear from panelists today that there is a need to increase power supplies to drive down market prices. While this is extremely important and badly needed, we also know that the additional power supplies are unlikely to come on line anytime soon enough.

And meanwhile, the debt resulting from the 6.5 cent rate cap will continue to grow each day. Under the legislation signed by the Governor, the debt is estimated to be as high as $800 million at the end of 2003 with interest, I might add.

And unless investigations determine culpability and those who are blamed are required to pay, are forced to pay, the innocent people and businesses in San Diego will be forced to pay the $800 million balloon payment, and we cannot afford it, and that is absolutely not fair.

Therefore, I ask you to use your power to convince the Federal Energy Regulatory Commission to impose lower caps on generators throughout the western region as soon as possible. This action would reduce or eliminate the huge accumulation of debt as a result of the difference between that 6.5 cent rate cap and that current outrageous market rate for electricity.

Believe me, 21 cents a kilowatt hour is not a just and reasonable rate for electricity. This action will give us some real—some real, not artificial—temporary relief while we work on these permanent solutions.

On August 17, the Board of Supervisors hosted a conference, bringing together deregulation experts to provide us with some recommendation as to what actions need to be taken to solve the current prices.

The Board is expected to adopt an action plan later this month based on those recommendations, and we will be forwarding these to the Governor, Members of the State Legislature, State and Federal regulators. And I would also be happy to make sure that your committee is given a copy of our plan after the Board takes action.

Again, I want to thank you all very much for being in San Diego today. I look forward to working with you, as the rest of my colleagues on the Board do, too, to return San Diego's electricity prices to a reasonable and fair level while protecting consumers throughout California and the Nation from having a similar crisis as we have here. Happy to answer any questions you may have. And again, thank you once again.

Mr. BARTON. Thank you, Supervisor. We appreciate those remarks.

Is Mayor Golding here or her representative? Okay. Well, before Supervisor Jacob leaves, we want to thank you and your staff and the county staff for all the courtesies that have been extended to the subcommittee in arranging for the location and the room and all of the equipment and things like that. We really appreciate that.

The Chair would recognize himself for an opening statement, and then all other members of the committee, and then the visiting Congressmen will also be recognized.

We are here today in the second field hearing of the Energy and Power Subcommittee. Our first field hearing was done in Nashville, Tennessee, last spring on the situation in the Tennessee Valley authority and all of the issues that are involved in that region of the country.

We are here today because Congressman Bilbray, who is a member of the full committee, formally requested to both myself and to the full committee Chairman Tom Bliley of Virginia, that we come to San Diego County and firsthand get a look at the situation that's developed as a result of restructuring here in California.

As Congressman Bilbray has told me, the electricity customers here in the San Diego area, by and large, are paying some of the highest prices in the country for their electricity. Without talking to the California legislators that passed the bill several years ago, I can state unequivocally that that was not the goal of the great State of California when they restructured their electricity industry.

I want our hearing today, if at all possible, to be helpful. It should be a fact-finding exercise to determine exactly what is happening here in California, what the State of California might do to alleviate the problem, and what role, if any, the Federal Government, either on the regulatory side at the Federal Energy Regulatory Commission, or the legislative side in the U.S. Congress, should do to try to help solve the problem.

I personally am a very strong believer in the rights of States, and I'm a strong believer that free markets will work well for consumers if they're properly structured. I believe that Congress should not tell California or any other State how or when to deregulate its energy markets. I think the Congress can be helpful, though, if we actually do listen, listen to the experts, perhaps convene experts to first understand exactly what California has done and how this fits into the national picture.

I want to commend California for its effort to restructure its electricity industry. California's initiative encouraged many other States to act. No other State has identically restructured its electricity system like California has, and there are many experts outside the State that have questioned some of the things that California has done and commented on the potential problems that these steps might create.

One area of concern is California's complex and lengthy permitting process, stringent environmental laws, and its history of what I would convey as general opposition to new power projects. Be-

cause of all of these factors, no major new power plants or transmission lines have been built in the State in the last 10 years.

The one statistic that I have been told—and I'm not sure that this is the gospel—but I have been told that the State of California's peak load requirement is approximately 46,000 megawatts. Unfortunately, the State of California has a generating capacity of only 38,000 megawatts.

That means that California, if these facts are true, if these numbers are true, is a net importer of almost 15 percent of its electricity. This puts an upward pressure on prices in the best of circumstances.

In the past 3 years alone, the facts that have been presented to me indicate that California's demand for electricity has risen about 5300 megawatts. Supply has only risen 600 megawatts. The good news is that 25 project applications, with a total generating capacity of 15,000 megawatts, have been submitted since 1997.

The bad news is that the State has only approved 5 projects, 4 of which, thankfully, are in construction, and that only 1400 additional megawatts will be available by next summer. If supply does not equal demand, the market will naturally produce higher prices.

I understand that the State Legislature has recently passed and the Governor has signed a new law about permitting and siting, but I have been told that while these are steps in the right direction, it doesn't go far enough because these new legislative initiatives only apply to a small percentage of the pending projects.

No other State requires its distribution utilities, including San Diego Gas and Electric, who is going to testify later today, to purchase all of their power through the centralized power exchange or PX, an independent system operator or ISO.

Even more puzzling is the requirement apparently to force most power purchases to the day before or the actual day the electricity is consumed. Often, all purchasers must pay a market clearing price, which is the highest price of the last peak power needed rather than the average price.

The more I learn about the rules for purchases from the California Power Exchange, the independent system operator, the less I like them and the more it appears to me that they may be part of the problem.

If distribution utilities in California were allowed to enter into long-term fixed-price bilateral contracts, price volatility would be lower, and average prices should be lower.

The ability to hedge power prices through the centralized exchange or individually would also help reduce retail prices. I'm told that under existing California regulations, such hedging is not allowed.

It is always easier in hindsight to point out the flaws of a new system. Based on my preliminary analysis, it appears that the rules promulgated by the—what I'm told is called the Pease Bill are imperfect and have caused many problems. Now is the time to look at reforming these rules so that prices hopefully will moderate in the future.

Let me turn a minute to what Congress can do to help California. We can continue to encourage wholesale competition as we started in 1992 with the Energy Policy Act. We can require all util-

ities to interconnect with any generator using one agreed-upon Federal standard for interconnection. We can require incentive rates to get more transmission capacity built. We can remove restrictions that discourage public power and rule electric co-ops from opening their markets and competing. And we can compliment State actions, making the State restructuring more effective without telling States what to do.

Federal legislation which passed my subcommittee last year, which hopefully in a reform process, will come before the subcommittee and the full committee in the next Congress, does many of the things that I've just outlined. It won't solve the problems overnight, and there's some things that California must do itself.

I'm confident that California can correct the current situation. First and foremost, Californians need to agree on the rules and regulations that allow new power plants and transmission lines to be built in a reasonable timeframe.

When supply of power is more in line with the demand for power, prices will moderate.

I look forward to hearing the testimony today, and I want to thank, again, Congressman Bilbray for requesting the subcommittee to come to California and hear what the facts are.

With that, I would recognize Congressman Bilbray for an opening statement.

Mr. BILBRAY. Thank you, Mr. Chairman. Mr. Chairman, allow me to say with a little pride, I want to welcome you to our little corner of paradise, San Diego, that at the moment seems to be going through electricity Hell.

I want to also thank you and Chairman Bliley for taking the time and the effort and the resources to hold this hearing, a hearing that is not only absolutely essential to the citizens and the consumers of San Diego County, but I think is essential for the rest of the Nation to learn from mistakes that occurred here in California and have severely impacted the consumers of San Diego.

I want to thank the County Board of Supervisors and their staff for providing this room that I am not a stranger to and the facilities for this hearing.

Mr. Chairman, I think that you've been briefed on the crisis before the San Diegan consumers, the tripling in the last year of the consumer rates, the absolute devastating impact on small business and senior citizens on fixed incomes and families who are struggling to try to pay their energy bills while paying all the rest of their bills.

And the big question is why. How did this happen, and how can it be corrected here in San Diego, and how can it be avoided in the rest of the Nation. And that's why I'm very, very pleased that you're here as someone who has really taken a leadership role.

In the national energy dereg, I think that as an old history major, you learn real quick the saying that those who do not learn from history are doomed to repeat it, and I think you are here today in no little way to learn to make sure that the mistakes made in California do not occur in the rest of the country.

Mr. Chairman, last week our committee held major hearings on the Firestone tire issue. And you saw people piling in and dis-

cussing that item, and you saw a lot of people talk about that hundreds of Americans were affected, even to the point of death.

And though there has not been any documented deaths related to this issue, I want to point out that with all of the attention that the Firestone tire issue got last week in Washington that affected hundreds of people, this is an issue that affects millions in San Diego County and, if it is not corrected, could affect 32 million people of California. And if it is not learned from the mistakes, could affect the 200-plus million people of the United States.

The difference is, last week we spent time watching private sector and government officials point fingers at different business community and different business elements to find blame. I don't think we need to do that today. This is a mistake that rests mostly in the hands of those of us in government, one way or the other.

I think that those in government who are involved in this mistake know it was a mistake, are open to it and are open to correcting the problem. So I think that in this hearing, we have the challenge of moving beyond finger-pointing and moving toward finding solutions and not problems. We all know where the problems lie.

I have major questions, as you do. Interesting to hear that under the terms of a proposal that was supposed to be deregulation, it appears to me that a public oversight body that was abandoned and a new group called the PX or the Energy Exchange, which was basically a group of providers and generators with distributors, were the ones who were going to determine price for the consumers of San Diego County and the State.

I have major questions about was this deregulation or reregulation under a different title. I have major questions about what's the ability of the Federal Government to step in at this time to protect the consumers right now with real long-term protection.

I would like to know what the FERC can do, what the Federal Government can do to come in and to initiate what the law says is supposed to be fair rates. And I think, as the chairwoman of San Diego County said quite clearly, no one in their right mind can point to what the San Diego consumer is paying today and say that it is fair.

And so the big challenge is, where can we find what the State needs to do to correct their side of the problem, but what we can do to help the State to get themselves out of this problem, but most importantly—I would have to say this as an old lifeguard. What we need to do is figure out not why somebody went swimming, not why somebody got caught in a terrible situation, but how we can get in and help rescue them and get them back on good fiscal and fair soil and good rates.

So I would like to say, Mr. Chairman, thank you very much for being here, and I'd just ask us to try to work together to find those answers so that the consumer on the bottom line is treated fairly, as our Federal and State laws specifically say.

And again, thank you very much for taking the time. And I would like to thank my colleagues for being here because I know there's a lot going on all over this country, and it's nice to see that those of us in San Diego have finally gotten some attention to the

fact that our crisis here is something the Nation needs to listen to and learn from and help correct. And I yield back, Mr Chairman.

Mr. BARTON. Thank you, Congressman Bilbray. And again, we are very appreciative of you calling the issue to our attention and asking us to come to California.

The Chair would now recognize the Congressman from Arizona, the Phoenix area, Congressman John Shadegg, a member of the subcommittee, for an opening statement.

Mr. SHADEGG. Thank you, Mr. Chairman. In deference to the 16 witnesses we have here today, I'll try to keep my remarks brief. I would request unanimous consent to insert my entire written opening statement into the record.

Mr. BARTON. Without objection.

Mr. SHADEGG. Let me begin by commending you for holding this hearing. We in the West face a number of issues that are very, very important to us. This is a critical one for all the people of the San Diego region and a critical issue for all of the people in the Southwestern United States.

I also want to commend my colleague on the full committee and my colleague on the subcommittee, Mr. Bilbray. He is consistently in the lead in taking care of issues for the people of California, and we have looked at his work with regard to gasoline and the problems that are now being caused to our water table, and indeed in Arizona try to follow some of the lead he's made on that issue. And again, on this issue, I commend you, Brian, for holding this hearing.

Everyone in San Diego knows that most Arizonans are Zonis. That is, when summer comes, we all come here to get out of the Arizona heat. And having spent a part of the weekend here in Arizona—I mean here in San Diego in the San Diego area, I can assure you that this is a delightful place, and I understand why many of my constituents spend time here.

The issue of electricity deregulation is an important one for the Congress and for the people of California and for the people of the Nation. My goal here today is to try to listen and try to learn from California's experience to try to find out what has gone wrong and to try to make sure that, as we in Arizona pursue electricity deregulation, and as we in the Congress do so on a national level, that we can learn from the process that was adopted here, perhaps recognize some of the errors that were made.

I commend California for having had the courage to get out into the restructuring field. The goal, as the chairman indicated, of restructuring is not to produce higher prices, but rather to produce both lower prices and better service. And I believe we can go in that direction.

I join you, Mr. Chairman, in your comments about deference to State and to State discretion in this area. I do not see the Federal Government as being the be all and end all for structuring the electricity market and for imposing on the various States a one-size-fits-all process.

So I think it is a great opportunity today to learn from California, to learn what they have done right and perhaps what they have done wrong. I also concur with Mr. Bilbray and his plea that

we not so much spend today looking at who is to blame, but rather what is to blame and how we can fix it.

With that, Mr. Chairman, I'll conclude only by saying that having spent the morning and the evening here last night and enjoyed the weekend, one of the tempting recommendations that this committee ought to come forward with, in my opinion, is that we move the capital from Washington, DC to San Diego, because I like it here much better than Washington.

Mr. FILNER. Second.

Mr. BARTON. Well, that may be a move in the right direction. I'm not sure we'd get this far west, though.

Mr. SHADEGG. You'd probably go along with Texas, wouldn't you, Mr. Chairman?

Mr. BARTON. Somewhere closer to the Mississippi, anyway.

The Chair would now recognize the gentleman from San Diego County, Congressman Filner, of Congressional District 50, which just as an aside, Texas and New York are the second largest delegations in the Congress, and we each have 30. So it says something about the strength of the California delegation. Congressman Filner is number 50, and I'm told that Congressman Hunter represents District 52. So that's a lot of folks from out here.

Congressman Filner is on the Transportation Committee. His district is in San Diego County, and obviously he's got an interest in this issue. So welcome to our subcommittee and our full committee, and you're recognized for an opening statement.

Mr. FILNER. I thank the chairman, and I do have an opening statement for the record that I'll try to summarize. As the other—as all of us from San Diego join in, we welcome you here. We thank you for being here. It's important that you're here, and I appreciate the courtesy of being allowed to sit on the committee with you.

Mr. Shadegg's statement about moving the capital will appear in the Phoenix papers tomorrow, so we thank you for the compliment.

Let me, in my opening statement, make my attitude clear on this. No. 1, this State should never have deregulated in the situation where you have monopoly control of a basic commodity. It's absolutely predictable that this would have occurred under this situation, and now we are struggling for ways to correct it. It should never have happened to begin with. We have a basic commodity. We have a monopoly. It doesn't mix for the consumer.

Let me also say that I think we ought to be focusing—as the chairwoman of the County Board of Supervisors pointed out, we have a short-range problem which deals with the suffering, the fear, the panic of hundreds of thousands of people in this county, people facing going out of business, people facing the possibility of life-and-death decisions. That has to be corrected immediately. And we have the long-range solution, which others on this body have referred to.

Let me say in terms of the first one, the State legislature—excuse me—under the leadership of some of our representatives here, State Senator Alpert, Assemblywoman Davis, I think produced a bill that went as far as possible in terms of what was achievable at the State level.

But as the supervisor—the chair of the supervisor has pointed out, this is a deferment of a bill that will become due at the end

of the 2 or 3-year period. What we must do is get rid of that potential.

Several people said, "What can FERC do? What can the Congress do?" Let me tell you, when you hear from the FERC commissioners, they will tell you, as I've read their testimony, that they are not—they do not have the authority to roll back prices retroactively.

They have the authority to impose some caps. They do not have the authority to roll back prices retroactively. Which means that our consumers are still on the hook. I hope the chair will consider, when he gets back to Washington, HR-5131, a bill which I introduced last week, which was referred to this committee, Mr. Chairman, which directs the FERC to roll back wholesale prices in the western region to the prices they were before deregulation.

And it orders the wholesalers to refund the price over that level to the consumer. That is the only way, I would submit, Mr. Chairman, that this Congress can—that the consumers will not suffer. It's what Congress has the authority to do. We must give FERC the authority to roll back those prices. My bill is called Halt Electricity Price Gouging in San Diego Act or HELP San Diego, and we should help it now.

So I hope, Mr. Chairman, you'll be considering this. I hope my colleagues from San Diego County will join me in sponsoring this legislation. It's only a retroactive roll-back that will prevent our small businesses and our individuals from facing a balloon payment of who knows how much at the end of the 2 or 3 years.

Just one brief statement in terms of our long-range solution. I applaud again the chairwoman of the board of supervisors for asking her body to look at local control of electricity industry, the so-called municipalization of power.

I think the only way that we in San Diego are going to get control of our own energy future is take the generation decisions out of the hands of monopoly and put it under the hands of our own people. We should be looking at that right away.

My colleagues referred to that we are the poster children for the rest of California, that if we don't act to avoid the problems, 32 million people will be affected. I would like to amend that because probably close to 10 million Californians do have their own electricity utilities. The city of Los Angeles has their own power company, basically. The city of Sacramento.

So there are millions of Californians that are not going to suffer this future because they have control of their own pricing. So let us look to those areas and begin to looking at local control of our own energy future. I thank the Chair.

Mr. BARTON. We thank you, Congressman Filner, for your remarks. Now recognize Congressman Duncan Hunter, whose suite is next to mine. His office is right next to mine in the Capitol. Congressman Hunter is a subcommittee chairman of the Armed Services Committee and has done tremendous work in providing for a national defense and is a recognized expert in that area. Welcome to the Energy and Commerce Committee, and we'd recognize you for an opening statement, Congressman Hunter.

Mr. HUNTER. Mr. Chairman, thank you and thank you so much for coming on this mission, which I hope to some degree will be a rescue mission.

You know, I left my district in east county a few minutes ago to get over here and had a chance to talk to some of my small businessmen, as we've all been doing, and our consumers. And I think one part of the factual base that you're going to receive this morning is that this is an emergency, and it's a crisis that is bigger in proportion than any natural disaster San Diego has ever had.

The amazing part of this is the amount of life savings, money that could go to mortgage payments, go to educate children, and in the case of small businessmen, the capital base for many small businesses has already left or is in the process of leaving within the next couple of months.

You'll hear businessmen who will talk about small machine shops going from a $25,000-a-month electricity bill to $90,000 a month. And that is consistent across the industry and the small business base in San Diego County, and I think you'll hear that testimony today.

What we have right now is quite unusual, to say the least. You've got this exchange where literally the real time energy costs can be bid up and have been bid up to what our staff calculated out to be 9,000 percent increases, where you have to go in and for the next several hours buy electricity from the lowest bidder.

And this is similar to having the oxygen supplier in a hospital literally 5 minutes before a life-saving operation being allowed to auction off his oxygen. There is no competition. This is not a competitive situation, and it's not a competitive situation because we lack the one most important element in a competitive situation, and that's a consumer with some choice.

A consumer can't walk across the street and buy that other loaf of bread at a lower price. They have one socket that they can plug their electrical appliances into, literally, or a few, and they are totally captives of the situation.

So you've got the patient laying there ready to be operated on, literally with their life savings at stake, and you have a system where the suppliers can auction off in real time that life-saving commodity, and it's gone up again to 9,000 percent of what it was just a few hours earlier. That is—and I'm speaking about the $90 per kilowatt hour costs that have occurred.

You know, I've got FERC's—the Federal law here in front of me that FERC operates under, and it says—and I quote—any such rate or charge that is not just and reasonable is hereby declared to be unlawful. That was put there for a reason.

In my estimation, although this is a State law that we've—and a State deregulation, the Federal Energy Regulatory Commission not only has jurisdiction, but they have a charge to cap these rates, and they haven't done it.

So I think that the only thing we should come away from this hearing with the agreement that 9,000 percent increases are not just and reasonable, and the overall 400 or 500 percent increases that we've seen, the 21 plus cents per kilowatt hour charges, are not just and reasonable, and the Federal Government should act, even though this has been a State—this has been a State creation.

Second, I think for San Diego County, it's clear to us we're going to lose our industrial base here. And we're not going to attract a high-paying industry and good jobs because the one thing that

businesses big or small want to avoid is unpredictability. And the situation that we have right now is one where there is total unpredictability.

A machine shop that's thinking of moving to San Diego County or a major aerospace concern has to look at what's happened with this incredible volatility of our prices for energy and conclude, like some of our businesses now that are paying $100,000, $200,000 a month more than they were for electricity alone just a few months ago, that it's a risky business to locate in San Diego County.

So we have to have stability. The only way we can achieve that stability right now, because of this incredible situation where you bid the oxygen off just before the operation, so to speak, is to have a district, a municipal district in San Diego County operated by a subdivision of the State.

And the proposal that I made on this a couple of weeks ago to the County of San Diego was to the effect that we take one asset that we have right now, which is a 36-inch natural gas line at Miramar Marine Corps Air Station. We also have a plug-in to the power grid at that location.

We buy some of the new high-tech equipment, like the General Electric LM-6000 generators that generate for Sacramento right now at 3.5 cents per kilowatt hour, or some of the machines that our own company, Solar Turbines, has in San Diego County. Their machines can handle 17 to 20,000 homes per machine or the equivalent. And we build our own power station.

And by doing that, we establish predictability and stability for the industrial base, the small business base and the consumer base in San Diego County. So that—under the current law, that, to me, appears to be the only way off this extremely volatile exchange, which literally is robbing San Diegans right now of their life savings. And in cases of businesses, of their total cash reserves in just a period of a few months. Thank you for being with us, and I look forward to a good hearing.

Mr. BARTON. Thank you, Congressman Hunter.

That concludes the opening statements. All members of the subcommittee who are not present that wish to put a written statement in the record, the Chair would ask unanimous consent that that be allowed. Hearing no objection, so ordered.

Mr. FILNER. Mr. Chairman, may I ask a question of procedure?

Mr. BARTON. Sure.

Mr. FILNER. I take it we—the public—this is a hearing, so there is no public testimony that's allowed?

Mr. BARTON. There is no sign-in sheet for people that just show up today, no, sir.

Mr. FILNER. I mean, I would hope if we—if we sometime—if we conclude the hearing in some reasonable fashion, that members of the public be allowed to speak. But more specifically, one member came in to me this morning and said he thought he had been on the agenda. He happens to be the business manager of the local IBEW union here, International Brotherhood of Electrical Workers, a major stakeholder in all of this, and was surprised that he was not on the agenda. Is there any way we can either add him or get his statement for us?

Mr. BARTON. Well, we have 16 witnesses scheduled. We can certainly get a written statement and let both staffs of the committee look at it, and I'm sure we can put that into the record.

Mr. FILNER. I would hope, if we have time, that we might hear from those who have big stakes in this that we have not scheduled in advance, depending on your time. I know that you have time constraints, Mr. Chair.

Mr. BARTON. Well, we will not be allowed to add witnesses to the panels today, but we can certainly, again, take a written statement, let both staffs look at it, and I would be surprised if we couldn't put that written statement into the record.

And my guess is that members of the California delegation could certainly meet individually with representatives that are not on the formal witness panels. And based on that, perhaps do another hearing at a future date in Washington. Thank you.

We'd now like to call our first panel forward. We have Mr. Roy Tyler, who is the owner of Tyler's Taste of Texas, which seems to me to be an oxymoron in California, but we'll see. Mr. Jeffrey Byron, who is the Energy Director of the Oracle Corporation. Mr. Michael Shames, the Executive Director of the Utilities Consumers' Action Network.

Mr. Jan Smutny-Jones, who is the Executive Director for Energy—Independent Energy Producers. Mr. Greg Barr, who is Vice President for Power Generation for Solar Turbines, Incorporated. Mr. William J. Keese, who is Chairman of the California Energy Commission. Mr. Terry Winter, who is the President and CEO of the California Independent System Operator. And Mr. George Sladoje who is President and CEO of California Power Exchange.

Welcome, gentlemen. I believe that Congressman Hunter and Congressman Bilbray both want to give a little bit more formal introductions to some of these panelists. We'd recognize Mr. Bilbray. If you want to give us a little more detail about one of the witnesses.

Mr. BILBRAY. Yes, Mr. Chairman.

Mr. BARTON. You've got to flip that little switch. He's been here a long time. He knows.

Mr. BILBRAY. It's been a while since I—I was just trying to make sure I'm on. Oh, there it is.

Mr. Chairman, it's my pleasure to introduce Mr. Barr, who is the vice president of Power Generation for Solar Turbines. Solar Turbines actually has been keeping me informed of the challenges of the small generator being able to get on line or the medium-sized generator being able to get on-line onto the grid to be able to provide alternative to the large traditional power generators.

The vice president has been very, very innovative of not only the ability to produce fair and cost-effective alternatives to traditional power sources, but also very environmentally friendly and economically viable power.

And so I'd like to welcome the vice president and thank him for being here. And I'd like to say sincerely, thank you for all the time you've taken trying to educate this member of the Congress committee.

In fact, I—the chairman of the full committee has said that my appointment on the task force, the special task force, was because

they figured I'd listen to your facts and figures enough to where if anybody knew how to address this issue of interconnection and the whole concept of allowing more people on line, you were able to educate me on that, and I want to thank you very much for that.

Mr. BARTON. Congressman Hunter, do you want to give us a little more formal introduction on——

Mr. HUNTER. Sure. And I know we've got to get going here, Mr. Chairman, but I just wanted to let you know, we have Roy Tyler, who is my——

Mr. BARTON. Turn your microphone on, please.

Mr. HUNTER. Thank you, Mr. Chairman. Roy Tyler, who has a business in San Diego County, I think, will have a great description of what happens when you mix an entrepreneur who came to San Diego with just a few bucks in his pocket with 20-hour work days and the creation of three restaurants now that are nationally recognized as being some of the finest in the Nation, and you have a chance to juxtapose that against this incredible disaster that has befallen all of us small business folks.

And Roy was just, I might say, on national television with one of the best dinner theaters in the United States of America, has had great publicity as a result of that. Brought a loot of entrepreneurial skills from Texas and applied them to California and helped all of us in doing that.

So I welcome Roy, and I welcome also all the panelists who are with us here today. Now let's go to work.

[Additional statements submitted for the record follow:]

PREPARED STATEMENT OF HON. JOHN D. DINGELL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

I commend the Subcommittee for holding this hearing to examine the results to date of California's experiment with electricity deregulation. This presents something of a moving target, however, since the California legislature enacted two new laws modifying the original deregulation statute and a third is pending.

Representative Bilbray has rightly noted that "sometimes governments make mistakes, and this is one of them." It is fortunate that California's problems have not yet spread to the rest of the country and that other states have been left to make their own judgments about what is in their citizens' best interests. In retrospect, Members of Congress should breathe a sigh of relief that they did not jump on the bandwagon for a federal retail competition mandate, a concept promoted in several bills referred to the House Commerce Committee, before fully grasping its consequences.

The bill reported almost a year ago by this Subcommittee wisely did not include a federal mandate. Unfortunately, I was unable to support my good friend Chairman Barton's effort because it contained a number of other ill-conceived measures which did not seem likely to benefit the average consumer. In particular, the bill was weak on market power issues, limiting the Federal Energy Regulatory Commission's authority to review mergers and set transmission policy. The bill also took an overly friendly approach towards the federal power agencies, preserving the public power preference for present Bonneville Power Administration customers which Rep. Bilbray has rightly questioned in recent weeks.

In short, while the Subcommittee recognized the folly of forcing deregulation on the states through a federal mandate, no alternative has emerged that would address concerns about market power. Nor is it clear that federal legislation could resolve the sort of problems California has experienced, first and foremost being the lack of adequate generation capacity.

The testimony presented today will doubtless prove helpful to Congress when it convenes next year and takes up the electricity restructuring debate once again. The States are our laboratories and there will be much to learn from the California experience. One lesson from California's experience is look before you leap—a caution that applies equally to state and federal legislatures. I hope that California can straighten out its current difficulties and achieve the benefits of competition. In

terms of the role of Congress in the restructuring debate, however, it is imperative that we learn from the states' experiences and enact new federal electricity laws only when it is clear that the effect on consumers will be positive.

PREPARED STATEMENT OF HON. TOM CAMPBELL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

The problems encountered in the Bay Area and in San Diego point out the danger of partial deregulation of electricity generation. Until complete wholesale deregulation occurs in the US, a step requiring federal law, the promise of lower prices from deregulation in California may not result.

From both an economic and environmental perspective, I believe the solution is to focus attention on fostering renewable energy and energy efficiency. This will shift us away from dependency on fossil fuels, which are inherently subject to large and unpredictable shifts in price.

In the long run, fully competitive electricity production is in the nation's and California's interest. However, recent events have highlighted some systemic changes that must be made in the way full deregulation is pursued. I strongly advocate these changes.

Here are the main points:

1. Increase Supply

New electricity-generating capacity must be created, and I believe it is necessary to build new cleaner, power plants. Among these, there should be several that are not vulnerable to the fluctuations in price seen in fossil fuels.

A government-provided fiscal incentive is necessary to induce the construction of facilities that generate electricity from renewable sources. This incentive should be financed by a surcharge on electricity from non-renewable sources.

Recently, I took the opportunity to testify in favor of the siting of a new electrical generating facility in Silicon Valley. Many neighbors were upset with me, but could not see how I could call for more supply of energy to California but demand it be built elsewhere.

We also need to build more transmission capacity to bring electricity into our state. Without that, Californians will be captive to the providers of electricity located in California only.

2. Decrease Consumption

The waste of energy in California is still one of the largest causes of shortage. We need to lighten the load on the power grid; for example, a full 30% of the peak energy consumed is due to A/C use.

The U.S. Department of Energy should move at once to upgrade minimum efficiency standards substantially for new air conditioners by at least 30%. California' Public Utilities Commission must provide all consumers with enhanced information, on-line and otherwise, on the largest sources of wasted energy.

We need to extend California's incentives for long-term energy efficiency investment, as proposed in bipartisan legislation that is now on the Governor's desk. And we should take the relatively simple steps that consumers can take to reduce that waste.

We should also require real-time metering for all industrial and large commercial users, now, including commercial users, do not know the cost of the energy they are using in real time, so they have no incentive to ration their use by time, or to invest in conservation.

3. Meet the Demands of the "Gap" Between Producers and Suppliers

Wholesale price caps already exist. Retail price caps set at the inflation-adjusted level before deregulation are needed as an interim measure. They should continue at least until several months after national electricity markets are fully competitive.

Relying on the supply and demand to keep down prices, before national sources of energy production and transmission became available for San Diego, proved inadequate to prevent a hugely damaging price-hike here.

I expect that eventually competition will bring prices down; but as long as deregulation has only partially been implemented, the potential for distortion is great. The key to future price stability remains the reduction of our dependency on fossil fuels while we continue to foster renewable energy and focus on energy efficiency.

I thank you for the opportunity to submit this testimony, and I look forward to working with the Congress toward a more cohesive strategy that assures that our energy supplies are both readily available and reasonably affordable for consumers.

Mr. BARTON. And I'm told that Congressman Filner wants to make one special introduction.

Mr. FILNER. I'd like to welcome Mr. Michael Shames, who is the executive director of what we call UCAN, Utility Consumers' Action Network. He is the one person in this county who has exercised an independent stance, an independent expertise on what is going on.

And I will tell you, when this crisis broke, there was virtually no public official who did not call Michael Shames. And I want to thank him for maintaining your expertise and your independent judgment throughout many, many, many years. And we look forward to hearing your perspective on this today.

Mr. BARTON. Well, gentlemen, we want to welcome you to the panel. Now, we've got 16 witnesses, and each of you are very important. We can't tell you how much tugging and hauling we had to do to narrow it down to 16, but we are going to have to ask that your opening statements be in the range of 5 minutes. And we have a little egg timer, so I'm going to click you at 5 minutes. If it takes another minute or so to wrap up, that's fine. I apologize in advance for having to be that constraining.

I'm told that Mr. William Keese has a pending engagement somewhere else, so I'm going to start with you, Mr. Keese, and then we'll just go back to Mr. Tyler and start down the road. So we'll get your statement first, and then if you need to leave, you would be excused. Hopefully, you could stay for some questioning. Mr. Keese.

STATEMENTS OF WILLIAM J. KEESE, CHAIRMAN, CALIFORNIA ENERGY COMMISSION; ROY TYLER, OWNER, TYLER'S TASTE OF TEXAS; JEFFREY D. BYRON, ENERGY DIRECTOR, ORACLE CORPORATION; MICHAEL SHAMES, EXECUTIVE DIRECTOR, UTILITY CONSUMERS' ACTION NETWORK; JAN SMUTNY-JONES, EXECUTIVE DIRECTOR, INDEPENDENT ENERGY PRODUCERS; GREGORY BARR, VICE PRESIDENT, POWER GENERATION, SOLAR TURBINES, INC.; TERRY WINTER, PRESIDENT AND CEO, CALIFORNIA INDEPENDENT SYSTEM OPERATOR; AND GEORGE SLADOJE, PRESIDENT AND CEO, CALIFORNIA POWER EXCHANGE CORPORATION

Mr. KEESE. Mr. Chairman, thank you, and I will stay around through what's the noon hour. I was elected chairman of the National Association of State Energy Officials yesterday, and I'm chairing a 3-day meeting in Redondo Beach starting this morning dealing with the high fuel prices in the northeast, dealing with the high gasoline prices across the country, and dealing with this issue on a national basis.

I do appreciate being here in San Diego, particularly on behalf of this administration and Governor Davis, who has indicated that deregulation can work. Deregulation is not working, but deregulation can work, but we must all, everyone involved, work together to find the solution.

As you mentioned earlier, the California legislature passed two bills this year. Passed actually 10 bills, the Governor has signed two of them. And I'd like to just refer to those two briefly.

Bill 8970 has granted the Energy Commission $50 million to give grants in energy efficiency and renewal generation to try to bring more power on before June 1 of next year, one of our critical areas.

It also has given us an expedited siting process. Currently, the Energy Commission cites power plants in a 1-year timeframe. We do it within 12 months of the acceptance of the filing for a power plant. The delay in building power plants is a result of the additional 2 years it generally takes to build a power plant after it gets licensed.

So we have at least a 3-year process there. We will now have an expedited siting process for plants that do not have a significant adverse impact on the environment. I will leave AB-265 to Ms. Lynch of the Public Utilities Commission. It deals with the rates in San Diego particularly.

The citizens of San Diego have a right to be concerned with the prices that they have seen, which were obviously not intended by the legislation, AB-1890. How did we get here? I have attached to my written presentation, which I believe the committee members have, four graphs. And you will see in the first graph an outline of the States that are growing more rapidly than the others in the country.

And there is no doubt, when you look at it, that California is surrounded by Arizona growing at 30 percent, Nevada at 50 percent. Utah, Oregon, Idaho. Every State around California is growing faster than we are.

Yes, it is true that California did not build a major power plant in the last 10 years. Actually, very few major power plants were built anywhere in the country or the West.

The problem is a Western problem. There have been moves now to start building power plants, and the actual number is 50. We are now talking to developers of 50 power plants in California who want to go through the California Energy Commission siting process.

The second slide would indicate where we are in reliability. That is, how much operating reserve do we have when we reach our peak demand. I will just give you a little fact that if we have a hot year, if we have a hot siege, a heat storm, we require 4,000 megawatts more than if we have a normal year. This was not a heat storm year. This was a little above normal year. So that's 8.5 percent more load.

We're going to need something to accommodate that additional 8.5 percent that would come if we had a heat storm. And a competitive market for generation is not the way that you will achieve that. Because very few generators will be willing to put the $300, $400 million into building a power plant that's necessary once a year for 3 days.

The third slide would show you our peak demand. And you will see that 29 percent of our power at peak goes to air conditioning in California. Air conditioning therefore becomes a great target for energy efficiency and for addressing the issue of peak demand.

Additional generation is a possibility. The last slide will show you the five projects the Energy Commission has approved, four of which are under construction, three of which may come on next summer.

We are doing everything in our power to work with the developers to see if we can move the dates up. You will see on the slides——

Mr. BARTON. That's 5 minutes. We'll give you 1 more minute.

Mr. KEESE. Okay. They're coming on from July to September. We are working to try to get them facilitated so that they can come on by June, which is the time we need.

I will just cut to the end and suggest what there is that Congress could do. And we are very strongly supportive of S-2718, the Smith bill, Energy-efficient Buildings Incentive Act, which will deal with buildings and appliances. We would strongly urge your support of that.

We are strongly urging to either adopt new energy-efficiency standards for air conditioners, standards that apply to the west, where it's dry, and to the east, where it's damp. There's a tremendous difference. We think that's important.

We would like a Federal exemption from the preemption of the Federal Government in appliance standards for efficiency, and the bill that was passed asks us to try to expedite that. Support of communities.

And we would ask FERC to confront the major issues of wholesale prices and to give California all the flexibility that they can. Thank you, Mr. Chairman.

[The prepared statement of William J. Keese follows:]

PREPARED STATEMENT OF WILLIAM J. KEESE, CHAIRMAN, CALIFORNIA ENERGY COMMISSION

Mr. Chairman I appreciate the opportunity to testify before the Committee in my role as Chairman of the California Energy Commission on electricity industry restructuring in California.

I would like to thank you for travelling to California and especially for meeting here in San Diego where the local citizens are justifiably interested and concerned about both the short- and long-term prospects of restructuring.

In response to those concerns, the California Legislature passed and Governor Davis signed two important bills in the past ten days, AB 970 and SB 265.

Two of the principal features of AB 970 are:

First, the allocation of $50 million to the Energy Commission to implement cost-effective energy conservation and demand-side management programs. We believe it is critical that we reduce our peak electricity demand and improve energy efficiency. This allocation of funds is an important component in achieving these goals.

A second key feature of the bill is the creation of an expedited siting process for power plant projects. Projects will be eligible for this expedited process if, on the basis of an initial review, the Energy Commission concludes there is substantial evidence that the project will not cause a significant adverse impact on the environment or electrical system, and will comply with all applicable laws.

AB 265 requires, among other things, the California Public Utilities Commission to establish a ceiling on the energy component of electric bills for residential and small commercial customers through December 31, 2002, retroactive to June 1, 2000.

The citizens of San Diego have experienced firsthand what happens when a market does not function properly and when there are barely sufficient resources to meet the demand for electricity during periods of peak use.

How did we get in this situation? First, population and electricity demand have grown substantially in California and the West in the past decade. Remember that California and the West, including British Columbia and Alberta, are part of an interconnected electrical grid. Problems in one area can affect the entire western United States.

California, which used to import large amounts of energy from the Northwest and Southwest during the summer months, has seen these sources diminish as electrical demand has increased in those areas. In addition, in the new competitive and restructured market, California generators are now exporting power out-of-state.

Because of the uncertainty created by restructuring in the latter part of the 1990s, few power plants were constructed in California. This meant that electrical reserve margins began to decline.

Today, we find ourselves with inadequate generating capacity during periods of peak demand which corresponds to hot summer days when people are using their air conditioners. During these periods, air conditioning accounts for about 29% of Statewide peak demand.

One solution to our problem in California and the West is additional generation. In the last year the Energy Commission has licensed five power plants with a combined generating capacity in excess of 3600 megawatts (MWs). Three of these facilities are expected to be on line sometime during the summer of 2001.

In addition, we are currently reviewing an additional 14 applications with a combined generating capacity exceeding 8000 MWs. We believe this additional generating capacity, combined with new facilities in the other western states, will create a more competitive electricity market in a few years.

However, even in the long-term, more generation by itself is not the answer.

In order for the restructured electricity market to function competitively, and to provide benefits to consumers in San Diego, as well as other parts of California, and the rest of the western states, mechanisms must be in place that allow consumers to respond to higher prices.

California Power Exchange data suggests that a three percent decrease in demand at peak hours can reduce market clearing prices by 25%. This means it is more cost-effective to reduce peak demand for electricity than to build power plants to meet peak demand.

The basic framework to provide incentives to end-users, including interval pricing and interval data recording meters, are important elements of a robust competitive market. When consumers reduce demand during periods of high prices, they will benefit themselves and concomitantly lower prices for others. This also reduces the need for additional power plants.

It is also critical to continue efforts to promote energy efficiency. First, energy efficiency programs will help reduce demand. This will contribute to both improved system reliability and lower prices. Second, there are significant environmental benefits associated with reducing demand since the environmental impacts of constructing and operating additional power plants are avoided.

Along with additional generation capacity, there is a need for selected upgrades and expansion of our transmission line system in California, particularly in constrained areas like the San Diego region.

The Energy Commission is currently funding a $7.2 million contract with the Consortium for Electric Reliability Solutions to determine what solutions might exist to improve the reliability of the electric grid. DOE is providing approximately $10 million in additional funding.

New transmission lines, however, do not represent a quick fix as they can take 5 to 7 years to plan, permit, and construct. Also, in California, they are not always the appropriate fix. It has not been the lack of bulk transmission lines from out-of-state that has constrained electricity supply in California this summer. For example, problems with adequate generating capacity and transformer capacity constraints were major factors leading to rolling blackouts in the Bay Area in June.

There are many things Congress can do to help address the electric supply, price and reliability problems facing California and the West.

• Pass the Smith Bill (S. 2718) which would enact the "Energy Efficient Buildings Incentive Act," which will provide federal tax credits and deductions for energy-efficient design and construction of residential and commercial buildings.

We believe this will lead to substantial energy savings in California, approximately 150 MWs annually.

• DOE should adopt a new efficiency standard for residential air conditioners which will lower energy bills for homeowners.

We are recommending the standard be set at SEER 13 (seasonal energy efficiency ratio) and include an EER (energy efficiency ratio) requirement because this is based on a hot, dry climate like the West's, which will do more to reduce peak demand.

• DOE should grant California exemptions from federal preemption for new state appliance efficiency standards covered by federal law.

AB 970 requires the CEC to consider expedited adoption of efficiency standards that achieve the maximum feasible level of conservation that is cost-effective.

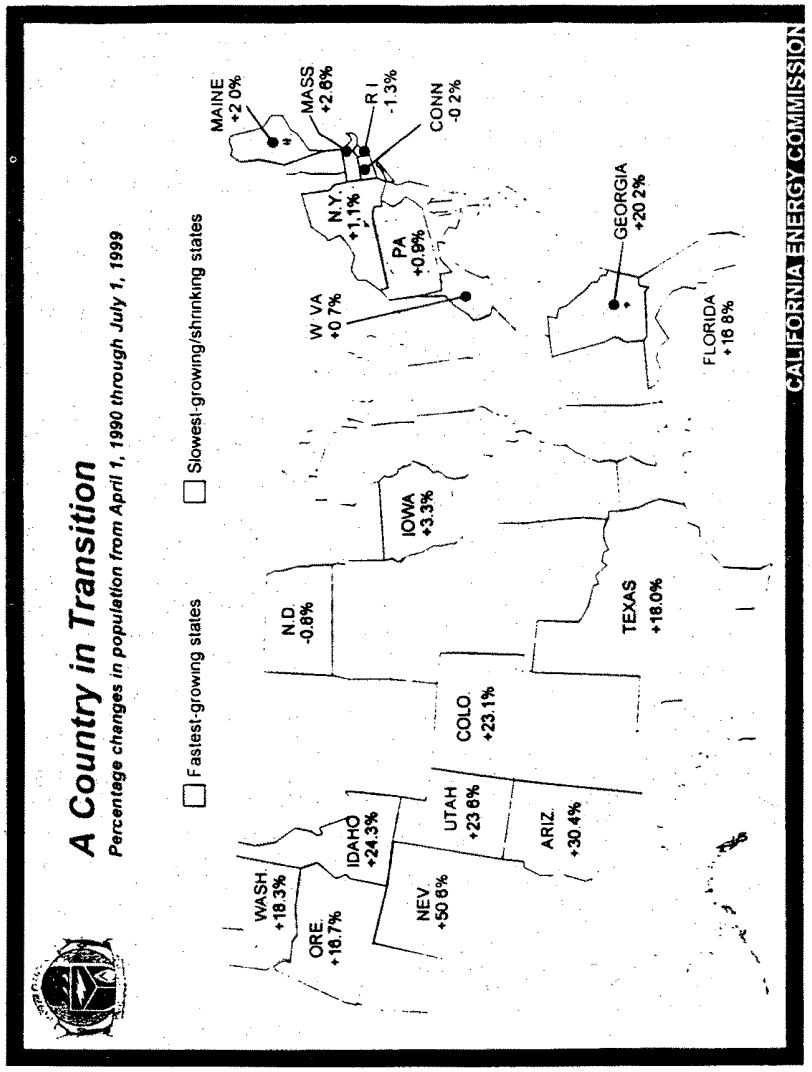
• Congress should support cool communities by providing funds for highly-reflective roof research.

• The Federal Energy Regulatory Commission must confront and resolve the issue of wholesale electricity prices. There must be just and reasonable prices for all ratepayers, something we did not have in San Diego this summer. And,

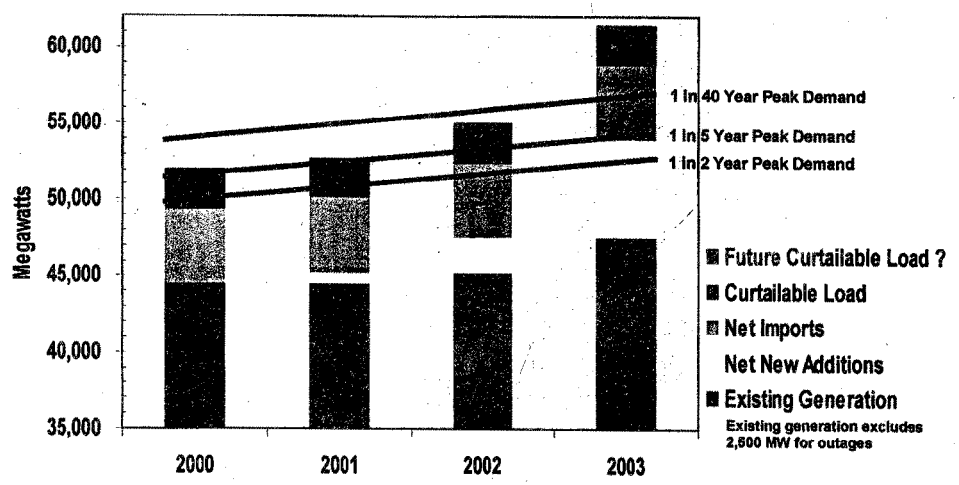
• States need to be given maximum flexibility and latitude to implement solutions to their unique set of issues.

The electricity supply problems facing California and the West are significant and should not be underestimated. However, I am optimistic they can be resolved if we work together cooperatively to develop solutions.

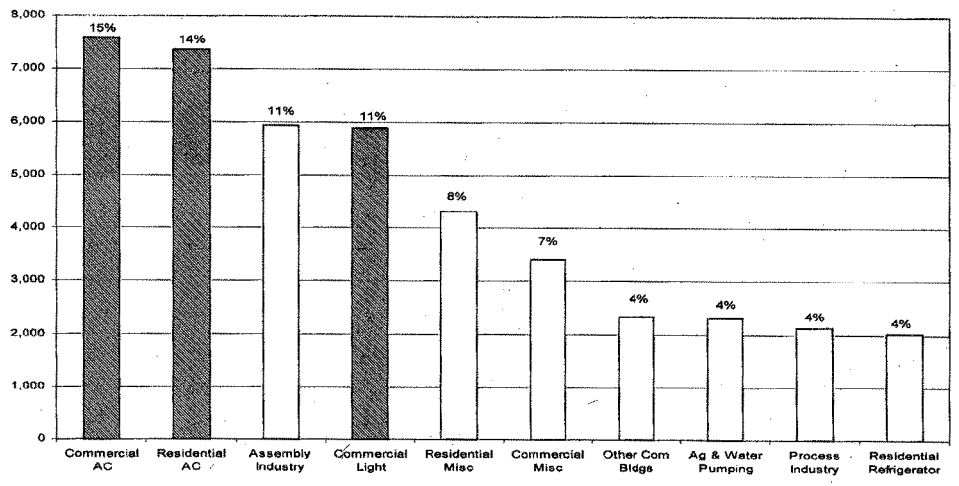
I look forward to answering your questions.



CAL ISO Load/Resource Balance with 7% Operating Reserve at Coincident Peak



Statewide Peak Demand (MW) by Sector and End-Use



CALIFORNIA ENERGY COMMISSION

POWER PLANT PROJECTS PROPOSED FOR CALIFORNIA

PROJECT	MW	PERMIT DATE	ON-LINE DATE 1/	CUMULATIVE CAPACITY
UNDER CONSTRUCTION		ACTUAL	EXPECTED	
Los Medanos	500	August 17, 1999	July-01	500
La Paloma	1,048	October 6, 1999	Aug-01	1,548
Sutter	500	April 19, 1999	Sept-01	2,048
Delta Energy	880	February 9, 2000	July-02	2,928
NOT UNDER CONSTRUCTION		ACTUAL	EXPECTED	
High Desert	720	May 3, 2000	Jan-03	3,648
IN REVIEW		EXPECTED	EXPECTED	
Sunrise Cogeneration	320	Sept-00	Sept-02	3,968
Elk Hills	500	Sept-00	Sept-02	4,468
Moss Landing	1,090	Oct-00	Oct-02	5,558
Otay Mesa	510	Jan-01	Jan-03	6,068
Pastoria	750	Jan-01	Jan-03	6,818
Hanford	99	Jan-01	Feb-03	6,917
Three Mountain	500	Feb-01	Feb-03	7,417
Midway-Sunset	500	Mar-01	Mar-03	7,917
Metcalf	600	Mar-01	Mar-03	8,517
Blythe	520	Apr-01	Apr-03	9,037
Contra Costa	530	May-01	May-03	9,567
Mountainview	1,056	May-01	May-03	10,623
Nueva Azalea	550	Aug-01	Aug-03	11,173
INDEFINITE DELAY		EXPECTED	EXPECTED	
Potrero	540	Sept-01	Sept-03	11,713

1/ Two years are typically required for power plant construction following permitting.

Mr. BARTON. Thank you, Mr. Keese.

We now go to Mr. Roy Tyler, of Tyler's Taste of Texas, for 5 minutes.

STATEMENT OF ROY TYLER

Mr. TYLER. Thank you, Mr. Chairman. Thank you, council, for inviting me here.

Mr. BARTON. You need to be at some microphone, either sitting or—I guess you could stand up here at the podium.

Mr. BILBRAY. If you go to the podium, they can turn that on.

Mr. BARTON. Either one. You can do either one, but we need to hear you.

Mr. TYLER. Is that on?

Mr. BARTON. Yes, sir.

Mr. TYLER. Roy Tyler. My wife and I own and operate Tyler's Taste of Texas restaurant here in San Diego for 22 years. I appreciate the opportunity to be here. I speak not for the restaurant industry, but for small business in general.

In our restaurants, we've had a number of meetings with small business in San Diego, and also, by the way, I represent the great State of Texas here in San Diego, of course.

Mr. BARTON. That's not an easy job, I guess.

Mr. TYLER. It's a tough job. Somebody has to do it.

It puts me to mind—I had the unfortunate opportunity as a young man in Texas—one reason I came to San Diego—to be destroyed in a natural disaster. And I saw the power of the government step in and save our economy, save our businesses, save our people overnight. I saw the action.

And since that day, I've also seen government come in and save something to death. And that's my greatest fear. At this point, this power failure is equivalent of that hurricane or of an 8.0 earthquake.

And the effects are virtually the same. You haven't seen it yet. I understand from the business people, which represents a big part of the economy of this county and small business of this Nation. I've seen the after-effects of this. We've had an eight-point earthquake already. We need the Federal Government here now, not study and not talking. We need some action.

If we were a scientist, we also could say we're sitting on a fault now that will produce a nine-point earthquake in another few months. The walls will come tumbling down in small business.

In 22 years, I came here virtually with nothing after a disaster, and I built some equity. My equity is gone. Effectively today, my equity has disappeared, as most of my business colleagues and small business. It's gone. Where is the Federal Government? Not to study it. We want to see some action from the government. We don't care who's to blame. We think there was some bad business decisions made. But the effect is, it's killing us. You know?

My power bill. I can talk about it pretty easily, because it belongs to me. Our combined bills were $8,500 before the disaster. Combined last month was $22,456. That's a $13,941 increase in my bill. That's everything. That's everything I own down the toilet if it's not corrected. The effect of that on my employees, the ones that

pay their bills at home. We're worried about how do they pay their increased bills. That's assuming they still have income.

I've got 150 payroll hours from my business, most of the employees that work for me. Half a dozen people have lost their jobs today. And I'm not sure what the effect will be next month, because those same people, their disposable incomes are disappearing. That's my customer. And when they quit coming in the door, what's next? We're only seeing the beginning, the first shock of the earthquake. The after-shock, I believe, will be worse.

Businesses that I've spoken with and met with, Buck Knives—this is an old chart. It's old numbers. They've almost doubled since then, or some of them. Buck Knives is up more than 100 percent. What's 100 percent? That's tremendous.

Manufacturing companies, 130 percent. Certified Metal, a small metal craft shop with 30 or 40 employees, is up $70,000 in 1 month. They can't survive it. And it's not a matter of months or a few years when you guys figure out what to do. It's a matter if we don't do something now, we're all in trouble.

And the trouble will run downhill. Not to San Diego. It'll go to California, and it'll go to the country, and it very well could go to the entire world. This is a total economic disaster, and we need relief from it. Not tomorrow. We need relief today.

Everybody said everything that needs to be said about the free market. We all understand you can't have more demand than supply and have a free market. It doesn't work. We have to come up with supply.

I commend Congressman Hunter as being the only person so far that has stepped forward with a plan that could be immediate.

Mr. BARTON. If you could wrap up in about a minute.

Mr. TYLER. Will do it. I'm wrapping now.

We need electric independence in San Diego. Congressman Hunter has brought us a plan. We should look at the plan. It can be implemented, from what I'm told, in a matter of a few months. We need to respond.

FERC. I don't understand. Congressman Hunter read the deferred ruling, and I've been told that the Federal Government has no power to step in and regulate rates. Explain. The business community would like the explanation of what just and reasonable means.

If the law is just and reasonable, why can't you step in? That's our question for the day. And we need somebody stepping in now, not studying it, not looking it over, not thinking about it. We want you now. Thank you.

[The prepared statement of Roy Tyler follows:]

PREPARED STATEMENT OF ROY TYLER, OWNER, TYLER'S TASTE OF TEXAS

It's time to talk about the consequences of the energy crisis. As well as a homeowner, I am representative of many small business owners whose electric bills have doubled, tripled and more. I am here to talk about concerns for the future of small business, which represents a large portion of the economy, not only of San Diego, but of the entire country.

Any business, small or large has to budget its major bills. Heretofore a business owner, in their wildest dreams could not imagine one of those bills budgeted at $33,000 becoming $75,000 in July and $91,000 in August.

What would most businesses do? They may have to borrow money to pay the bill, digging the same hole financial hole to business disaster. Most business can't raise

prices to customers that rapidily. Many businesses have customers on contract and can't raise prices at all, so how do they cut costs to keep operating.

Employee salaries are often the only "variable" costs he has, therefore lay-offs become a necessary means of surviving. I have cut over 150 hours per week for my very small businesses, resulting in loss of income to many people in our community. These are the people who will benefit for the rate roll back, but how will they pay any rate when they don't have a job?

One more utility bill of these proportions and this owner is forced to close his doors. Multiply this by the over 5 to 20,000 small operating and manufacturing companies that are dependent on electricity to operate, and not only East County, but all of San Diego. We are facing economic disaster to the same proportion of a major earthquake, with possibly longer lasting devastation. Ironically, at least for a short period of time the rest of the country is celebrating prosperity and most of the State of California.

Much of the media attention has been focused on residential needs . . . the struggles of low-income households and the elderly. The consequence of ignoring the plight of business can, and will, include large numbers of unemployed, business closures and business relocations out of this state. Discretionary income will become non-existent, retail will suffer and business and housing sales will drop. In short a major depression is possible in a short time. Already, it is almost impossible to sell a small business in San Diego County, profitable businesses a few months ago, that would have sold at a premium sold and sold quickly, are now not marketable.

The leaders at every level of business and government should be dedicated to finding both short term and long-term solutions to this crisis. All should endeavor to avoid the dead end thinking demonstrated by many that got us into this mess. The county, state and federal officials, S.D.G.&E, the PUC and FERC, and business leaders should ban together to prevent the consequences of doing nothing, or of repeating past mistakes.

Though electricity deregulation was created at the state level, I, as well as many, believe that fast action and intervention by the federal government is necessary, and required to reverse the impacts of the deregulation and prevent a major economic disaster. Free market, in order to be completive requires a more than adequate supply to meet demand for any product. Perhaps, if the leaders that drafted the de-regulation of SDG&E had picked up the phone and called the owner of most any business, (or their high school teacher for that matter) and asked how things work, this could have been avoided.

Mr. BARTON. Thank you, Mr. Tyler.

We'd now like to hear from Jeffrey Byron, who is Energy Director for Oracle Corporation.

STATEMENT OF JEFFREY D. BYRON

Mr. BYRON. If it please Mr. Chairman and Commerce Committee members. Thank you for the invitation to provide input to your deliberations on the——

Mr. BARTON. Pull the microphone to you, if that's possible, so we can hear you a little bit better.

Mr. BYRON. Thanks for the opportunity to provide some input to your deliberations on the electric industry in California and what Congress can do to address our problems.

My name is Jeff Byron. I'm the Energy Director at Oracle in Redwood Shores, California. Oracle is a software developer who sells to many of the Fortune 500 companies and is one of the largest economic engines of the digital economy.

However, like Mr. Tyler, I'm here today as an end-use customer of electric commodity and services. Reliability drives Oracle's energy decisions. It's clear that if we need a higher level of service, we'll have to take care of it ourselves. And it's worth a great deal to Oracle to minimize interruptions by investing in options to mitigate them.

Other digital economy companies have taken similar actions because it's the absence of electricity that's far more costly to the digital economy company than the cost of electricity.

We can expect to see more sophisticated end-use customers in the future because digital economy companies do not only suffer lost productivity during an interruption of power, they suffer credibility, customer loyalty and the ability to conduct business continuously around the world.

It's imperative that there is an adequate supply of electricity in order to sustain economic growth and meet the needs of all consumers. These were the correct intentions for restructuring in California and still are the right issue going forward.

Now the marketplace must provide customers with the right to choose the level of reliability and other products and services that are most important to them. This is the point I'd like to direct my remaining comments toward. The electric power issues for digital economy companies are as follows:

One, digital economy companies require higher reliability than a utility is able to provide or will be able to provide in the future.

Two, the grid may not be able to provide sufficient capacity to match increases in demand.

Three, the actions of regulators and legislators may have unintended negative consequences.

And four, the emerging technologies to address these needs may be inhibited from entering the marketplace.

These issues must be addressed by legislators and policymakers. Some programs are currently under way and should continue or be accelerated. These include programs to improve efficiency and reduce wasteful energy consumption, siting and approval of transmission and distribution facilities to address local capacity limitations, incentive programs to reduce energy consumption during peak load periods, and continued efforts to open up the generation market and provide competitive pricing for new engines.

However, these four solutions will not happen quickly enough to provide sufficient capacity in California to meet the growing needs by the summer of 2001. Now Oracle must consider other options to address an inadequate supply of power and requirement for higher levels of reliability.

One of the most promising ways to do this is with onsite or distributed generation. Digital economies require the ability to install and operate these innovative and necessary generation technologies in a timely manner.

Conceptually, this is not a difficult or controversial proposition. However, the details to enable its implementation are critical. The following are the required steps that will enable digital economy companies to meet their electricity needs with onsite generation.

One, digital economy companies may need to operate in parallel with the utility. To do this, clear interconnection standards that the utility cannot alter or delay are needed.

Two, customers should be relieved of the stranded cost payments and rules that prevent privately owed construction of new electrical infrastructure if the utility is unable to meet capacity requirements.

Three, standby rates should be unbundled to allow customers alternative generation sources.

Four, depreciation schedules should be accelerated to promote more efficient technologies going forward, and distributed generation owners should be encouraged to use the cleanest and most efficient technologies through investment or production tax credits.

Five, digital economy companies must still be required to self-generate in compliance with all existing environmental and regulatory statutes.

Therefore, I appeal to Congress to consider legislation that will expand customer choices to install distributed generation.

Standardized interconnection policies, unbundled standby rates and fair environmental standards for onsite generation should be a high priority for energy policymakers this fall. Thank you for the opportunity to speak before you today.

[The prepared statement of Jeffrey D. Byron follows:]

PREPARED STATEMENT OF JEFF BYRON, ENERGY DIRECTOR, ORACLE CORPORATION

Greetings Mr. Chairman and Honorable Commerce Committee members and thank you for the invitation to provide input to your deliberations on the electric industry in California and what Congress can do to address our problems.

My name is Jeff Byron. I am the energy director at Oracle Corporation in Redwood Shores, California. Oracle is a software developer who sells to many of the Fortune 500 companies. I am here today as an end-use customer of electric commodity and services.

I have been associated with the electric power industry my entire professional career. I was trained as an engineer at Stanford University and have worked since then in many capacities in the electric power industry; nuclear containment, fossil generation, solar power, and most recently in transmission and distribution systems. I have worked for General Electric's Nuclear Energy Division, Accurex Corporation's Aerotherm Division on solar energy, Aptech Engineering Services consulting firm to the electric power industry, the Electric Power Research Institute, BrightLine Energy market research firm, and for the past four years in my current position at Oracle Corporation. I have nearly 25 years of diverse experience in this industry.

As Oracle's energy director, charged with keeping that aspect of the company's infrastructure up and running, I do my best to keep abreast of the industry and the actions taken by others that will affect us. Like all electric customers, Oracle is at the end of a supply chain over which we have little control. It is my responsibility to anticipate and understand the effects of change, make recommendations, and then take action to maintain the level of electric reliability the company requires to maintain productivity and profitability. However, end use customers, like Oracle, have little influence on the reliability, capacity, and price of the commodity that is delivered.

I believe Oracle is representative of many of the high tech companies of the digital-economy. Although I am only speaking on behalf of my company, my comments are also focused on the energy needs of our customer companies. I am not authorized to speak for them, but the reliability of the electric supply is important to our customers, and therefore, important to Oracle. Therefore, my comments are not just focused on Oracle's needs, but I hope you find them applicable to all high-reliability customers.

I operate a 15 megawatt distribution system at Oracle. Like all of Oracle's operations, we do our best to minimize costs while providing the optimal infrastructure to run our business. This operation is as thinly staffed as it can be. I am a one-man operation, whose responsibility is to maintain the highest level of reliability of electric supply at the lowest feasible cost. The expertise I bring to Oracle is not a core competency for the world's second largest software company. However, in 1996 Oracle had become frustrated with the number of power outages that were being experienced, and instead of making substantial expenditures for uninterruptable power supplies (batteries) that would maintain critical functions through short power interruptions, Oracle invested in its own substation and distribution system.

This system was put in service in July 1997 during two consecutive weekends. It was a monumental undertaking for a software company and it has proven to be

a worthwhile risk. Becoming a transmission customer has provided Oracle with a higher level of reliability than it had before. Oracle was able to design and build a more expensive system than the regulated utility would have been permitted to provide within its rate structure. This investment cost Oracle approximately $6.5 million and involved taking a risk that few commercial companies have considered. Nevertheless, the investment has afforded Oracle a moderately more reliable electric supply than most commercial customers.

But this independence has also come with a price. Oracle must now operate and maintain medium and high voltage equipment, including switchgear, transformers, and miles of underground cable. Oracle has utilized independent contractors with the necessary expertise, independent of the regulated utility. And Oracle has instituted preventive maintenance programs, hired emergency response contractors, and developed procedures for high voltage switching and emergency situations. This is not what software development companies normally do. So, why did Oracle undertake such a venture?

In a word, Oracle ventured into electricity distribution for improvement in "reliability." Oracle is not the first end user to take these measures and I am certain there will be many more. Why? Because it is becoming clear that if customers need a higher level of service, they will have to take care of it themselves.

Because of what Oracle does, create software, it has always been difficult to calculate financial losses due to a power interruption or significant voltage sag. A voltage fluctuation that causes the majority of Oracle computers to crash and restart is significant to Oracle. This could be as little as a 25% voltage sag for 0.2 seconds and may occur 6 to 12 times per year. When a voltage sag or outage occurs, the work of 7,000 Oracle software developers comes to a halt. They may lose what they are working on. Equipment may fail, causing the loss of more work and data. Overnight porting and program execution may be lost and have to be recreated. Oracle worldwide data communications may be interrupted. Sales force demonstrations using web-based software will not work and sales opportunities for Oracle software may be lost. And in many cases even that short voltage sag may take hours, if not days, for a complete recovery of all Oracle data and communications systems. In all, losses from each event can be many millions of dollars. It is worth a great deal to Oracle to minimize these interruptions and to invest in options to mitigate them.

Oracle has also installed power quality monitoring equipment at each critical building and monitors and collects this information in real-time. These meters allow Oracle to continuously measure each fraction of a cycle of the 60 cycle per second alternating current. When a cycle of power is distorted by switching, faults on the transmission grid, or equipment failure, we are aware of it immediately. We know if it occurred on our campus, or if it occurred outside our system. This information is extremely empowering. Although we cannot alter the power that we monitor with this system, we can immediately begin to respond, determine the cause of the problem, and correct or influence correction of the problem. Information is the beginning of understanding and provides a sense of control that is relatively new for an end-use customer.

Oracle has also added emergency power capability for its critical facilities. This is no different than many other companies who have installed uninterruptable power supplies and diesel generators to maintain critical systems during power outages and voltage sags. Altogether, Oracle has created a more reliable system than most other commercial customers. Oracle built, paid for, owns, operates, and maintains this system. Oracle also paid for the installation and subsequent removal of the system originally provided by the utility. The cost of these actions were not borne by any other customers.

Oracle is an E20-T rate tariff customer in the service territory of Pacific Gas & Electric Company. This tariff means that our load exceeds 1 megawatt and electric service is taken at transmission voltage of 60,000 volts or greater. The actions I have described above were all taken under existing rate structures and had nothing to do with deregulation. These actions are worthy of mention as they indicate the level of effort that Oracle has undertaken to improve the reliability of its electric supply.

Other digital-economy companies have taken similar actions. Some have installed their own substation and distribution systems, and others have installed generators and power quality monitors. Some have installed co-generation to improve energy efficiency, save money, and improve reliability. While large industrial companies have taken similar actions in the past, the reasons for doing so were generally different than they are today for digital-economy companies. For industrial customers, where energy costs may be a significant portion of production costs, minimizing electric costs provides an important competitive advantage. But for the digital-economy companies, electric costs are typically a very small fraction of revenue or production

costs. It is the absence of electricity that is far more costly to a digital-economy company than the cost of electricity.

This is a new and critical change in the value proposition for electricity. For nearly 100 years, all end use customers have received the same unlimited supply of electrons with interruptions, voltage sags, and other distortions according to how well the supplier delivered it to them. This is not a criticism, but recognition of how the electric power grid works and the service limitations of a regulated monopoly.

In the past few years we have seen restructuring of the electricity market and more energy services on the customer side of the meter in California. Recently customers have become aware of emerging technologies and service offerings that can improve the reliability of the electric supply to their critical functions. It has also only been recently that companies have come to realize that they can invest in options that can go beyond the "one size fits all" offerings of the local utility. We can expect to see more sophisticated end-use customers in the future.

The electric power supply needs of the digital-economy companies are different than those of the traditional-economy companies. The digital-economy companies are not a one or two shift per day product line. Rather, they are 24 hours per day and 365 days per year, or 24 by forever. Any company that has computers, servers, routers, hubs, or depends on the services of those that do, is a "digital-economy company" and has many of the same needs as Oracle. Digital-economy companies do not only suffer lost productivity during an interruption of power they suffer credibility, customer loyalty, and the inability to conduct business continuously around the world.

Not all digital-economy companies have the identical requirements for continuous power. Each makes a determination of what optimal improvements can be made to meet their electrical supply needs. This is the point I would like to direct my remaining comments towards; the marketplace must provide customers with the right to choose the level of reliability and other products and services that are most important to them.

For the most part, the digital-economy customers are the missing stakeholder in the deregulation process. I offer that this has been the case for two reasons. First, most digital-economy companies did not grasp the significance of what was at stake, except for anticipated savings from lower energy costs. And second, most energy managers have operational jobs that greatly constrain their involvement in the regulatory process. They simply do not have the time or resources to participate.

We must rely on the policy makers to understand this complex industry and balance the needs and interests of all stakeholders. Policy makers must balance many issues in considering what is best in deregulating this industry, such as:

- Encouraging competition and efficiency
- Protecting unfair shifting of costs
- Sustainability of the UDC
- Protecting the environment
- Ensuring safety and reliability of the grid

This is a difficult task. The California PUC and legislature did a thorough and thoughtful job of initiating a fair and open market for electricity. There is a tendency to search for the guilty when symptomatic issues, such as high electricity prices, arise and a tendency to overreact with quick-fix solutions. There is an overwhelming concern that the best intentions of those who were not initially involved in this process could result in unintended consequences and make the situation worse than it currently is. It is imperative that there is an adequate supply of electricity in order to sustain economic growth and meet the needs of all consumers. These were the correct intentions for restructuring in California and still are the right issues going forward.

I will conclude my comments by outlining what I believe are the problems facing the electric markets and what steps policy-makers should take to ensure that customers have reliable and affordable energy supplies.

The electric power issues for digital-economy companies are as follows:

1. Digital-economy companies require higher reliability than the utility is able to provide or will be able to provide in the future.
2. The grid may not be able to provide sufficient capacity to match increasing demand.
3. The actions of regulators and legislators may have unintended negative consequences
4. The emerging technologies to address these needs may be inhibited from entering the marketplace.

These issues must be addressed by legislators and policy makers simultaneously on four fronts. Some programs are currently underway and should continue or accelerated. These include:

1. Programs to improve efficiency and reduce wasteful energy consumption
2. Siting and approval of transmission and distribution facilities to address local capacity limitations
3. Incentive programs to reduce energy consumption during peak load periods
4. Continued efforts to open the generation market and provide competitive pricing for new entrants

However, these four solutions will not happen quickly enough to provide sufficient capacity in California to meet the growing capacity needs by the summer of 2001.

Given these issues, what should a company like Oracle do to make sure that it does not have significant nor frequent interruptions of business? As with all other critical business issues and decisions, Oracle cannot assume others will solve the problem for them. Oracle has already begun that process by building its own substation and distribution system, by operating and maintaining this system, and putting in backup systems to prevent interruption of critical services. Now Oracle must consider other options to address an inadequate supply of power and a requirement for higher levels of reliability.

One of the most promising ways to do this is with on-site or distributed generation (DG). DG is being discussed and considered in many forms. I would like to ask that you consider DG from the perspective of meeting the needs of the digital-economy companies. These companies do not want to sell power for a profit. They do not want to bypass the utility or strand assets that others may have to pay for. They do not want to circumvent safety standards that protect utility workers and the public. Digital-economy companies require the ability to install and operate innovative and necessary generation technologies in a timely manner. Conceptually, this is not a difficult or controversial proposition. However, the details to enable its implementation are critical.

The following are required steps that will enable digital-economy companies to meet their electricity needs with onsite generation:

1. In order to prevent business interruptions and losses, digital-economy companies need to operate in parallel with the utility. To do this clear interconnection standards that the utility cannot alter or delay are needed. Timeliness is important to these businesses and "Internet speed" is a phrase not in the lexicon of the regulated utility.
2. The utility may not be able to serve the growing electric requirements of an existing company or of new construction. If the utility's "obligation to serve" cannot be met in a timely manner, then the digital-economy company's "obligation to pay" for stranded assets should not apply. Customers should be relived of stranded cost payments and rules preventing privately owned construction of new electrical infrastructure.
3. If a digital-economy company elects to use the grid as a backup source of power and has access to other backup generation sources, they should not have to pay for a bundled standby rate that includes both transmission and generation. Standby rates should be unbundled.
4. The financial "playing field" for distributed generation must be fair. Distributed generation has a shorter life span than large centralized power plants. Thus, the depreciation schedules should be accelerated to promote more efficient technologies going forward and distributed generation owners should be encouraged to use the cleanest and most efficient technologies through investment or production tax credits.
5. And finally, if the digital-economy company must take the necessary actions to secure its financial success in an uncertain regulatory environment and with inadequate electric capacity, they must still be required to do so in compliance with all existing environmental and regulatory statutes.

CONCLUSIONS

One goal of restructuring was to promote private investment in new generation and lower energy prices through increased competition. Another goal was to encourage the development of new technologies, products, and services for customers. These remain extremely important goals. The current crisis in electricity supplies is proof that we must accelerate our efforts to offer more demand-side options to customers, including load shedding programs, time of use pricing, and the topic on which I have concentrated my remarks, distributed generation. Without quick action on these policy fronts, I anticipate that the problems we've been having this summer will be an order of magnitude worse next year.

Therefore, I appeal to Congress to consider legislation that will expand customer choices to install distributed generation. Standardized interconnect policies, unbundled standby rates, and fair environmental standards for onsite generation should be a high priority for energy policy makers this fall.

Thank you for the opportunity to speak before you today.

Mr. BARTON. Thank you, sir. And you actually finished within 5 minutes. We appreciate that.

We now go to Mr. Michael Shames, who is the Executive Director of Utility Consumers' Action Network.

Mr. BILBRAY. Now the pressure is on Michael.

STATEMENT OF MICHAEL SHAMES

Mr. SHAMES. Four minutes, 59 seconds. Here we go.

Welcome, committee members, Congressmen, to San Diego, a region that in the last year has been racked by double if not triple-digit increases, not just in electricity, but natural gas, gasoline, housing, rental. Basic necessities of life in San Diego have substantially increased, thus creating trauma for all of its customers, all of its residents in a number of ways.

Truly in San Diego, the cost of living index has turned into a cost of misery index. And that's why it's so important that you are here today.

The facts are daunting. You've heard many of them. Five hundred and eighteen percent increase in electricity in the last 90 days. I'm sorry, 100 days. We're looking at 185 percent increase in the average bill for the residential customer. And as you heard from Mr. Tyler, substantially more for some small businesses. The impacts are dramatic.

The statement that I have prepared for you, the written statement, is called, "Lessons Learned from San Diego." And I've spent about 16 pages, which I will certainly not go over here, detailing what the problems are, what the lessons were that can be learned by this committee, and how some fixes can be made.

All we ask in exchange for these lessons that we've offered to you is tuition. Now, it won't be cheap, but our terms are flexible. And some of the means of payment that you can offer to San Diego in exchange for the very important lessons that we are providing to you are, first, please use whatever powers you have to impose upon FERC its obligation to find that the rate that have been charged to San Diego and to California are just unreasonable. Gentleman, they cannot be, not given the rate that have been imposed upon San Diego.

Second, certainly we will not turn away any efforts or any offerings that you make to help us pay what is going to be a substantially large bill. The differential, as has been explained to you, between 6.5 cents and the current 21 cents is formidable.

SDG&E estimates it's probably somewhere in the billion dollar range. We expect that figure is lower, but certainly somewhere in the $400 to $500 million range can be expected. The San Diego economy cannot afford that, especially given the trauma that we're feeling from all of the other basic necessities that have gone up just in this past year.

Three important lessons that I want to share with you in the 2 minutes I have left. First, lesson No. 1, is it's going to take longer

for the market to respond than you may imagine. And I think a lot of theoreticians had imagined when deregulation had begun.

Your facts, Congressman Barton, about generation in California may not be exactly accurate. Yes, a new generating plant is not open for a good 10 years, if not more, in California. A large reason for that was because we relied heavily on power from out of State that was cheaper.

Only within the last couple of years did it seem as though it was economically feasible to build in California, and then we found there are a number of factors—not just environmental restrictions, but a number of factors that make it very difficult for generation to be sited.

So it does take a longer time for the market to respond than I think people had imagined when the legislation was passed in 1996.

Lesson No. 2. It's also far more complicated to deregulate or to change regulation. We spent 80 years building a very complex—I can assure you very complex—regulatory process. It's going to take more than just 5 years or 10 years to tear that process apart. And we're seeing that.

We're also seeing two truisms that I think you need to take to heart. First is that in addition to the fact that there will be a transition period that will take longer than people expected. The second truism is that weather is going to have a significant impact during this transition period.

In the Western States, we've had extremely hot weather that's caused this shortage of power and the increases in prices in California. You saw just 2 years ago the Mid West was racked by substantial increases in power demand due to a heat wave there.

The Northeast this year looks pretty good. A lot of people tout Pennsylvania as being a model that should be followed, and yet Pennsylvania and New York have had an unusually cool summer with a lot of water, very wet, and yet in New York, power prices have jumped by 40 percent. Weather will be a major factor. And I think you needn't necessarily assume that the California model is clearly the wrong model.

I'm going to end there. My time is up. I'll look forward to question and answer if we have opportunity. Thank you.

[The prepared statement of Michael Shames follows:]

PREPARED STATEMENT OF MICHAEL SHAMES, EXECUTIVE DIRECTOR, UCAN

The heralded pioneers that opened the western United States in 19th century could have taught California the following lesson: the first one in often never makes it out alive. Perhaps California's pioneering spirit prompted it to be the first state in the nation to deregulate. But now, after a summer marked by 510% increases in energy rates for San Diego residents, the state's regulators are retrenching, utilities are running for cover, consumers are publicly burning their utility bills even as the state's politicians adopt rate caps and talk about windfall profit taxes, or even the dreaded "r" word—re-regulation.

San Diego's experience offers the Congress an unparalleled opportunity to learn from a bungled attempt at deregulation. And from this deregulation debacle, important lessons can be learned. As will be explained below, UCAN believes that there are five important lessons to be gleaned. They are:

- It takes the energy market longer to respond to market forces than anyone predicted.
- It is more complicated and more time consuming to unravel the regulated energy markets than anyone predicted.

- The absence of a safety net has caused tremendous damage to the most vulnerable customers.
- Ensure effective monitoring—government can not be blind to what is occurring in the markets.
- Don't confuse customer education campaigns with wish-fulfillment marketing campaigns

I. SETTING THE STAGE

The furor pertaining to electric deregulation stretches beyond California; the economic stakes in this political hot-potato affects the entire nation. New York is reeling from far more modest electric rate hikes than those seen in San Diego. Nationally, a booming economy fueled by an electricity-driven technological revolution has created unprecedented demand for new electricity capacity.

Deregulation was heavily advertised in California to open the door to lower rates. The electric service industry restructuring model adopted in 1996 by California was intended to fundamentally change electric service and regulation in this state by infusing competition in the electric generation market to the benefit of *all* electric consumers and market participants. That legislation—AB1890—promised a 20% cumulative rate reduction by April 1, 2002 for residential customers, innovation, efficiency and increased quality in electric service, with a reduction of costly regulatory oversight; and "meaningful and immediate rate reductions for residential and small customers".

And it promised to open the door to new technological innovations and greater energy efficiencies. Electricity generation technology in the form of a new generation of natural gas-fired combustion turbines were supposed to flow into the state like a second gold rush. New distributed generation technologies like fuel cells were supposed to give centralized generation plants a run for their money. And communications-based energy services offers value-added benefits unavailable in the regulator-overseen monopoly world.

These new innovations effectively forced changes in the way power companies are regulated. Throughout the world, new "disruptive" technologies are emerging which are changing the economics of electricity generation. The old paradigm of large centralized power plants linked to customers via complex webs of power transmission will soon be obsolete, replaced by new, low-pollution distributed generation.This transition into the new economics of generation have made traditional generation investments riskier. But it has pushed regulators into recognizing that the rules of the past may not apply to the future.

It is this technological revolution that really has forced a change in the way the industry is regulated. But de-regulation has proven to be a challenging task—the dismantling of rules that took 80 years to develop more resembles a Gordian Knot than a Boy Scout loop knot. But if full re-regulation in states suffering from rate shock like California and New York occurs, will the needed capacity, along with technological innovations and increased productivity be thrown out with the bath water? Perhaps.

UCAN submits that the transition to a "competitive" market for energy was tougher than California's pioneers bargained for. It was more complicated, more time consuming and more unpredictable than California policy makers had expected. And this is compounded by the fact that the era of cheap natural gas prices appears to be ending. The price of gas has more than doubled, and more trouble looms on the horizon. This should come as a surprise to no one. As early as 1990, energy experts began warning about the cumulative effects of the utility industry's "dash for gas." These experts predicted much greater volatility in electricity prices—particularly in a deregulated market.

They were right. And yet, the energy markets appear surprised. In the space of just a few months, San Diego ratepayers saw their electricity bills more than *triple.* No wonder these consumers are angry—and rightfully so. Nor has it helped the political climate that San Diego Gas & Electric's affiliate, Sempra Energy, reported a 34% increase in its second-quarter earnings.

II. SUMMER ELECTRIC STORM HITS STRIKES SAN DIEGO

On its surface, the dysfunction of the state's electric market appears to have been quick and startling. Within the past 100 days, the price of electricity for residential consumers has tripled from 3.2 cents per kWhr to 21.4 cents per kWhr. Bundled with distribution, transmission and other charges, the overall energy rate zoomed from 11 cents to 28 cents per kWhr. For the "mythical" average residential customer who uses 500 kWhrs in the summer, this 182% overall rate hike translates to a monthly increase of $94. For small businesses, the increase is substantially larger.

Natural gas prices have also soared. One year ago, the average residential customer paid 21 cents per therm. Today, SDG&E is charging core residential customers an average cost of gas in excess of 45 cents per therm. This 115% increase in natural gas prices has more than doubled the natural gas component of customers' bills. Additional 40% increases are predicted for this coming winter; UCAN believes natural gas prices will be even higher.

But it hasn't been that quick, in reality. Active efforts to reform the state's energy markets began in 1995, culminating in state law passed in 1996 that ordered the restructuring of the electric services market. Utilities' roles changed, a new energy exchange was created and regulators were compelled to revise most of the regulations that had been on the books for decades. Since 1996, numerous Commission decisions have been issued (a rare few good, most really bad) that paved the way for San Diego to be exposed to an unregulated electricity market beginning in late 1999.

Deregulation has also spawned many nasty forms of market manipulation that drives up prices and artificially constricts supplies. Recently, San Diego Gas & Electric called for an investigation into the under-scheduling of power and market manipulation by other investor-owned utilities in California that resulted in San Diego paying higher energy costs. And it has condemned profiteering by private generators.

III. LESSONS LEARNED FROM SAN DIEGO'S BRUSH WITH DEREGULATION

Lesson #1—The Energy Market Is Not A Roadrunner

When AB1980 passed in 1996, the predictions were that by 1998, California would be rich in new, clean-burning, ultra-efficient combined cycle turbines producing adequate power for California's needs. Based upon these representations, the state legislature unanimously passed the deregulation law. Hindsight shows that the lawmakers were conned, much like Congress was misled by cable and telecommunication interests who predicted robust telecommunications competition if the 1996 federal overhaul of the telecom industry were approved. It turns out that the market did not speedily respond to the challenges that faced it. In fact, the market turned downright timid.

For many reasons, the promised generation did not materialized. Some of the rationales include:

- Complications in siting/locating plants—NIMBYism & shortage of acceptable sites
- Unavailability of next-generation generating turbines
- Restrictions on emissions.
- Uncertainty about regulatory decisions pertaining to the deregulation law.
- Unavailability of low-cost natural gas
- Interference by monopoly distribution companies
- Absence of uniform interconnection rules

While observers assumed that the market would devise solutions to many of these problems, it turns out that the problems were not readily solvable by the market. For one example, stringent air pollution regulations. Under EPA rules, there are simply no surplus pollution emission credits available to allow the permitting of a new plant in San Diego. Moreover, clean air regulations were not developed with energy issues in mind, so the grandfather-oriented regulations need to be reformulated in order to allow new, cleaner burning plants to be located in emissions-constrained areas (which includes almost ALL of California).

A second problem is more insidious. Through its Sempra affiliate, SDG&E has a monopoly over the local natural gas pipeline. And it is building competing power plants just over the borders, in Baja California and Nevada. That means potential competitors are blocked from entering the local generation market because they can't get dedicated gas capacity and interconnection agreements at a fair price. Sempra isn't eager to accommodate competitors to its own power plant investments—instead, its proposed solution is building more transmission lines (to its out-of-region power plants) and changing its rate structure so that it collects more of its fixed costs through fixed charges.

These are hardly the only non-competitive element plaguing the system. About seventy percent of the power sold in California's Power Exchange is purchased by the state's Big Three utilities. That's an oligopsony by anyone's standards. Predictably, these utilities have used their considerable market buying power to manipulate both bidding protocols and prices. This observation leads us to a major barrier to entry. Suppliers were reluctant to enter an oligopsony-dominated market, so only five companies took the plunge into the California generation market. Effectively, a five-company unregulated oligopoly was substituted for a three-company regulated oligopoly.

Another underlying problem contributing to this problem has been market manipulation. For example, where generators bid to provide power at prices that approach the prevailing price-cap—a "band-aid" that has been applied. Only California has a market structure that is devoid of major controls on market power abuse. California allows generators and large loads to bid into any market they wish, without restriction, subject only to maximum price-cap. The predictable result is the equivalent of monopoly power which translates inexorably into higher prices at times when power is scarce in particular regions.

Finally, there is little evidence that legislators anticipated the unbridled degree of greed that would be displayed by the generators. Many, if not all, of those companies that purchased California generating plants at inflated prices have largely recouped their investment within the first two years of ownership. Record profits and unabashed exploitation of market loopholes have been the hallmark of the California experience.

For those who believed that the creativity of the market would result in rapid response to an energy deficit, the truth was crushing. It turns out that, like telecommunications, the market is slow to respond to a transitionary market where a powerful incumbent lays in wait for any overly ambitious challenger.

Lesson #2—Deregulation Is Complicated Thing

In the years following the passage of the 1996 law, the legislators and regulators failed deal with the following critical assignments necessary to making a competitive electricity market function:

- Ensure an adequate number of generators existed before deregulation began;
- Protect against market power manipulation and abuses by those generators selling into the market
- Develop effective bidding protocols and congestion management schemes
- Develop effective congestion pricing schemes
- Ensure a sufficient number of bidders purchasing power, thus resulting in some buying power manipulation
- Define a clear role for utility distribution companies
- Target demand responsiveness, thus giving customers the power to influence the market
- Effectively promote distributed generation, utilizing smaller, decentralized generation

The result was the absence of a level playing field for competitors coupled with glaring flaws in the California's incomplete deregulation model.

It is not as though the regulators haven't had time. The Public Utilities Commission has been locked in lengthy, time-consuming, resource-draining regulatory hearings since early 1997 trying to sort out the very complicated and contentious issues. Well-resourced utilities have spared little expensive in protecting their interests and, in doing so, delaying or appealing decisions. The regulators never had a chance to complete the restructuring process in three years. It probably won't in ten years.

Lesson #3—The Absence Of A Safety Net

What has happened in the San Diego region is politically impossible. Yet, it occurred. There is no region in the country that would tolerate the volatility experienced this summer. It is a testament to the civility and sophistication of San Diegans that there was no violence. But the reality is that electricity is not a service in which extreme rate volatility is acceptable. Ultimately, elected officials had to intervene and provide some legislatively mandated rate stability.

The folly of imposing a volatile market upon electric customers during a time of shortage is perhaps the most obvious failure in this deregulation debacle. But perhaps the greatest failure of California's deregulation, at this point, is the fact that consumers have been given no tools and few options with which to respond to rate volatility and no safety net to protect against an absence of such options. The worst case scenario was given no credence by regulators and thus they were totally unprepared for it. Consumer groups were forced to sit and wait for the disaster to hit. And when it did, they were ready. But even then, California regulators were content to fiddle. Finally, the state legislature was forced to step in and quell a growing ratepayer rebellion in San Diego.

In addition to not preparing for Armageddon, regulators did little to assure that consumers had choices or tools with which to deal with rate volatility. For example:

- The demand-side of the equation has been largely overlooked. There are no "interval" or time-sensitive meters that enable small customers to obtain specific market signals about actual electricity use and costs.
- There are few, if any, energy efficiency and load management programs available to small customers to help reduce or change the way in which they use energy.

- Self-generation isn't cost-effective yet
- The rules for interconnecting to the utility power grid are not resolved.
- Competitive energy providers have been reluctant to enter this unsettled market;only three such providers are offering mildly discounted prices to San Diegans.

Without meaningful choices, customers are left powerless and increasingly frustrated. Perhaps the most galling aspect of these problems is that the customers who can least afford the rate hikes are being hit the hardest. For the average consumer, the $94 per month summer penalty that they have to pay squeezes a family budget already battered by a similar 70% increase in gasoline prices. Add to this the recent increases in telephone, cable and home rental prices and you have an unprecedented mugging of the household budgets of fixed-income and low-income customers.

One such barrier is the product itself. The visionaries of deregulation see electricity as just one of a suite of products competitors can offer customers. Other products offered by these "network providers" range from simple billing and smart metering to a more lucrative bundling of electricity with cable, internet access, and phone services. It is within this broader suite of products where the real profit margins lay and where the real incentives to play in the electricity market exist and other states like Pennsylvania have recognized this and designed their deregulation model accordingly.

Unfortunately, in California, competitors are effectively limited to selling electricity as a pure, undifferentiated bulk commodity. To further stifle competition, the Big Three utilities have also retained the power to do the billing and the metering for any customers they happen to lose to competitors; and, of course, they charge competitors too much for these services. The result: profit margins are simply too thin to attract enough players to make competition a reality.

Lesson #4—Regulators Are Referees—They Can't Wear Blinders

Perhaps the most egregious mistake by the various regulatory and quasi-regulatory agencies involved in California's deregulation was their ignorance of the market. A host of bodies purporting to be trying to create a competitive market appeared to be blind to what was really going on in the market. And they had little inkling of the significant rate volatility that could be expected; or if they knew, they kept it a well-guarded secret.

With the new reliance upon the competitive market to provide basic electric services for small consumers, the new regulator's challenges are, in the simplest of terms:

a. Promote a competitive marketplace with multiple buyers and sellers
b. To arm all consumers with the information necessary to make informed choices.

These two elements are essential components to a competitive market. If either of the two elements are missing, then a competitive market will not materialize. This assertion is a basic economic axiom that is not disputed by any reputable party.

This underlying premise compels the state regulator to ensure a multi-seller/multi-buyer marketplace using supply and demand forces. Supply means using market conduct and incentive to ensure multiple sellers are serving all customers. Demand means adequately informing all consumers of choices and ensuring that customers have the necessary economic incentives to choose among competitors.

Upon the commencement of a deregulated market, the demand upon regulatory resources will increase due to the increased number of consumer complaints and inquiries spawned by an uncertain, transitional environment. A virtual or real direct access world would spawn a number of aggregators, brokers, marketers and other third parties offering services to individual retail customers or cooperatives. These transactions will likely spawn a multitude of complaints, disputes and disharmonies that will need to be addressed in a uniform and knowledgeable fashion. Similarly, in the telecommunications market, the amount of consumer choices and consumer confusion will increase

During the transition years, demands made upon the new regulator's staff time for complaint resolution and investigation will increase. Funding levels would have to increase in order for staff to be trained, armed and capable of fielding the slew of complaints. For example, in telecommunications California regulators have seen its staff swamped with a tidal wave of telecommunication service abuses ranging from benign, but irritating slamming (unauthorized switching of long-distance service providers) to outright scam artist activity. It has even found that the large incumbent LECs and the established IXCs have engaged in illegal or unethical sales practices.

But because of the complexity of energy services, new and more widespread types of complaints are expected, such as have been spawned by telecommunications com-

petition. Contractual disputes will abound, as will new billing, service and jurisdictional disputes. Information-based infractions (misleading advertising, unrealized expectations, fraud) will also develop into huge growth industries in their own right. Current funding levels at most regulatory bodies are simply inadequate to deal with current demands upon the regulator. The future demands will likely dwarf current ones, thus further necessitating a new approach to dispute resolution.

The focus of the state regulator's challenge will be one of monitoring market conduct. Not only will it need to be vigilant for market dominance problems (a critical function that California regulators have proven themselves impressively inept) but it must also be attentive to whether the competitors are treating customers responsibly, are providing adequate service, and are not engaging in unintentional redlining. The problems will be developing at a fast and furious rate. Most regulators are woefully under-prepared to track, let alone respond, to these problems.

Lesson #5—Customer Education Shouldn't Be A Misinformation Campaign

In the California restructuring proceeding, R94-04-031, the California Commission committed to a consumer education process. It asked stakeholders to create an education process. Pursuant to this group's recommendation created a trust "to promote consumer education and understanding of forthcoming changes in the structure of the electric industry in California and to educate consumers about service options available to them in the newly competitive electric environment." (D. 97-03-068) It was the last "correct" thing that the Commission did regarding consumer education.

The trust concept was based on the model of the Telecommunications Education Trust set up by the California Commission with $16.5 million in fines paid by Pacific Bell as a result of alleged abusive and deceptive marketing practices. These funds were disbursed over a six year period to community groups and other grantees to provide basic telecommunications educational information, especially to underserved consumer populations.

The CPUC spent upwards of $90 million during 1997 and 1998 in an awareness building campaign that turned out to be very controversial within the state. It created an Electric Restructuring Education Group (EREG) to advise the Commission on how to spend these monies.

The main failing of the regulator's adopted education plan is that it failed to adequately differentiate between leading customers to an information source and providing the substantive information. The former is focused on educating consumers on HOW to find information. The latter is focused upon trying to explain the changes to customers. Greater emphasis should have been placed upon the former during the first two phases of the effort.

The plan appeared to be based upon an erroneous assumption that the education of consumers must be done via mass media and is not a simple message affording a useful tool to consumers. It recommended an expensive first phase mass media campaign during a very expensive media market period. Its assumptions were in error because it:

a. Underestimated the amount of independent mass media marketing that will be done by private marketers;
b. Overestimated the quickness with which mass markets would be served by competitors.
c. Assumed that a simple message will inadequate;
d. Underestimated the value of targeted public education of opinion leaders;
e. Undervalued the amount of free education time available via public service announcements and news programming.
f. It did not anticipate consumer reaction to rate volatility.

In delivering messages, it is more important to direct the available resources to the more inaccessible, hard-to-reach, small business and local government. Television and radio are good for reaching out to the population that is generally not at-risk of being underserved. Most small business owners and bill payers do not have much time to watch television or listen to the radio. The best way to reach these people is through trade journals and/or through trade association meetings, or mixers, or one-on-one contact through local CBOs (community-based organizations) such as California Small Business Association, Minority Business Council, Overall Economic Development Program, ethnic chambers, Wester Council for Construction, Business Link, Women Business Association and the California Community College System.

The message(s) could have been very simple. In the first phase, it could have been supplemented by advertising done by the private market. Rather than buying large amounts of expensive airtime, the CPUC could have disseminated a simple message: "Change is coming and by calling 1-800-MYPOWER (or some such toll-free number) I can get some useful info."

That, combined with an aggressive targeted education campaign to opinion leaders, community groups and traditionally underserved or vulnerable communities, should have been sufficient for the First Phase of the program. The expected free news and public service announcement time should have been adequate substitutes an for expensive mass media campaign.

Alas, the Commission didn't do that. Instead, it ran an awareness campaign that left consumers feeling confused and, ultimately, betrayed. They were promised savings if they switched providers and partook in the competitive market. As one current CPUC commissioner observed, ratepayers have good reason to believe that they were lied to—at a formidable $90 million cost borne by all ratepayers.

IV. UCAN'S RECOMMENDATIONS

From these observations, UCAN submits that is not yet clear that deregulation is the problem in California. That is because the fundamentally flawed nature of the initiating legislation and its implementation by state regulatory agencies has not yet permitted functional market to work. Consumers have witnessed lousy regulation—not deregulation. Nor is re-regulation the solution. It may not even be possible;with most of the utilities' power plants sold to third parties at inflated prices, the state may not want these old, inefficient units back.

Yet, deregulation is now been tainted. And deservedly so. The dangers of relying upon a market to provide an essential commodity has been uncovered. States may appropriately conclude that the importance of reliability and rate stability may outweigh any benefits to be gained by a fully unregulated electric market. The Federal government should respect that decision.

However, the federal government has an obligation to ensure that all consumers are afforded a minimum level of protection in those states that do adopt a deregulatory scheme. Before getting to these protections, it is important to establish principles for any deregulatory scheme. These principles should be considered in any federal deregulation bill as sacrosanct; and they should be required for any state embarking upon deregulation of energy.

Essential Deregulation Principles

The wholesale and retail electricity markets in California are broken. Putting aside the question of whether the process it is incomplete (as claimed by proponents) or fundamentally flawed (as opponents insist), it is almost inarguable that what has happened to San Diego is not acceptable and not an expected outcome of a competitive energy market. The following principles were not heeded in California and should be in other states.

- A competitive retail market is an impossibility in the absence of a workably competitive wholesale market. Conversely, a competitive wholesale market depends upon a reasonably functional and responsive retail competitive market.
- Extreme rate volatility should not be imposed upon customers who can not effectively respond to such volatility
- Electric service must be kept affordable and reliable
- The ability of consumers to send price signals to energy producers must be enhanced
- Energy reliability and prices can not be held hostage by profit-seeking electric generators—market power must be kept balanced;
- Until the competitively market develops completely, energy efficiency and load management must be encouraged;
- Ratepayers should not be locked into long-term, expensive fixes in this increasingly dynamic market;
- Regulators have an important role to play in monitoring the market and making sure that is working;
- Local governments have to play a bigger role in protecting its citizens and its economy from energy market volatility and they should have the tools to do so;
- Consumers must be given useful information about the market and about their options; and
- The local distribution company must not base its profitability on selling more power, but smarter power.

Specific Elements of Any Federal Deregulation Law

Some specific applications of the lessons learned from San Diego's disaster are listed below. This list is in no way exhaustive. But it is representative of the kinds of minimal steps that must be taken by the federal government to ensure that no other city or region in this country experiences the damage suffered by San Diego.

More effective customer protection, information, and education programs and a safety net for small customers. For retail competition to work, customers

must be comfortable participating in the market. California's SB477 is a reasonably decent model for the kind of consumer protections that should be a part of any state deregulation plan. California's consumer education effort is the opposite—a lesson in what NOT to do. In educating customers, they must be given tools by which to take advantages of choices. Finally, they must be afforded some form of safety net which caps the risk that they can take.

Support aggregation opportunities for small customers. Aggregating many small customers into one large customer can help overcome both the supply side and demand side barriers of marketing to and serving small customers individually. There are too few good examples of small customer aggregation projects. Any state law impeding aggregation of customers, especially by accountable public or quasi-public agencies, should be precluded by law.

Major commitment to energy efficiency and load management. States must include a commitment to utilizing cost-effective, flexible efficiency and demand management programs as any part of a deregulation process. This effort should utilize the combined resources of public agencies, industry, consumer groups and environmental organizations. Long-term, capital intensive investments in transmission or central generation infrastructure must be compared to efficiency investments as a precondition for them being built.

Expand net metering and other policies to open up the distribution system to alternative supply sources. California adopted a net metering statute, which allows small customers who self generate to return extra kilowatt-hours to the utility grid and "run their meter backwards." Net metering offers opportunities for homes and businesses to connect small-scale wind and solar applications, save on their power bill and perhaps contribute increased efficiencies to the overall electricity production and delivery system. Any state precluding or unduly limiting consumer access to renewable alternatives can not be tolerated. Moreover, any state deregulation plan should have some component that addresses means by which renewable or emerging generation technologies will be promoted in that state. Innovation may be the true benefit of deregulation; states should not be allowed to create barriers to these innovations.

Better definition of the role of the default provider. A default supplier provides regulated electricity supply to customers who do not have real supply alternatives or have not switched to a competitive supplier. The idea of several competing default suppliers is one that needs to be seriously considered. Whatever default supply method is ultimately used it should not hamper the development of competition, where competition is workable. However, an effective default supply program is essential and must be an early component of any state deregulation plan. Retail competition should not go forward without a well-defined role for incumbent distribution companies.

Distribution system policies to support efficiency and resource diversity. Some experts see energy distribution monopolies of the future as "converged" companies that deliver electricity, natural gas, and even water. In their view, future distribution monopolies would be fully separated from production assets and would play an important role in ensuring reliable, high quality service and supporting public purposes in a competitively neutral way. Future distribution providers could also help shape an economically efficient and environmentally sustainable supply infrastructure through the use of distributed generation. Also more thought also needs to go into distribution rate design for deregulated markets—they must not be designed to impose fixed charges upon small customers. Such charges discourage efficiency and the cost-effectiveness of alternative, distributed generation. These matters must be resolved a priori, that is, before a market is opened to competition.

V. CONCLUSION

UCAN requests that this Committee ensure that the principles and essential elements discussed above be incorporated into any federal legislation that sanctions energy deregulation. It also requests that special attention be paid to reducing barriers to entry by emerging technologies and that, in fact, the government commit to making subsidies available to promote these alternative generation options and enhanced energy service services available to large and small customers. Ultimately, it will be the generation and energy service technologies that will make any deregulation scheme a successful one. These, more than anything else, will ensure that competition blossoms and that real choice exists for small consumers.

Mr. BARTON. Thank you, Mr. Shames.

We'd now like to hear from Mr. Jan Smutny-Jones, who is Executive Director of Independent Energy Producers here in California. Welcome, Mr. Jones.

STATEMENT OF JAN SMUTNY-JONES

Mr. SMUTNY-JONES. Thank you, Chairman Barton and members of the committee and San Diego Congressmen.

I am Jan Smutny-Jones. I'm the Executive Director of the Independent Energy Producers. We represent a large portion of the generation community here in California. Not just gas fired, but also a significant amount of the renewables, such as the wind, biomass and the geothermal companies down in the Imperial Valley, which are a part of Mr. Hunter's district, if I remember correctly.

Our view of this is the fundamental cause of both the high prices and reliability problems that California has been facing is the lack of power plant construction actually keeping up with the demands of a booming economy.

And let me put this in sort of a back of an envelope perspective for you just so you understand. Since restructuring began in 1998, we've had three different summers. The peak has grown by about 1,000 megawatts per year. If you figure the average size of a power plant is about 500 megawatts, that's six power plants in the last 3 years.

Mr. BARTON. What is the peak right now, Mr. Jones?

Mr. SMUTNY-JONES. The peak we hit at the ISO this summer, I believe, was 46,000.

Mr. WINTER. The peak that we——

Mr. SMUTNY-JONES. Overall it was 50. It was over 50.

Mr. WINTER. Yeah. The peak, we had about 45, but in fact, we had curtailed so much load that we're really looking at peaks in the 47, 48,000 range.

Mr. BARTON. Thank you.

We won't take it away from your time.

Mr. SMUTNY-JONES. That's fine. In addition to that, growth in the west, which Mr. Shames just referred to, has gobbled up about an additional 2,000 megawatts of power we used to be able to import from Arizona and the northwest. That's another four power plants.

So just to get back to where we started, just in terms of the amount of supply out there in the last 3 years, we would have needed to add 10 power plants. That hasn't happened. That's the bad news. The good news is, help is on the way.

But I also want to make it very clear that deregulation is not the cause of power supply shortages in California. Rather, it's a legacy of a failed regulatory process that failed to add power plants in the 1990's. We did, in fact, have a process that went to great lengths to try to identify needs for new power plants. There were supposed to be about 1400 megawatts added in 1999 and the year 2000. That was back in 1994, 1995 timeframe. We saw all that coming.

A couple of utilities out here opposed that, went to FERC, got that decision overturned. Those power plants didn't get built. They would have come in handy right about now.

That was the old world. Okay. And part of the reason my membership is supporting deregulation trying to move to a different

world is basically because we believe that in a more deregulated market, you will see more power plants being constructed.

In fact, right now, as Mr. Keese indicated, there is a significant amount of activity going on at the California Energy Commission. We have five plants that currently have been licensed, four under construction. There's another 10 or so in the process right now and a whole slew of them about to follow that.

That's good news. These are new state-of-the-art clean resources that will not only add needed capacity to California, but will be environmentally beneficial as well. Right now we're estimating it's about $10 billion worth of new investment in there.

So it's very important to recognize that California has attracted this new capital base, and these people are here to build power plants. Maybe they make money, maybe they lose money, but it's their money, and the rate payors aren't going to be basically captured or held to that as we had with the old stranded cost problems that developed in the 1970's and 1980's.

Our obvious concern is is that we don't try to reregulate, because those dollars can go elsewhere. This is an international market. We're competing for turbines internationally, and we need them here in California.

The California legislature has enacted some legislation that we believe will help speed along siting of power plants. Mr. Keese referred to that. Governor Davis did, in fact, order the agencies here to expedite review of various applications before them while still maintaining the integrity of environmental law. This is California. We have environmental laws that people take very seriously, and we're not asking those be overturned, but we do believe you can trim months off of the siting process.

From the standpoint of what can the Federal Government do: one, accelerate necessary Federal review of permits. That's a relatively easy thing to do. When an application comes in from a power plant, take it out of the bottom of the "in" box, put it on the top. You don't have to say yes, but you have to expedite that.

Second, and it's in my testimony, there are some Catch-22's with respect to how the Federal Coastal Zone Management Act complies with California laws who are literally in a Catch-22—I'm almost done—inside a power plant——

Mr. BARTON. Go ahead about 2 more minutes because I cost you a minute when I asked the question.

Mr. SMUTNY-JONES. Okay. I'll take you up on that.

Last but not least in this is giving the Environmental Appeals Board of EPA the discretion of all other appellate bodies out there. We have a real world experience where a power plant in Northern California jumped through every firey hoop, is going to be the cleanest gas plant built anywhere in the world.

Okay. One person sent a letter. Automatically, that plant got stayed for 4 months. Notwithstanding the fact that every regulator that reviewed it thought it was a good plan. So basically, what we're asking is that EPA Appeals Board apply the same appellate process that if you went to any other court or any other appellate body, that you basically have to show that you're going to probably win this and be irreparably harmed if you didn't.

So in closing, I would just say that what we need to be doing in California is giving customers meaningful choice so they actually, you know, have something to choose from, and building out the generation. It is very critical. This is—short of repealing the laws of supply and demand—and I haven't heard anybody suggest that that's where you want to go—it's very important that we build additional supply out there so we're able to meet the needs not only of people here in San Diego, but the rest of the west as well. Thank you very much, Mr. Chairman.

[The prepared statement of Jan Smutny-Jones follows:]

PREPARED STATEMENT OF JAN SMUTNY-JONES, EXECUTIVE DIRECTOR, INDEPENDENT ENERGY PRODUCERS

Mr. Chairman, members of the Committee, I am Jan Smutny-Jones, representing the California Independent Energy Producers Association.[1] IEP represents the independent generators and marketers doing business in California. Its members own or operate over half the generation in California and all of the proposed new generation. IEP has been an active participant in restructuring efforts in California over the past decade, a fact reflected in my service as Chairman of the Board of the California Independent System Operator. I emphasize that my comments this morning are solely on behalf of IEP.

Thank you for your invitation to address what has become front page news in California: this summer's high retail electricity prices and threats of electricity blackouts. John Stout of Reliant Energy, one of IEP's member companies, will testify this morning regarding the reasons for price volatility in California's retail and wholesale markets. I will not repeat John's testimony, other than to say that IEP concurs with his key points. Most fundamentally, John is correct in his conclusion that lack of supply is the fundamental driving force behind both the price and reliability problems making headlines in California. My testimony focuses on the causes of this lack of supply, what solutions are already underway, and some specific further steps that the federal government might take to help solve this problem.

Although this problem only hit the front pages this summer, the seeds of California's current electricity shortage were planted over many years, both on the demand side and the supply side. They were planted on the demand side in the emergence of the vibrant "dot.com economy" of which Californians are justly proud. But as we advance the frontiers of "e-commerce", let us not forget what the "e" stands for. Indeed, our entire economy and lifestyle should have an explicit "e" in front of it. Take a brief moment to consider just how fundamental electricity is in our everyday lives. When the electric grid fails, it is not just the lights that go out. Computers, automatic teller machines, traffic lights, air conditioning, television, radio, public transportation, and millions of other devices upon which we depend demand electricity. Everyday we plug more and more of these devices into our electric grid, taking for granted that some power plant somewhere will generate when we flip the switch.

Given California's booming economy, not to mention its growing population, it is entirely predictable that demand for electricity is booming as well. Indeed, in the famed Silicon Valley, demand for electricity is growing at 5 per cent annually. In some California locations electric demand this summer reached levels which until

[1] IEP was founded in 1981 to represent the interests of non-utility electric generators selling electricity to the state's investor-owned utilities under long-term contracts. Over the next fifteen years, the industry grew to nearly 10,000 MW and made California a world leader in efficient industrial cogeneration and renewable energy technologies.

In 1996, the State Legislature fundamentally changed the California's electric industry with the passage of AB 1890. As a result, California's investor-owned utilities sold all of their gas-fired power plants and their geothermal power plants.

The purchasers of these assets—some of the largest, most innovative energy market participants in the world—are now members of IEP. As a result, IEP now represents the owners of most of the electric generation in California. Moreover, IEP's membership includes owners and developers of virtually every electric generation technology in California. The technologies include conventional and cogeneration gas-fired power plants, coal-fired cogeneration plants, geothermal plants, solar plants, biomass plants, and wind farms.

IEP represents its members in a variety state legislative issues and administrative proceedings. The organization is committed to maintaining a viable, competitive electric generation industry that can meet the state's growing electricity demand and reliability needs. With proper state leadership and an ongoing state commitment to a competitive electricity market, the industry is poised to invest billions of additional dollars in the California economy to these ends.

recently were forecast to be more than a decade away. The California Energy Commission's 1998 statewide electric demand forecast for the year 2000—then only two years into the future—was revised upward last June by a full 5.1 per cent or 2,640 megawatts. And that, of course, is just the size of the revision in one year, not the overall growth in demand. Moreover, this growth is occurring throughout the West, not just in California—which means that electricity once available to California from other states now serves local loads.

Other seeds of today's shortage were planted on the supply-side—or, to be more accurate, the seeds of a solution were killed. Despite its growing population and economy, California's former regulated monopoly regime brought construction of new power plants to a virtual standstill beginning in the late 1980's. Although electricity demand grew by nearly 10,000 megawatts during the 1990's, California's lead agency for thermal power plant licensing permitted only 1,620 megawatts of new generation. Moreover, of these permitted facilities, only 1,076 megawatts were constructed. For example, in the case of San Francisco Energy Company's proposal for a 240 megawatt facility in San Francisco, local government opposition killed the project despite its ostensibly preemptive state license.

Lest my Washington friends jump to the "excessive California environmental regulation" explanation, however, I must tell you that is not the problem. Modern power plants can meet even California's notoriously stringent environmental standards. In fact, by reducing the operation of older, dirtier and less efficient generation, new power plants substantially reduce air and water pollution from power plants overall in California. While the "NIMBY" phenomena is certainly alive and well, the sophisticated major environmental groups understand and support the construction of state-of-the-art power plants in markets, such as California, where the alternative is continued reliance on much dirtier facilities.

No, the seeds of the supply shortage were not planted by environmentalists. They were planted by economic regulators who removed the incentives for new power plant construction. Indeed, those that deprecate California might be surprised to learn that the most egregious California electricity supply decision of the past decade actually occurred in Washington at the Federal Energy Regulatory Commission. I refer to the FERC's 1995 decision granting the petitions of two California utilities, Southern California Edison and San Diego Gas & Electric Company, to overturn a decision of the California Legislature and the California Public Utilities Commission that would have resulted in the construction of 1,400 megawatts of cost effective new gas and renewable generation. These projects would be on-line today, generating clean power at prices between 3.5 and 6 cents per kilowatt hour under long-term contracts, had the FERC not overturned the state's decision authorizing the contracts.

Of course, California made its own flawed supply decisions in the regulated market as well. The California Energy Commission, in determining the need for new power plants in 1992, chose to rely upon over 8,000 megawatts (by 2003) of "uncommitted conservation"—that is, conservation representing a "future commitment" beyond the conservation deemed enforceable at the time. (This is in addition to the Commission's reliance upon "committed conservation" such as adopted energy efficiency standards or other existing programs.) Not surprisingly, this "uncommitted conservation" left California prior to the wedding without reducing real-world demand.

In short, the problem California is experiencing today is the result of growing demand and the failure of the economic regulatory structure in place *before* deregulation. That former regulated monopoly regime failed to acknowledge the need for new power plant construction over the past decade or more. This fact was a major reason, though not the only one, underlying the decision of the California Legislature to fundamentally restructure California's electricity market in 1997-98.

That restructuring has been strikingly successful in attracting proposals for private sector investment in new power plants in California. Indeed, I must tell you candidly that even I have been shocked at the swiftness of the private sector response, especially given the economic and regulatory risks involved in constructing new power plants in a fledgling market. In the four years since the California Legislature enacted AB-1890, and as a direct result of it, over 40 new power plants requiring the investment of over 10 billion dollars have been planned or filed for licenses in California—all with private sector capital and no guarantee of capital recovery other than the opportunity to compete in a real market.

Just the projects which have already filed for licenses would total over 14,000 megawatts—greatly reducing the threat of blackouts. They will compete with existing generation and each other to reduce consumer prices. And, because of that competition, older, inefficient, more polluting facilities will either operate less or be re-

placed altogether, resulting in overall reductions in air emissions, water use and other environmental impacts system-wide.

The problem, of course, is that most of these power plants are still on the drawing boards or in the hearing room, not under construction or operating. To be precise, of the announced projects, only five projects totaling 3,643 megawatts have been granted licenses to date or are under construction. 14 additional projects totaling 8,015 megawatts are in the licensing process. Others will be filing for licenses in the near future.

Governor Gray Davis has made processing of these license applications a top state priority. While making clear that all applicable standards will be enforced, the Governor has asked state agencies to give priority to reviews of power plant applications.

The California Legislature has also already acted to address both the supply side and demand side problem in California. Within the past two weeks, the Legislature enacted bills to increase demand responsiveness, cap retail prices in San Diego and expedite the siting of power plants. The governor is expected to sign these bills into law in the next few days.

The legislation to expedite the siting of power plants is limited to temporary installation of simple cycle peaking facilities and facilities which have no significant environmental impacts and are in compliance with all applicable laws, standards and ordinances. The goal of this legislation is to accelerate the licensing of facilities without compromising environmental standards. This is an objective which IEP strongly supports.

As you know, power plant licensing is primarily in the hands of the states. However, power plants are subject to numerous federal laws and regulations. Thus, without compromising the substance of these requirements, the federal government can assist California by making its administration of these requirements more efficient and less ambiguous.

Perhaps the greatest single thing the federal government can do is simply to determine compliance with its standards more quickly and efficiently. Anything this committee can do to accelerate key federal permits such as U.S. Fish and Wildlife Service biological opinions or Environmental Protection Agency determinations under the Clean Air Act would be an important step.

There are also two other very specific things that the federal government can do to accelerate power plants without compromising federal standards. The first concerns determinations under the Federal Coastal Zone Management Act. As you know, California has numerous facilities along its coast, many of which are likely candidates for replacement and repowering proposals. These proposals are particularly beneficial because they directly replace older, more polluting facilities with state-of-the-art power plants. There is, however, a "Catch 22" created by a conflict between federal and state law regarding who determines compliance with the Federal Coastal Zone Management Act.

When the California Energy Commission was created in 1974 by the California legislature, the legislature sought to consolidate all permitting issues into that agency. As part of that effort, the legislature enacted a statute which prohibits the California Coastal Commission, the agency that would otherwise determine compliance with the Federal Coastal Zone Management Act as a delegate of the federal government, from performing that function. The state sought to transfer this delegation for power plants to the California Energy Commission. However, according to the California Coastal Commission, federal law does not recognize the state law on this issue and prohibits any state agency other than the California Coastal Commission from determining compliance with the federal law. Thus, power plant developers in California have been told by the Coastal Commission that the agency is simultaneously prohibited by state law from making the determination, yet it is the only agency under federal law which can do so. The federal government could remove this "Catch 22" by designating the California Energy Commission as the entity which determines the conformance of power plant proposals in the coastal zone with the requirements of the Federal Coastal Zone Management Act.

Another area where the federal government can help concerns expediting the resolution of frivolous appeals to the Environmental Protection Agency's Environmental Appeals Board. Under current law, an appeal to the Environmental Appeals Board automatically stays the challenged permit and therefore prevents commencement of construction regardless of the merit of the appeal. In other words, unlike virtually every other appellate body, the Environmental Appeals Board lacks the authority to determine whether the merit of an appeal warrants a stay of construction. It has no choice other than to stay construction pending the final resolution of the appeal which can take many months. Using this mechanism, a single individual in California, by writing a one-page letter, was able to delay construction of the first of

California's post-deregulation power plants for several months with claims that were utterly without merit and had been rejected by the EPA staff, the California Energy Commission and ultimately by the Environmental Appeals Board. Recognizing the urgency of the situation and the frivolity of the appeal, the Environmental Appeals Board gave this appeal a priority and dismissed it as quickly as it could. Nonetheless, because the appeal automatically stayed the necessary permit, the project was significantly delayed, its costs were increased and its ability to meet the summer peak of 2001 was jeopardized.

The solution to this problem is to give the Environmental Appeals Board the same sort of appellate injunctive relief role that is typical of other appellate bodies. Specifically, the filing of an appeal with the Environmental Appeals Board should be required to justify the need for a stay of the challenged permit based upon the likelihood of success of the appeal and the relative harms to the appellate and the public interest. This would be an important reform as many opponents of power plant projects in California have become very aware of their ability to significantly delay projects in this fashion at essentially no cost to themselves.

In conclusion, the law which is most affecting price and reliability in California is the law of supply and demand. Obviously, no one can amend that law and it will continue to apply regardless of the regulatory structure. The solution to California's problems lies in reforming the retail market as discussed by John Stout and by accelerating the licensing of the many projects which deregulation has brought forward consistent with applicable environmental standards. While these solutions are primarily the responsibility of state government, the federal government can support the state's efforts by accelerating its own reviews, addressing jurisdictional ambiguities and applying standard appellate rules regarding construction stays to federal environmental appeals.

Mr. BARTON. Thank you, Mr. Jones, and thank you for changing your schedule to appear. You're one of the witnesses that I really wanted to hear from, so I appreciate you coming.

We now want to hear from Mr. Greg Barr, who is the Vice President of Power Generation for Solar Turbines.

STATEMENT OF GREGORY BARR

Mr. BARR. Thank you, Mr. Chairman, members of the Commission and local Congressmen.

Mr. BARTON. Use that big microphone because I think it's a little bit better.

Mr. BARR. Okay. Solar Turbines is a wholly-owned subsidiary of Caterpillar, Incorporated, located here in San Diego. And we, along with our 3,000 employees and other members of the community at large, have been experiencing extraordinarily high electricity prices for the last few weeks.

We are a manufacturer of medium-sized industrial gas turbines. And together with Caterpillar's engine division, we produce 20 gigawatts of generating capacity per year. That's the equivalent of about nine Hoover Dams.

I'm honored to be here. My role in the company is to lead our power division. I'm not an expert on utility regulatory and legal structure. However, it is clear that the new regulatory structure did not fully anticipate the electricity market dynamics.

Restructuring has proceeded slowly. Market forces work rapidly. Price signals would normally prompt supply and demand responses. But those responses have been blocked to date by residual regulation and continuing uncertainty.

The heart of the problem today is a shortage of generating capacity. We are Solar Turbines make generating capacity. As such, we believe we are part of the solution.

The gas turbine generators that we make are ideally suited for distributed generation. And by distributed generation, I mean gen-

eration cited at industrial, commercial and institutional facilities where the heat and power is used in their process, as well as generations cited at distribution and transmission substations that respond to periods of peak demand.

There are several reasons why distributed generation is a critical part of the solution that you are looking for today. It has very short lead time. Barring regulatory barriers, a distributed generation unit can be operational within 1 year.

It has attractive and predictable economics because it is customer-driven. However, regulatory uncertainty can undermine investment criteria and economics. It creates supply side diversity, which dampens market price swings and addresses concerns over market power.

It reduces transmission and distribution system constraints rather than adding to them because it is located near the consumer. This can defer needed additions to the T and D system. And in many cases, it can actually reduce emissions from existing industrial locations by as much as 50 percent.

Economically and environmentally, distributed generation makes sense. Both Federal and State governments should work to eliminate barriers to distributed generation. In particular, Congress should create uniform national standards for interconnection of distributed generation. Congress should work to eliminate rate policies that penalize self-generators and instead should credit them for the benefits they create.

Where generation ownership is not prohibited by State law, utilities and their affiliates should be permitted to own and operate distributed resources. Congress should work to eliminate any requirements that distributed generators be regulated as public utilities.

We need an electricity market structure that is efficient economic and fair to all consumers in the way that only an open and competitive market can be. Distributed generation can play a major part in such a market.

Thank you very much, and I will be happy to take any questions that you may have on my testimony.

[The prepared statement of Gregory Barr follows:]

PREPARED STATEMENT OF GREGORY BARR, VICE PRESIDENT, SOLAR TURBINES INCORPORATED

INTRODUCTION

My name is Gregory Barr and I am Vice President of Solar Turbines Incorporated. On behalf of my company and our three thousand employees here at our headquarters in San Diego, I am honored to have this opportunity to testify at this important hearing. We thank the Subcommittee for holding this hearing to assess the problems that have occurred in our newly restructured electricity market and to consider our recommendations for addressing and solving these issues.

Solar Turbines is a leading manufacturer of combustion gas turbine generator sets. Of the 11,000 Solar combustion gas turbines installed around the world, over 4,000 generator packages are sited in the United States. Solar Turbines is currently working in partnership with the United States Department of Energy to develop high efficiency, low emissions, low cost advanced turbine systems (ATS) specifically designed for distributed power generation. Solar Turbines is owned by Caterpillar Inc., the world leader in the manufacture of earthmoving and mining equipment. Caterpillar also makes reciprocating engines, often used for power generation. Together, Caterpillar Inc. and Solar Turbines are one of the largest manufacturers of electrical generation capacity in the world, producing each year about twenty gigawatts of generating plant—the equivalent of nine Hoover Dams.

As you well know and as you have heard from other witnesses this morning, the restructured electricity market in California is enduring a very rough "break-in" period. Consumers and businesses in this area have been involuntary participants in what has effectively been a massive initial experiment in electric industry reform, and the costs to them have been extreme. Solar Turbines urges this Subcommittee, the rest of the Federal government, and the California state government to work closely and quickly to alleviate the huge economic penalty that has effectively been imposed on this region. In the same way that other regions and states will be able to benefit from the lessons learned here about restructuring, it is not unfair to ask that the costs of the experiment be shared more widely, at least for the benefit of the residential and small commercial customers who are least able to cope with them. It is perhaps ironic that Solar Turbines, as a major manufacturer of electricity generating capacity, has itself been subject to extraordinarily high electricity rates because of what is generally recognized to be a shortage of electricity generating capacity.

In this testimony, Solar Turbines will provide its own perspective on the general problems, but we will not attempt to compete with the elaborate analysis of causes and effects the Subcommittee will have heard from other witnesses. Instead, my testimony will focus on my company's role as a part of the solution through its business of providing equipment for high-efficiency, low-emission distributed generation of electricity. I will note the barriers that have so far prevented greater application of distributed generating resources and the policy changes needed to remove those barriers.

THE NATURE OF THE PROBLEM

As the electricity industry is a highly complex group of enterprises and activities, so too the current problems are highly complex. The essence of the current problem, stated as simply as I can, is that there is a remaining mismatch between the new market structure designed and embodied in legislation and the actual market dynamics of the electricity business.

There has been a general consensus that in the electricity industry, as in other industries that were once thoroughly regulated, it makes sense to allow the competitive forces of the free market to work their magic in providing price signals to consumers and suppliers to the extent possible, gaining economic efficiency as a result. Yet the same consensus holds that many electricity industry activities, such as transmission, distribution, facility siting, and environmental emissions, must remain subject to regulation in the public interest—these are not activities that can be simply deregulated.

Determining how to restructure once-pervasive regulation to allow market forces to operate where they can operate is not an easy task. Solar believes that it would have been unreasonable to expect that electric industry restructuring could have proceeded without any "glitches." By their nature, markets are unpredictable. Newly created markets are particularly unpredictable. For this reason, Solar Turbines is unwilling to join in attempting to assign blame to anyone for the problems that have been experienced. The key questions are what should be changed to make the new structure work better and how should the impacts of the problems to date be alleviated.

A major part of the problem has come from the fact that the markets have moved on while the complex decision-making process of restructuring was unfolding. Yet the uncertainties about the new structure of regulations and market incentives kept those who would earlier have responded to market developments by adding capacity and transmission from doing so. Key market changes included the following:

- Electricity demand grew strongly, driven by resurgent economic growth in California following several low-growth years in the early 1990s.
- Peak summer weather conditions have added seasonal emphasis to this demand growth.
- New capacity investment awaited clarity in the new institutional roles of the utilities and other market participants. It is simply not feasible to make multi-million-dollar commitments of resources to a new generation plant if one is uncertain about the terms under which that plant can be operated, or even whether that plant must be sold to others.
- Similarly, new transmission investment was not made, leading to the perpetuation and growth of transmission bottlenecks. Transmission bottlenecks isolated and amplified generation capacity shortages.
- On the demand side of the market, very few consumers have the flexibility or timely information to be able to react to market price signals by adapting their usage, creating an artificially inelastic short-term demand curve.

While regulators were focused on reshaping the fundamental regulatory structure of the electric industry, there was not similar focus on the underlying siting, permitting, and environmental regulations applying to electricity facilities. As a result, once the signals began to emerge from a newly competitive electricity market, the potential participants were unable to respond in a timely manner. They continued to be subject to the welter of inflexible, time-consuming, multi-agency regulations and requirements that not only delayed new generation, but added significantly to its costs and to the uncertainty of cost recovery that creates business risk. In a market, higher business risk means a higher minimum price threshold. It is not merely hunger for profits, but also knowledge of the risks from continued uncertainty that leads market participants to seek maximum returns when returns are available. In short, regulatory speed and flexibility have not matched the market's speedy evolution or new requirements.

There has also been a failure to recognize that the very mechanics of the electricity industry have also been changing as a function of new technology. In particular, new small-scale electric generation technologies have in recent years created the potential for a proliferation of generators sited near load centers. These small power sources include not only the turbines manufactured by Solar Turbines, but other technologies that are emerging.

Restructuring policy-makers have been slow to recognize that the new regulatory structure needed not only to accommodate competitive electricity markets, but also to accommodate the new potential for distributed generation. In the same way that the old monopoly electrical utility industry paradigm (generating, transmitting, distributing, and selling all by the same company) is being restructured, Solar Turbines believes that the old paradigm of large remote power plants, long-distance high voltage transmission, and networks of distribution wires will also undergo dramatic reconfiguration. The emerging electricity industry will be much more a network of both suppliers and consumers, linked together for optimum reliability and uniformity by a grid of distribution and transmission wires, and joined in a transparent, broad, and seamless market for electricity supply pricing. So far, the regulatory restructuring has been too much designed for the old industry, not the new one.

HOW CAN DISTRIBUTED GENERATION HELP SOLVE THE PROBLEMS?

Distributed generation, i.e., generation sited in numerous places on the grid, and particularly near load centers, offers solutions to numerous issues confronting us today. In the face of generating capacity shortages, distributed generation offers multi-faceted help:

- Assembly-line production of medium sized distributed generation units allows for rapid response to orders, and therefore promises—depending on regulatory and permitting delays—exceptionally short lead-times to achieving new capacity on line. A typical turn-key combined heat and power installation for continuous operation can be completed in one year. A peaking unit can be ready to meet periodic requirements typically in about nine months.
- Distributed generators are sized precisely to the need they are intended to fill. Because they are linked to the demand conditions of a particular user or area, demands which are therefore more easily projected, there is no risk of over-investment which has in the past created problems for electric rates and utility company financial health.
- Distributed generation customers can obtain total certainty of the capital costs of their generating equipment, allowing them valuable economic predictability and autonomy. While they may still be subject to fuel price uncertainty, today's fuel markets allow hedging in futures and other derivative transactions in a manner that can also make fuel prices predictable. Distributed generators can thus protect themselves significantly from the variability of the broader market.
- Perhaps more important to the questions confronting this hearing, distributed generators can help dampen the market-price swings that may otherwise occur in the broader market: when prices are high, they can self-generate and take demand out of the surging market, perhaps also selling additional power into that market.

In addition to the benefits of adding new capacity to the market, distributed generation offers the important additional benefit of reducing the burdens on the transmission and distribution system. Sited at load centers, distributed generators require less of the limited capacity of transmission lines and distribution lines bringing power from remote central generating stations. Indeed, they may export power into the grid. Environmental and aesthetic impacts, land use issues, and land-owner resistance has made it virtually impossible to add new transmission right-of-way

throughout the United States. Increasing the voltage of existing transmission lines presents major technical, investment, and timing issues. Distributed generation can be a major part of the answer to this dilemma by adding generation at the consumer's end of the line, and thereby improving both the transmission access and the transmission reliability of all users who continue to use system transmission and distribution resources.

In addition, distributed generation can mitigate residual concerns about generating-industry market power by creating a large number of new and dispersed generators on the supply side of the bulk power markets, increasing competition, and adding capacity available to purchasers on behalf of small customers.

While these benefits of distributed generation clearly help the restructured electricity market directly, society as a whole benefits from the general energy efficiency gains and environmental emission reductions that come from creating combined heat and power applications. Simple-cycle thermal generation efficiency still averages about 40%—the balance of the energy content of the fuel is lost though waste heat discharge. Delivery to consumers may take an additional 10% of the original energy in the form of line losses on transmission and distribution lines. By contrast, local combined heat and power applications can usefully extract upwards of 90% of the original fuel energy—from two to three times the overall energy efficiency. This energy efficiency helps put downward pressure on fuel market prices.

Equally important to the efficiency gain, combined heat and power creates air emissions that are one-half to one-third of what they would be from accomplishing the same purposes with separate fuel consumption. While some emissions must come from any combustion-powered generator, a combined heat and power application is one of the lowest-emission technologies available. These environmental benefits are shared with everyone, and can help offset the increased emissions that would otherwise come from continued economic growth.

Economically and environmentally, distributed therefore makes good sense. The current process of restructuring the electric industry is a tremendous opportunity for regulators and policy-makers to reduce the serious barriers that are preventing distributed generation and combined heat and power from playing their appropriate roles in the electricity market.

OBSTACLES TO ACHIEVING THE PROMISE OF DISTRIBUTED GENERATION.

There are numerous barriers to the implementation of distributed generation, including but not limited to the following:

- **Lack of standardization of requirements.** Distributed generation units are manufactured to be standard in their inputs and outputs, yet there has not been a parallel standardization of treatment by regulators, environmental permit authorities, and utilities. Much red tape could be cut and substantial time saved in getting the needed electricity to the consumer by adopting standardized regulatory and permitting requirements on standardized units.
- **Lack of reasonable interconnection policies.** Interconnection standards in particular often differ from utility to utility, and can be unduly complex and burdensome. Intentionally or not, such complexity discourages competition with the utility's own generation. There are no major technical issues with interconnection of distributed generation in a manner that is fully compatible with reliable grid operation. This is done all over the world.
- **Rate policies that discriminate against self-generation.** Utility rates are frequently set in a manner that discourages distributed generation in order to preserve industrial load for the utilities, under the assumption that other ratepayers would suffer cost increases if industrial load went to self-generation. In fact, as noted above, all customers obtain significant system benefits when distributed generation is installed, not merely the company installing it.
  - For example, distributed generators effectively create additional transmission and distribution capacity by removing their own load from the total demand and often by providing excess energy to other users downstream of transmission bottlenecks. Yet rate policies typically deny distributed generators any credit for this effect of their operations. Indeed, rate regimes typically burden distributed generators by attributing to their new generation a full share of the cost of transmission and distribution systems they will not use as a result of the new generation, as if their new distributed generation were adding to rather than subtracting from the load on the system.
  - Sometimes industrial customers are offered special discounts in utility rates to encourage them not to install their own generation. When industrial rates are discounted to prevent a customer from opting for distributed generation, all customers may be the losers, because the other customers rates must off-

set the discount and all customers lose the efficiency and environmental benefits.

- Frequently distributed generators are charged high rates for standby and peaking power they may require from the grid as a disincentive to self-generate. On the contrary, distributed generators should be credited in their rates for the contribution their generation makes to system reliability at the margin and for the diminished transmission constraints as a result of their self-generation.

These ratemaking policies are vestiges of an earlier regulatory environment premised on utility monopoly power and non-market economics for consumers and generators alike. Utilities are no longer required to provide non-market price subsidies to alternative power suppliers, and utilities should not be permitted to discriminate against them. Customers will only seek to install distributed generation where it makes economic sense to them, and do not require utility subsidies to do so, but should not face artificial economic barriers from outmoded rate policies.

- **Ambivalence about the utility role in distributed generation.** Many utilities themselves are aware of and support the need for distributed generation, yet until their own potential role in building and operating distributed generation is clarified, they are often resistant to having other parties construct such generation on their systems. Solar Turbines believes that except in states where regulators have forbidden utilities to own generation, the utilities themselves or their affiliates should be able to own and operate distributed generation units to meet the supply needs they continue to serve, such as core loads. There is no reason that the utilities themselves should not be able to capture the economic, efficiency, and environmental benefits of distribute generation. However, the terms for others to add distributed generation to the utility grids must be no different or more onerous than the terms the utilities themselves must meet. In other words, an open market means open competition!
- **Defining distributed generators as utilities.** Under current state and federal policies (particularly the Public Utility Holding Company Act ["PUHCA"]), distributed generators may be subject to traditional regulation as public utilities in order to make any off-site sales. In the new electricity industry, "wires" companies are the utilities; those who generate and sell power, especially at wholesale or to bulk power markets and exchanges, are competitive entities that clearly do not require regulation. As in other unregulated sectors of the economy, their fully-enforceable contractual duties, obligations, and rights eliminate any need for utility-style regulation.

WHAT THE FEDERAL GOVERNMENT SHOULD DO

Solar Turbines believes that the electricity industry is inherently a regional industry, not a state or national industry. There is no level of government which ideally fits a regional industrial structure for purposes of regulation and approvals. It is understandable that State authorities want to continue regulation of industry functions they have traditionally managed, and this is appropriate for regulation of distribution rates, interrelationships of suppliers and utilities with consumers, facility siting, and other inherently local activities. However, much of the efficiency that can be achieved in electricity restructuring will come from moving toward larger workable markets for power, and reducing barriers to those markets. Indeed, markets already are operating regionally (and indeed internationally in the case of the region California is part of) and must therefore operate under federal supervision.

Transmission capacity generally must interconnect and serve the entire regional market, and therefore should generally also function under federal supervision. Solar Turbines believes that transmission regulation should aim to achieve viable electricity commodity markets which are not bounded at state borders but which are open, nondiscriminatory, and transparent at the regional and inter-regional level.

Solar Turbines does not attempt in this testimony to prescribe a new state-federal division of responsibility for a restructured industry, merely to indicate that there are critical roles for both levels of government, and both must cooperate to get the legal structure right so that the markets can function optimally. Solar Turbines will be happy to work with Subcommittee members and staff to refine these ideas and express them in appropriate legislation.

The key issue is timing. Solar Turbines is concerned that after several additional years of attempting regulation fundamentally at the state level, Congress will eventually be compelled to step in to assure the minimum consistency of policy in certain key areas to preserve functional regional markets. This should happen sooner rather than later.

Among other things, both the federal and state governments should work to reduce the barriers to distributed generation mentioned above. In particular:

- Congress should consider actions that will identify uniform national standards for interconnection of distributed generation and require all utilities involved in interstate commerce in electricity to adopt such standards.
- Congress should encourage the states to change rate policies to encourage distributed generation, and combined heat and power generation, and to eliminate rate policies that penalize self-generators.
- FERC should be empowered to adopt nondiscriminatory rate policies throughout wholesale and interstate markets that recognize the system benefits of distributed generation, and that liberally allow distributed generators to interconnect to the grid under a common set of interconnection standards. Utilities that utilize the grid for their own wholesale bulk power transactions should be expected and required to offer ready interconnection of distributed generators to the grid for wholesale transactions.
- Where generation ownership by utilities is not prohibited by state law, utilities and their affiliates should be permitted to own and operate distributed generation resources on the same basis and under the same constraints that they own and operate any other form of generation.
- Congress should repeal the provisions of PUHCA that would require regulation of distributed generators making off-site sales, and should either clarify or encourage the states to clarify that distributed generators can sell power without becoming public utilities subject to regulation under the provisions that apply to monopoly electric distribution and transmission companies.

What the federal and state governments should not do is panic in the face of current difficulties. They should certainly cooperate on quick actions to ease the economic trauma in this area, and should work to prevent similar short-term market crunches in other areas by learning the lessons of this summer in California. Market-driven electric commodity markets are working in other parts of the country and the world, and can work in California and throughout the regions of the United States. The difficulty is structuring them to allow the proper pricing signals to flow both to the suppliers and consumers, and reforming the regulatory structure so that both suppliers and consumers can react to those signals quickly. Transmission and distribution regulation must support the viability of the commodity markets for power, and create proper incentives for transmission and distribution investment, in order to avoid balkanizing and hamstringing the commodity markets.

CONCLUSION

Distributed generation can offer, as noted above, very important assistance in reaching many of the public policy goals that electricity restructuring must not ignore: the need for growing, efficient, dispersed, and diversified new supply capacity, with a net benefit to transmission and distribution resources, all at a net benefit to environmental emissions and general fuel-use efficiency. Because a large part of the answers to the current dilemmas with electricity restructuring can and should come from distributed generation, a large emphasis in electricity restructuring policy should be put on removing barriers to distributed generation, including those cited here.

It is Solar Turbines' business objective to play a major role in the development of distributed generation and combined heat and power projects in support of the goals and objectives of a restructured utility model. But it is also Solar Turbines' responsibility to its community to assist with creating an electric market structure that is efficient, economic, and fair to all consumers in the ways that only an competitive market can achieve. Thank you again on behalf of Solar Turbines for the honor of testifying, and I am happy to respond to any questions you may have.

Mr. BARTON. Thank you, Mr. Barr.

We now want to hear from Mr. Terry Winter, who is the President and CEO of the California Independent System Operator. We really want to hear from you because you're kind of right at the heart of the issue, so to speak. So welcome to the subcommittee, and we'll recognize you for 5 minutes.

STATEMENT OF TERRY WINTER

Mr. WINTER. Chairman Barton, Members of Congress, I want to thank you for inviting me here. I've been a resident of San Diego

for 21 years, and this is kind of like homecoming, but not exactly the one I would like to have experienced.

I think that here in California, that we have to be very careful as we look at what has happened to be certain that we don't throw out markets completely because I think they have a real role to play.

The California ISO is the one where I guess you would say the buck stops here, because at each hour of the day, it is my organization that has to make the decisions of how we keep the lights on and where we get the power. It was always intended that we do that in what we call the real time market, which was designed to allow us to take account for the discrepancies in forecast, the weather deviations.

That 5 to 6 percent of the requirements that we have needed has now grown to 25 or 30 percent. And what that means to me is that starting at 7 o'clock in the morning, I can be as much as 10 to 16,000 megawatts short for the peak hours of that day. That means I've got to go find that in a matter of 2 or 3 hours, and that is a reliability concern that we greatly are concerned about.

I think there's been adequate discussion of why that exists. Clearly, the demand has far outgrown the supply. But it doesn't stop with just that. It also has to deal with the transmission facilities that we have and that we can use to move power back and forth.

I think in the long run, that clearly the markets will provide the innovation that will send the signals for demand that are required, and they clearly are a benefit in the final cost analysis. But we are faced with an interim problem that we must solve because it is totally unacceptable, in my opinion, to have prices where they are.

Now, there's lots of ways that people have proposed to solve that. One of them is price caps. Price caps are a partial solution that we lowered our caps down to $250, and, in fact, that did not cause the total energy bill to go down. It merely capped the peaks that we hit.

I think the other area, as you look at the structure of what we have developed here, was that we moved very quickly to a wholesale market on the supply side. We have not built the transmission to move that supply around, and probably the biggest shortcoming is we have not implemented the demand side that we needed for people to be able to turn off.

As you have heard Oracle speak, very clearly, they are willing to pay a considerable price for reliability. But you can't transpose that to everyone on the system. And so I believe that we need to look at the market in almost a two-piece scenario, still keeping markets in play. Because during times of sufficient demand, the last 2 years before we hit this summer, there was considerable doubt as to whether the price we paid in California would support new generation. This year it has gone completely the other way and out-of-hand.

So I think we have to look at almost a two-market structure, one that deals with the peak units that occur at the very high time of the day when you're only running a unit for 200 hours out of the year, and deal with that as one price, and that price also ought to

be the one that we look at to pay demand side to get off because it is those peaks that we are after.

Then I think the more basic or base load type plants need to compete. And if we put that structure in place, it will give us the results that we've seen over the last 2 to 3 years.

Having said that, I think actions have been taken to get new generation licensed. I believe that load-serving entities have to be given hedging opportunities. People talk about the market setting the high price, and everyone has to pay that.

The hedging market is a price paid as bid, which you can then do what most averaging would expect. But people have to be free to go into that hedging market.

Second, I think we have to commit to the encouraging commitments of transmission line building. One of the great advantages of operating the total system in California is the ability to take advantage—I heard the beeper—take advantage of the facilities in Northern California to serve the southern where hydro capacity is. We've had a wet year. It's very important that we be able to move that power back and forth.

Right now in the regional market, we serve the northwest every night because they have low water supply and want to retain that water. It is a regional market, and we are going to have to deal with it as a regional market. Thank you.

[The prepared statement of Terry Winter follows:]

PREPARED STATEMENT OF TERRY WINTER, PRESIDENT AND CHIEF EXECUTIVE OFFICER, CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

Thank you for inviting me to share with you my perspective on the health of electric utility restructuring in California. I do so from a unique vantage point and experience base. Since the spring of 1998, the California ISO has had operational responsibility for most of California's electric transmission grid—the network that is critical to reliability and to competitive commerce.

From that experience I readily confirm the reality that brings this Committee here today: unquestionably the market is not mature and the consequences have been serious. But the overriding message that I wish you to draw from my remarks is one of hope, not because I am an optimist at heart, but because restructuring of the electric services industry was and remains correct. Notwithstanding the challenges we have encountered, the benefits that are yet attainable more than justify the growing pains and the effort.

It is for this reason that I truly welcome this hearing. It can do much to put the California experience in perspective for the rest of the nation. In saying that, I do not presume to suggest that electric restructuring nationally is or should hinge on what is happening in California. But the California "problems" that now are being prominently discussed in the national press cannot help but discourage movement from a regulated to a competitive paradigm elsewhere. That would be most unfortunate.

For the commodity side of the business, that is for the kilowatt hours that consumers expect to be available, at fair prices, when they flick on light switches or power up motors, the competitive model is the correct one. It can and it will produce the lowest prices. It can and it will bring innovation in the form of new technologies, new energy products, and new market participants. It can and it will provide consumers with choice: of when and when not to consume; of the level of reliability that makes economic sense considering their individual requirements.

We are experiencing serious challenges in California, but these challenges should not be attributed solely to the restructuring decisions. Reliability is being tested as never before and some consumers already have experienced rate shock. However, I am here to tell you that California made the right choice when it set out on the path of restructuring more than five years ago; to tell you that if public policy decisionmakers and market participants cooperatively work together, the enormous benefits that a competitive market is capable of producing for consumers can yet be attained.

In a moment I will offer my views on the challenges that we face, and on what corrective action must be taken. It is most important that we distill the lessons to be learned from the experience that we have had. If I can make any contribution to your deliberation, let it be that we not repeat the most basic, and in my view, most costly mistake that was made when restructuring first began to be debated: we created a climate of uncertainty and with it discouraged planning and infrastructure investments. It is precisely because of that uncertainty that I and my staff must wage a near-daily battle just to keep the lights on in California; it is because of the consequences of that uncertainty that more and more consumers face the risk of rate shock.

In my judgment, the single most significant contribution that this Committee and that State decisionmakers can make to the restoration of economic order is to put an end to uncertainty: to make clear the commitment to a competitive commodity market facilitated by a regulated transmission infrastructure. I am concerned that until that happens, the investment that is the precondition to a robust competitive market will not be forthcoming and a painful transition will plague us—and consumers—for far longer than is necessary.

It is also important that we keep in mind the impetus for restructuring. It was the failure of the old regulatory paradigm to bring forth the capacity, fairly priced, and the investment in the transmission infrastructure necessary for a robust economy. It was precisely because independent generators were more successful in developing innovative, more efficient and more economical capacity that Congress enacted the Public Utilities Regulatory Policy Act. It was precisely because of the unwillingness of the utilities to open their transmission highways to the new breed of independent generators, and to permit those essential facilities to be used for competitive commerce, that Congress mandated access and that the FERC issued its groundbreaking orders, 888 and 889. Lest we are tricked into thinking nostalgically about the "good old days", let us first reflect on them soberly. Restructuring came about because the entrenched industry was not doing its job and the former regulatory paradigm of "command and control" had failed.

The world of electric power supply is different today because it has to be. We must not delude ourselves into believing that all will be right if we simply superimpose the former regulatory model onto today's industry structure. It will not work.

That does not mean that the market is to be allowed to run free of oversight. It means that an entirely different type of oversight is required—demanding far different skills and competencies. The market will require oversight that has the capability to develop rules ensuring that competition will thrive to bring forth the consumer and social benefits that it is uniquely suited to promote; and oversight that is willing to step back when that is the right course of action. Those are not attributes of the former regulatory model.

Before addressing today's challenges and tomorrow's solutions, I think it important that I summarize for you the California model and in particular the responsibility that has been entrusted to the ISO. In a word, we are responsible for the "highway". Our statutory mandate is to safeguard reliability. While other States have elected to combine responsibility for operation of the commodity markets and the transmission grid, the designers of restructuring in California were of the view that competitive objectives would be furthered if those functions were bifurcated. In my judgment, FERC was wise to encourage restructuring under general guidelines rather than mandating a "one size fits all" approach, for the latter surely would have been met with resistance.

When restructuring became a reality in California, the ISO was given operational responsibility for the high voltage transmission facilities then owned by the State's three investor-owned utility systems. As such, the ISO manages approximately 80% of the high voltage facilities in California and is responsible for maintaining the reliability of that grid and its interconnections with neighboring systems. A reliable transmission system, providing open, non-discriminatory access, is an absolute precondition to a competitive commodity market.

The ISO's objective is to secure needed services that will assure grid reliability through operation of markets. Toward this end the ISO operates Ancillary Services markets, established for the competitive acquisition of reliability services. For example, the operating reserves that are critical to system reliability are acquired through these markets. Further, because supply must be kept in balance with actual consumer demands, the ISO operates a real-time spot market. When the market structure was designed, the assumption was that this spot market would be limited to a fine tuning function acquiring energy to meet perhaps 1-5% of normal control area load. As I will explain presently, it has become much more. Finally, the ISO manages congestion. When the available transmission is incapable of reliably

accommodating the requested transactions, the ISO utilizes market mechanisms to allocate available capacity to those who value it most.

Notwithstanding that concerns remain, the model is a sound one. The most critical concern perhaps should have been obvious at the outset of restructuring. Since the mid 1980s the investor-owned utilities have made virtually no investments in either incremental generation or transmission. In the aftermath of the large prudence disallowances of the 1980s and with the expectation of restructuring beginning in the early 1990s, it was understandable that utilities would be loathe to commit capital to a highly uncertain future. As a result, it now is the case that over 60 percent of California's generation stock has been in service for over 30 years. And of the newer capacity, a significant portion is nuclear and of questionable economic longevity.

Moreover, electricity is an interstate commodity and California most definitely is not an island. Indeed, if it were it would not be self-sufficient. Historically, California has been a net importer of electricity, importing between 4,000 and 8,000 MW per hour, to meet a peak load that varies between 27,000 and 48,000 MW.

The supply problem largely was camouflaged when restructuring commenced. While California was a net importer, the Western region had ample capacity and load growth was modest. It was not too long ago that the Western region enjoyed a generation reserve or supply margin of 25 to 30 percent; it is now below 10 percent. As units age and are stressed, the adequacy of reserves becomes an even more pressing issue. In truth, during the debate that preceded restructuring California ignored supply issues choosing instead to focus on market power concerns and to debate about the generation that investor-owned utilities would retain while the remainder of the supply inventory was divested. Further, there has been a lack of specificity as to where responsibility lay for acquiring the resources necessary to meet load and an absence of policy and tools to provide entities that serve load with the capability to do what providers of commodities must do—hedge against price spikes by forward contracting.

And, to most end-use consumers, restructuring was not visible. As a consequence, consumers were not prepared for the significant changes that they would have to confront. Viewed from their vantage point, it was as if nothing had changed. The legislature imposed retail price freezes. I do not say that critically. I understand and support fully the importance of protecting consumers during difficult, untested transition periods and before they have been given the information and the tools to enable them to protect themselves. But there were counter-costs. Consumers were left unprepared. They were not encouraged or enabled to shop wisely. In retrospect, in the market redesign not nearly enough consideration was given to the demand side of the equation. This was not a recipe for an effective competitive market. Both supply and demand must be prepared and must confront rational economic incentives.

This underscores the point that I made at the outset—the point that I view to be absolutely critical. If we are to pass through the transition successfully we simply must encourage new infrastructure investment—both on the part of generation and transmission supply and on the part of demand. But logic and history tell us that investment will not be forthcoming in a climate of uncertainty with investors fearful that the rules are in flux. And history also tells us that absent the ability to induce entry by merchant generators, consumers may be denied the best bargains attainable in the market. One of the motivations that led California to go to a market-based environment was the recognition that, in the regulatory planning process, merchant generators consistently underbid utility-sponsored projects.

Let me share with you a few more facts so that you can better appreciate the challenges we confront. The Western region, thankfully, has shared in our Nation's economic growth. That has translated directly into increased demand for electricity. But as I already have noted, supply has not kept pace. Please understand, while the focus today is on California, this is a regional problem requiring regional solutions. Commerce in electricity does not and economically should not respect state geographical boundaries. That is why I have made no secret of my support for a Regional RTO—so that the states that inevitably are tied together electrically can plan and act for the mutual benefit of all consumers. I say this recognizing that each state can and should retain jurisdiction over retail matters rightfully under their respective control.

It is premature to determine whether the RTO effort requires federal legislative initiatives. FERC has gotten it right and should be supported as it encourages each region to develop the model that is best adapted for local requirements while still satisfying minimum prescriptive guidelines.

From the ISO's perspective, the regional effort makes eminent sense. We depend on the region as we struggle daily to meet ever-increasing threats to reliability. In all of 1999 the ISO had to declare a total of four system emergencies and in only

one of those instances was it necessary to curtail service to loads that had agreed to be interruptible. Thus far in 2000 we have been required to declare 22 system emergencies, and 14 of them required the curtailment of interruptible load. We are far from being out of the woods. It is not uncommon for California to experience some of its hottest weather early in the fall, and our contractual ability to curtail interruptible load has greatly diminished.

A key to maintaining reliability is having available to the system operator reserves that it may call upon to meet emergencies—the loss of a generator or of a transmission facility. In our region the Western System Coordinating Council is responsible for prescribing minimum operating requirements and for sanctioning those who fail to comply. In all of 1999 the ISO was fined just less than $55,000 for operating reserve inadequacies. Thus far in 2000 the fines imposed by the WSCC are approximately $700,000.

To some extent this has been the direct result of episodic market dysfunction. Under the California market design, it was intended that the principal balancing of supply and demand would take place in forward markets; for example, those administered by the California Power Exchange. As I explained, the ISO's energy market was intended only for the inevitable fine-tuning required in real-time. It has proven anything but. Over the past few months it has not been unusual for the ISO to have to scramble in real time for 20 to 30 percent of the energy supply actually required to meet demand. There are reasons for this and they are being addressed. But until this over reliance on real time markets is resolved and until the balancing market is limited to the fine tuning that was intended, we are concerned that there will continue to be reliability and price impacts. Reliability will be compromised as reserves intended to be on call to meet emergencies continue to be conscripted simply to meet load. And the solutions will likely be expensive. During real-time operations the ISO will be required to pay what the market requires—unless I am told to sacrifice reliability, a solution I would not find palatable.

I have painted a bleak picture because candor requires no less. But at the outset I told you that I am optimistic, that I am convinced that the benefits capable of being achieved are worth the efforts that yet will have to be expended.

There is a silver lining. This summer has been a call to action, and we are responding. We know what corrective steps need to be taken and efforts have begun.

- The State is taking steps to expedite the licensing of new generation.
- Renewables can and must make a substantial contribution to an augmented supply portfolio. I fear that we are committing too much of our inventory to natural gas-fired facilities. If we have learned anything from history, it should have been the essentiality of fuel diversity.
- Distributed generation must be encouraged—perhaps with tax incentives that typically have been used to encourage innovative technologies. It is the one resource that can satisfy both generation and transmission inadequacies.
- The California Public Utilities Commission is providing load-serving entities with the capability to hedge against price volatility. The IOUs must be encouraged to utilize that capacity with the understanding that decisions made in a market environment cannot be judged in the same manner as decisions made in a stable, regulatory environment.
- Actions are being taken to stabilize rates in the San Diego area—the first of the IOU service territories to be exposed to rate shock. It is important that rate stability be provided to all consumers during the several year transition that we must yet navigate while simultaneously arming consumers with the information and capacity to shop intelligently.
- We must reaffirm our commitment to energy efficiency and conservation. We must marshal our resources and redouble efforts to ensure that we maximize the contribution that each can and must make to a comprehensive energy strategy.
- The ISO is taking action to facilitate greater market participation by demand. These efforts must be pursued vigorously and metering technology that will enable consumers to plan their purchases judiciously must be encouraged.
- Commitments must be made to the transmission infrastructure. To date the ISO has identified and authorized over $800 million in transmission upgrades. This must continue.

These are necessary first steps, not easily achieved. For example, from my vantage point a robust transmission network is key. Without it new generation may be left without an avenue for commerce. The rules of interconnection must be clear and fair and the network has to be planned with the needs of the competitive marketplace paramount. I commit that the ISO will do its part—it will develop interconnection guidelines; it will work with transmission owners and users to plan for a robust grid; it will identify the projects that must go forward and on what schedule.

But that alone will not suffice to get transmission built. There will have to be appropriate economic incentives and if the IOUs are still reluctant to move forward, others must have that opportunity. And there will have to be a rational siting and licensing process. I wish that I could tell you that all you need do is to pass some legislative language. It is not that simple. The siting and licensing of transmission as well as of generation must remain a local prerogative. But that does not mean that we can tolerate improvident vetoes. I have asked my staff to give immediate consideration to the issue of how best to reconcile local imperatives with the absolute need that we move forward expeditiously with projects that are essential. We will be offering our recommendations to those responsible for siting decision making, and I urge others to do the same.

I must conclude by returning to the beginning. That we are facing many challenges and that they are serious cannot be disputed. My greatest apprehension is that decision-makers will overreact. That pressures will lead to short-sighted expediencies or, worse yet, leave the marketplace confused about our resolve, about our commitment to a competitive commodity market. I can think of no more counterproductive message.

Therefore, if I could write your conclusions they would be straightforward and unmistakable. California made the right decision when it embarked upon restructuring. It has made mistakes in implementation and in not moderating expectations, but none of these mistakes are fatal. With cooperation from all, California's grand initiative will succeed. Economic development and consumers will be the beneficiaries.

I pledge to you that the ISO will do its part—and more.

Mr. BARTON. Thank you. Thank you, Mr. Winter.

We now want to hear from Mr. George Sladoje, who is the President and CEO of the California Power Exchange. And again, along with Mr. Winter of the California ISO, you've kind of been at the heart of the storm too. So we appreciate you being here in person and welcome your testimony.

STATEMENT OF GEORGE SLADOJE

Mr. SLADOJE. Thank you, Mr. Chairman. It's an honor to be here.

I would like to supplement my written testimony, which was submitted last week, and also there's 75 copies here, and I hope the committee has it all, and has had a chance to take a look at it.

When California went into the restructuring, went into the deregulation efforts, they constructed two new enterprises to implement that, one of them, of course, being the ISO for grid reliability, the other being the California Power Exchange for market reliability.

Other major features which we need to keep in mind, were three IOUs in California were required to divest a portion of their generation and then required to sell the power from what generation remained and purchase all of their load out of the California Power Exchange. In return, they were given a 4-year transition period to recover stranded costs, and purchases through the Power Exchange were deemed reasonable. This is a very important concept. Not subject to second-guess audits, fines and so on down the road.

And, of course, the concentration of this load and demand would make for one big liquid marketplace, which would yield a fair and reasonable market price.

Just to digress for a minute, the mechanics of the Power Exchange in its day-ahead market is that we run 24 separate auctions each day so that everybody can see what the wholesale price of power is throughout the night and the day.

We began on March 31, 1998 with 27 bidders in a day-ahead market. Since that time, we have gone now to where we have 80

certified participants from three countries, and from offering one product in March 1998, we now offer nearly 20, a day-ahead market, a day-up market, block-forward markets, five separate versions of that, 1-year strips that go out for 5 years, daily blocks, balance of the month and ancillary service forward markets.

Our goal is to have our participants utilize these markets in order to smooth out market effects and peaks. How is this all working? Well, I think it was working mighty fine until about May 2000. Prices here for the first 9 months in California averaged 2.6 cents a kilowatt hour and over the first year 2.4 cents. For all of 1999, the average price of power through the Power Exchange day-ahead market was 3.1 cents.

So why are we here? May, the average was 4.7 cents a kilowatt hour versus 2.4 cents the previous year. June, the price got up to 12 cents a kilowatt hour versus 2.4 cents in 1999. July, 10.6 cents versus 2.9 cents. August, 16.7 cents versus 3.2 cents and so on.

Remember, those prices that I just gave you reflect the day-ahead price. Now let's take a look at what the prices were for those who hedged in our forward market. And these are peak hours, 16-hour peak hours.

If you purchased in our forward market, the average price that you paid for May was 3.4 cents, not the 6 cents that was the actual result in the spot market or day-ahead market. June, you would have paid 3.7 cents, not the 17 cents that was experienced in the day-ahead market.

July, you would have paid 6.8 cents, not the 14 cents that we saw in the day-ahead market. And in August, you would have paid 7.5 cents, not the 21 cents.

In my written testimony, I go through the fundamental reasons for overall price increases that you've seen. But I want to place particular emphasis on the need to hedge and to utilize these market opportunities that we present.

And also, besides the forward market, I want to add to the forward market, those who did buy in our block forward market saved some $600 million compared to that day-up price. So we need to have participants go into that forward market in a much larger quantity.

Second, there is a major flaw, I believe, in the structure of the marketplace, and that is too much of the power is being purchased in the ISO real time market. As Mr. Winter said, 25 to 30 percent some hours for something that was designed to only be 2 percent or so.

It worked fine until about May, and then all of a sudden we saw a lot of supply go into that market, obviously waiting for the higher price or waiting to the last minute to gain a higher price.

So we're working with the ISO to correct that flaw and take charge and move that supply back into the day-ahead market, which we think should help stabilize price.

Finally, of course, we need more supply. Very simple. And then ultimately, we need demand response. In California and elsewhere, few consumers see wholesale hourly prices, and if they did, they have no economic incentive to shift demand to slower demand times.

So in conclusion, Mr. Chairman, the California Power Exchange, we believe, has developed products that should help stabilize the market. We're in the middle of the transition period, and I think we need to transition over to utilizing those products to a greater extent. We also have several new products on the drawing boards which we'll be introducing come the winter months.

California's deregulation can work, and I think it worked well for 2 years. And after all, when you look back at it, one of the reasons we're here today is that San Diego Gas and Electric recovered its stranded cost early. And one of the reasons they recovered their stranded cost early was because of the relatively low prices on the California Power Exchange for the first 2 years. Thank you.

[The prepared statement of George Sladoje follows:]

PREPARED STATEMENT OF GEORGE SLADOJE, CHIEF EXECUTIVE OFFICER/PRESIDENT, CALIFORNIA POWER EXCHANGE

BACKGROUND

The California Power Exchange (CalPX) is a non-profit, public benefit corporation created by legislative and regulatory bodies to provide a marketplace for trading electricity. The CalPX is one of the institutions that was developed as part of the adopted market design for California's restructuring of its electric utility industry. The CalPX, which is regulated by the Federal Regulatory Energy Commission (FERC), operates a number of markets, the largest of which is the Day-Ahead Market that establishes an hourly market-clearing price for wholesale power in California. The CalPX also operates other markets, including a Block Forward Market to allow participants to manage price risk through purchases and sales of electricity on a forward basis for up to five years into the future. California is slightly more than two years through a four-year transition period that was adopted in order to allow the features of a competitive electricity market to develop. The purpose of my testimony is to explain the factors that the CalPX has identified that contributed to the price disruptions during this summer and to discuss potential solutions to address this situation.[1]

WHY CALIFORNIA PRICES INCREASED IN MAY-JULY 2000

This summer, California has experienced dramatic wholesale price increases. In general, the CalPX has found that certain key fundamental factors have contributed to these increased prices. These factors include load growth that has steadily increased in California, but construction of new large generation has been at a standstill for more than a decade. In addition, natural gas prices have nearly doubled since last summer, there was an extraordinary hot weather situation throughout the Western United States, hydro outflows from the Northwest are below normal, environmental constraints have a negative effect on electric supplies, and there has been a significant shift of trading volume out of the CalPX Day-Ahead Market and into the Real-Time Market operated by the California Independent System Operator (ISO).

Because electricity is in a situation of tight supply in California, scarcity premiums are more likely to be charged. By reducing demand during the tight supply times, consumers in a mature market provide a mechanism for limiting scarcity rents by suppliers to their economically efficient level. In the California market, few consumers today see their wholesale prices and have the choice to buy less electricity during high price hours. Hence, they cannot provide a moderating influence on scarcity rents during times of tight supply. Electricity is instantly perishable, so the market price of power can quickly rise to very high levels to achieve a supply-demand balance. Over time, new power plants can be built in response to these high prices, which in turn will bring back down the price of power. But the time lag for attracting that additional supply can lead to high short-term bills for consumers whose costs are tied to the spot wholesale power market.

During this summer, subregions throughout the Western Systems Coordinating Council (WSCC) system, especially California and the Southwest, experienced pronounced declines in reserve margins, much greater than forecasts predicted. These

[1] I have attached detailed analysis from the CalPX Compliance Unit regarding the price movements in California's electricity markets during May-July, 2000.

reserve margin declines were due in part to an extraordinary weather circumstance where the entire Western United States was unusually hot at the same time, and this higher than normal heat pattern persisted. Typically, heat variations throughout the West allow for reserve margins to be supported in one area where high temperatures occur by accessing resources from other regions that are not experiencing high temperatures and associated reserve margin pressures. During the critical time periods this summer, all subregions of the WSCC were faced with unusually high temperatures and consequently the Western system was unable to support individual subregions.

Another element that exacerbated the price increases this summer is the NO_X market in southern California. Environmental constraints on critical electric supplies forced generators to either buy NOx credits at higher than expected prices or to operate within existing constraints. If generators did operate within existing constraints, some supply was simply not available because plants could not run given their environmental limitations. If generators bought NO_X credits at high market prices, it is possible that they could not actually acquire adequate offsets to allow for full production. This dynamic contributed to supply uncertainty and amplified price premiums to assure certainty of supply during a protracted period of high system stress. The CalPX continues to analyze this issue to assess the market interactions between environmental credits, generation availability, and competitive market dynamics.

The CalPX has also observed that there was less supply in the CalPX Day-Ahead Market during the summer of 2000 as compared to the summer of 1999. Exports from the CalPX Day-Ahead market increased from 1% in 1999 to 4% in 2000, whereas imports continue to be approximately 15% of the Day-Ahead volume. This export supply is voluntary, which means that it can sell to any available market, including bilateral markets anywhere in the West, as well as other markets sequentially downstream from the Day-Ahead Market. During this summer, prices were more attractive in markets outside California, notably in the Northwest, as well as the ISO's Real-Time Market and Ancillary Services Reserve Markets. This circumstance had the effect of pulling supply out of the Day-Ahead Market and forcing demand to follow supply into these other markets.

The shift of demand from the Day-Ahead Market to the Real-Time Market exacerbated price volatility and contributed to the crisis atmosphere, and it has been the most dominant cause of the significant supply reduction in the Day-Ahead Market. The situation is particularly problematic in that it burdens the ISO with procuring significant amounts of energy along with capacity in the most volatile and time sensitive period, and it offers an inter-market arbitrage opportunity that was outside the design intentions of the California market founders.

POTENTIAL SOLUTIONS

A number of recommendations should be explored to ensure that consumers receive the benefits of a competitive market as California restructures the electricity industry. These options include a strong emphasis on ensuring that San Diego Gas & Electric Company, Pacific Gas and Electric Company, and Southern California Edison utilize the Block Forward Market in the CalPX to manage price volatility. In addition, market structure changes should be considered that would limit the shift of supply from the CalPX Day-Ahead Market into the ISO Real-Time Market. The CalPX and the ISO have jointly developed a set of concepts to mitigate this situation. These and other options are discussed below.

1. *Increase forward purchases of power.* One way to protect customers from spot market volatility is through the forward purchasing of power. This forward purchasing can include 1-5 year contracts for power, which also provide financial certainty to suppliers to encourage investment in new power plants. Forward purchasing also includes more procurement of power in the Day-Ahead rather than the Real-Time Market. The CalPX currently offers 1-5 year (and shorter) forward contracts. Another option the CalPX is developing is capacity or call option contracts. This product would allow generators to recover their fixed costs through a fixed payment rather than through spot market scarcity rents. Such an arrangement can reduce the volatility of (and the amount of load affected by) the spot price. The advantage of such contracts is that buyers and sellers have more balanced negotiating leverage when the contract is done before the pressures of a real-time need. Because the market value of peaking capacity is known, such contracts also make it easier to monitor whether suppliers are extracting excess scarcity rents.

2. *The ISO Real-Time price that is paid for supply should be capped at the actual ISO Real-Time price for any supply deviations up to 5% outside Day-Ahead forecasts.* The ISO Real-Time price should be no higher than the CalPX Day-Ahead price for

all other Real-Time supply procured by the ISO. Conversely, load deviations greater than 5% should pay the greater of the ISO Real-Time price or the CalPX Day-Ahead price, and the first 5% will be at the CalPX Day-Ahead price. This modification would eliminate economic incentives, without undue penalties, to under-schedule load or withhold supply from the Day-Ahead Market and avoid the price/time pressure of the Real-Time Market. It would also allow utilization of the Real-Time Market for its intended purpose of close-in adjustments due to load/weather changes or loss of generation capability.

3. *Limit the allocation of ISO Out-of-Market costs to participants who caused Out-of-Market purchases to occur.* This ensures price certainty for participants who scheduled energy in the Forward markets.

4. *The CalPX Board will review the market implications of amending its tariff to provide for publishing the daily supply offered into the CalPX Day-Ahead Market at various prices or releasing aggregate daily curves instead of the current three-month lag policy.*

5. *The CalPX and the ISO will explore the introduction of electronic tagging from source to zone for all in-state production.* This will provide an audit trail to track the exact routes of generation from within California.

6. *The CalPX will provide daily to local newspapers the hourly PX prices for the Day-Ahead Market in areas where the rate freeze has ended.* This valuable market information could help trigger potential demand response opportunities.

7. *The CalPX will explore with the ISO the benefit of the ISO utilizing CalPX markets (Day-Ahead, Day-Of, the daily block products and potentially a new capacity option market) to reduce out of market purchases and minimize procurement resource requirements.*

ROLE OF THE FEDERAL GOVERNMENT

In order to implement several of the potential solutions described herein, FERC must accept revisions to the tariffs of the CalPX and/or the ISO. The Commodity Futures Trading Commission (CFTC) may also need to review and approve the capacity or call option solutions offered by the CalPX. The federal government, under the auspices of FERC and/or the CFTC, will therefore actively supervise the implementation of certain potential solutions through the regulatory approval process.

By an order issued July 26, 2000, FERC initiated an informal investigation into bulk power markets throughout the United States. By order issued August 23, 2000, FERC also initiated a formal investigation under Section 206 of the Federal Power Act into the California electricity markets (Docket Nos. EL00-95-000 and EL00-98-000: "Order Initiating Hearing Proceedings to Investigate Justness and Reasonableness of Rates of Public Utility Sellers in California ISO and PX Markets and to Investigate ISO and PX Tariffs, Contracts, Institutional Structures and Bylaws; and Providing Further Guidance to California Entities"). By these actions, FERC has chosen to exercise its plenary jurisdiction to review wholesale markets in California.

NEED FOR FEDERAL LEGISLATION

I do not see a present need for federal legislation. It is possible that the need for a legislative solution may emerge as an outcome of the pending FERC investigations.

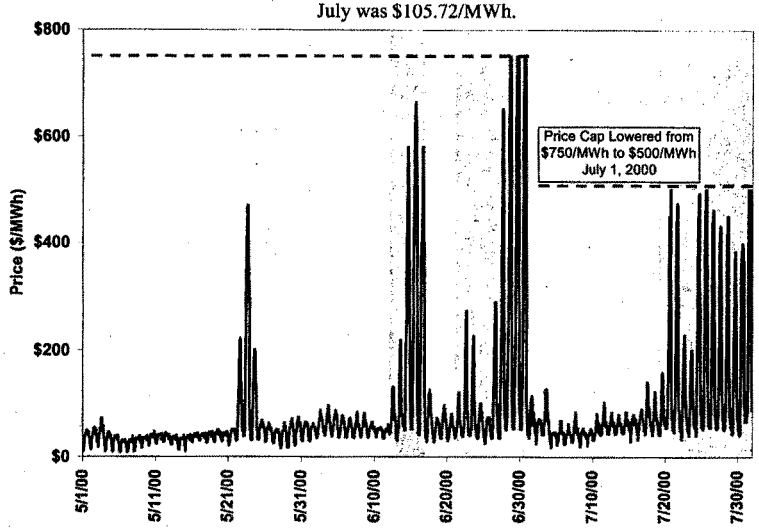
CALIFORNIA POWER EXCHANGE

Price Movements in California Electricity Markets

CalPX Compliance Unit

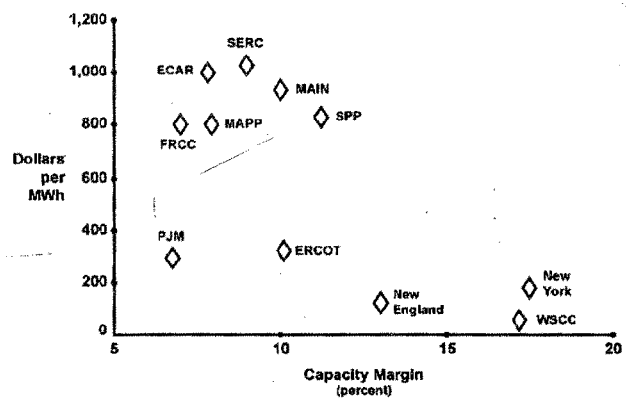
CALIFORNIA POWER EXCHANGE

In the summer of 2000, prices first spiked on May 22, 23 and 24, reaching a maximum of $469.84/MWh on May 23 in the Day-Ahead Market. The monthly average unconstrained market-clearing price (UMCP) increased to $47.22/MWH, up 78% over the April average of $26.56/MWH. In June 2000, the UMCP in the Day-Ahead Market increased over May 2000 by 155% to $120.20/MWh. Price spikes reaching as high as $750/MWh occurred June 28-30. The monthly average UMCP in the Day-Ahead Market for July 2000 actually decreased from that of June by about 12% due to a reduction in the ISO price cap from $750/MWh to $500/MWh. The monthly average UMCP for July was $105.72/MWh.



WSCC reserve margins, consistently at 17-20% over the last few years dropped below 12% during the event period. Cambridge Energy Research Associates, a global energy research consultancy, has shown that there is a high correlation between low reserve margins and high spot prices. Events in California are consistent with similar events throughout the US over the last three years.

Weekly Average Spot Price Highs versus Capacity Margin, 1999



Source: Cambridge Energy Research Associates.
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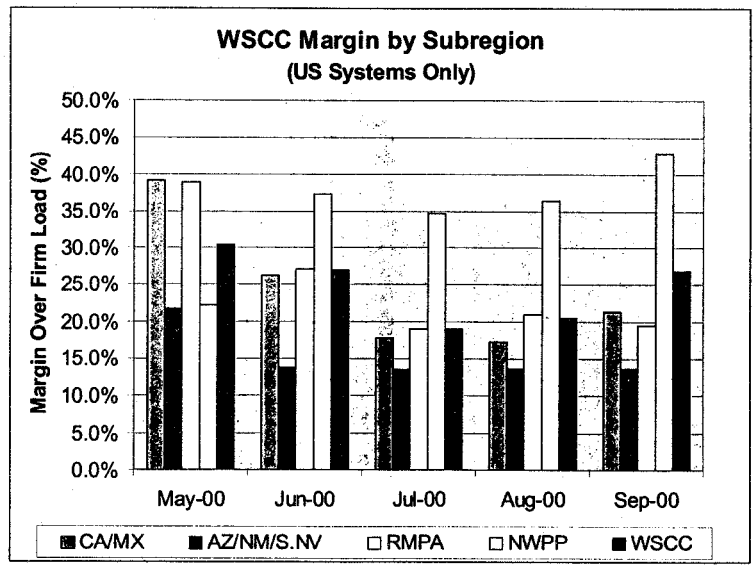
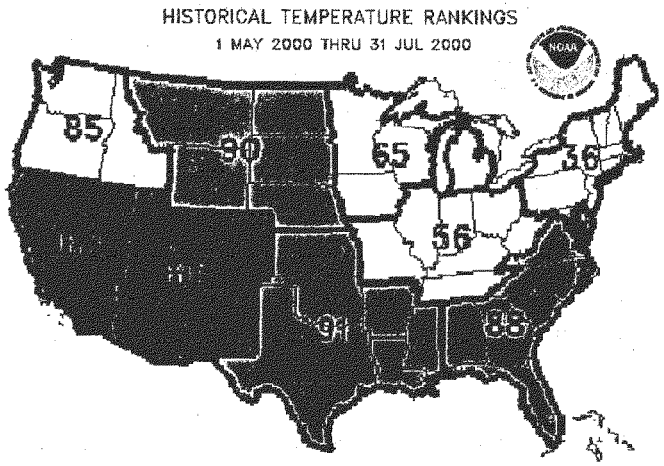
CALIFORNIA POWER EXCHANGE

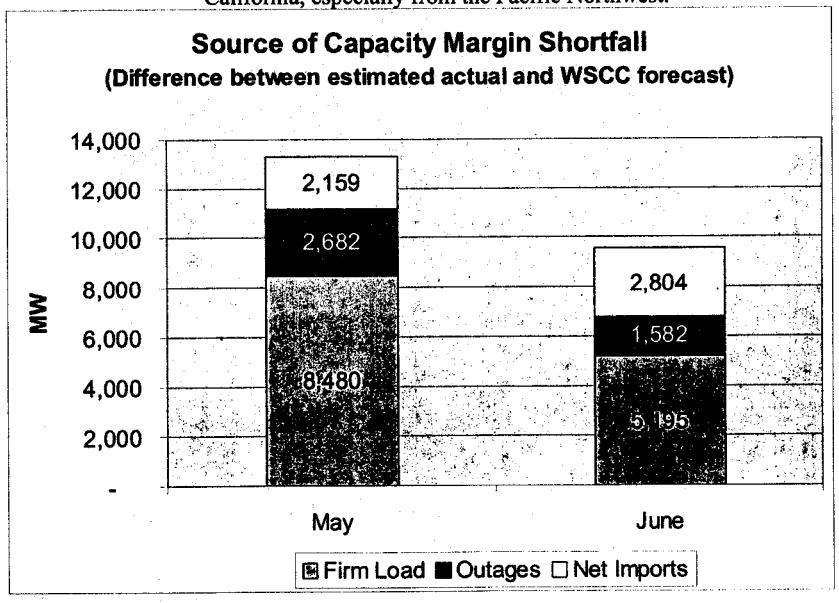
The aggregate WSCC reserve margin dropped to levels that are considered by the WSCC to be dangerously low. Subregions throughout the WSCC, especially California and the Southwest experienced pronounced declines in reserve margins, much greater than forecasts predicted.



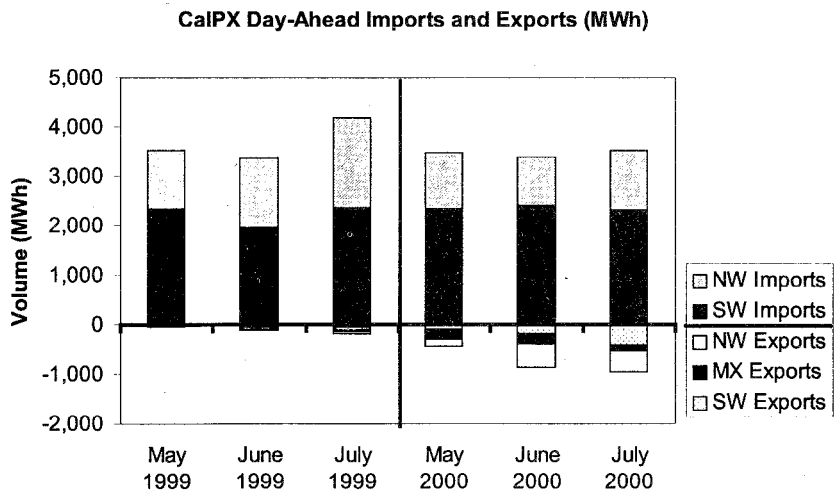
These reserve margin declines are due to an extraordinary weather circumstance. The entire Western US was unusually hot at the same time, and that higher than normal heat pattern persisted. The summer of 2000 was one of the ten hottest on record. Typically, heat variations throughout the West allow for reserve margins to be supported in one area where high temperatures occur by accessing resources from other regions. During the event period, all subregions of the WSCC were faced with unusually high temperatures.



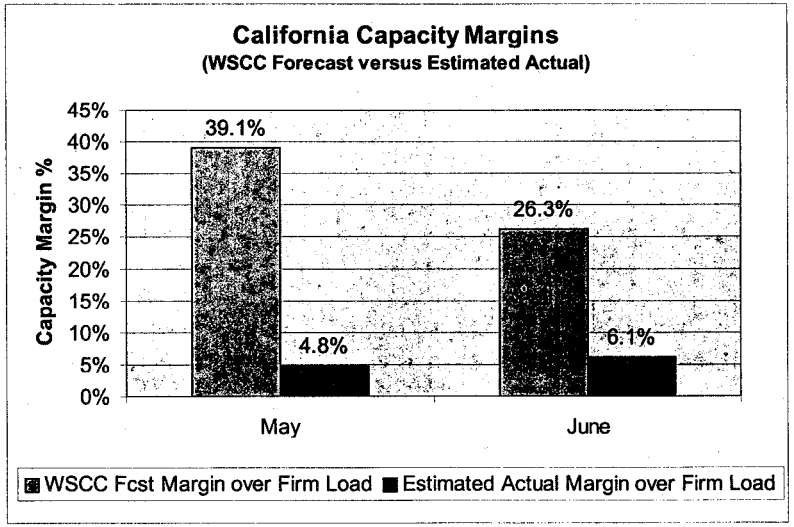
The shortfall in WSCC and California reserve margins stems from higher than expected loads, higher than expected unit outages, and lower than expected imports available to California, especially from the Pacific Northwest.



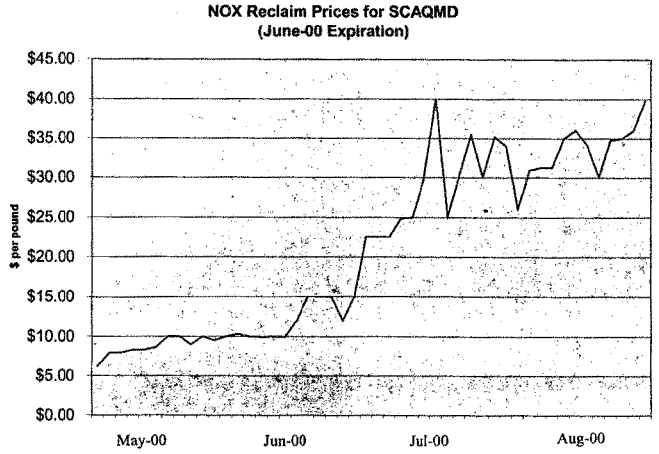
This summer has seen exports from the CalPX Day-Ahead market increased from 1% of total Day-Ahead volume in 1999 to 4% in 2000. Imports continue to be approximately 15% of the Day-Ahead volumes.



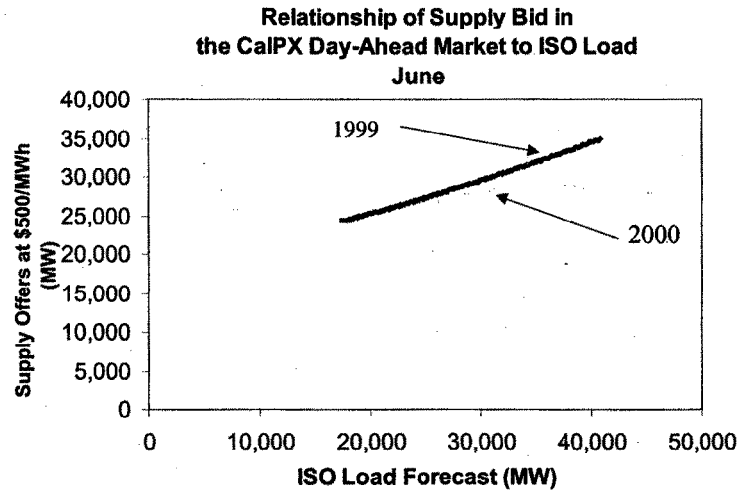
California reserve margins were extraordinarily thin compared to forecasts of expected reserve margins. This may have contributed to trade behavior that amplified the price dynamics during the event period.



An overlooked element of that contributed to supply problems is the NOx market in Southern California. Environmental constraints on critical electric supplies forced generators to either buy NOx credits at higher than expected prices or to operate within existing constraints. If generators did operate within existing constraints, some supply was simply not available because plants could not run given their environmental limitations. If generators bought NOx credits at high market prices, it is possible that they could not actually acquire adequate offsets to allow for full production. This dynamic contributed to supply uncertainty and amplified price premiums to assure certainty of supply during a protracted period of high stress. This factor needs to be more fully analyzed to appreciate the market interactions between environmental credits, generation availability, and competitive market dynamics.

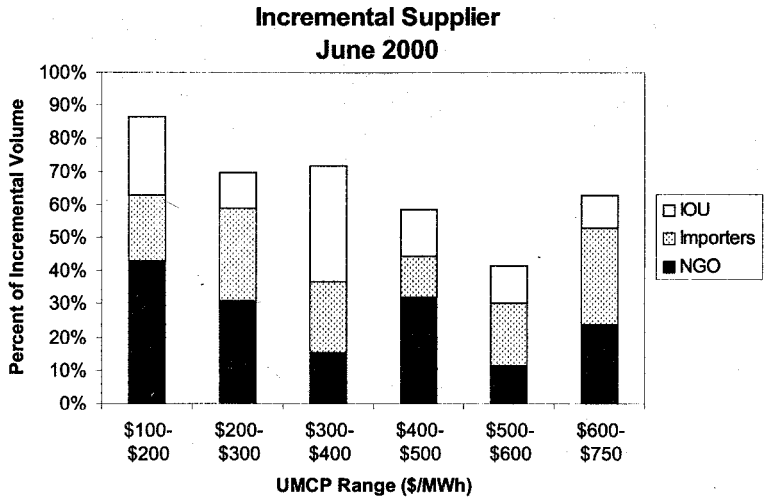


Less supply was offered in the CalPX Day-ahead market during the summer of 2000 than during 1999. During the event period, prices were often more attractive in markets outside California as well as the ISO Real-time and Ancillary Services markets. This in turn had the effect of pulling supply out of the Day-Ahead market and forcing demand to follow supply into these more attractive markets.

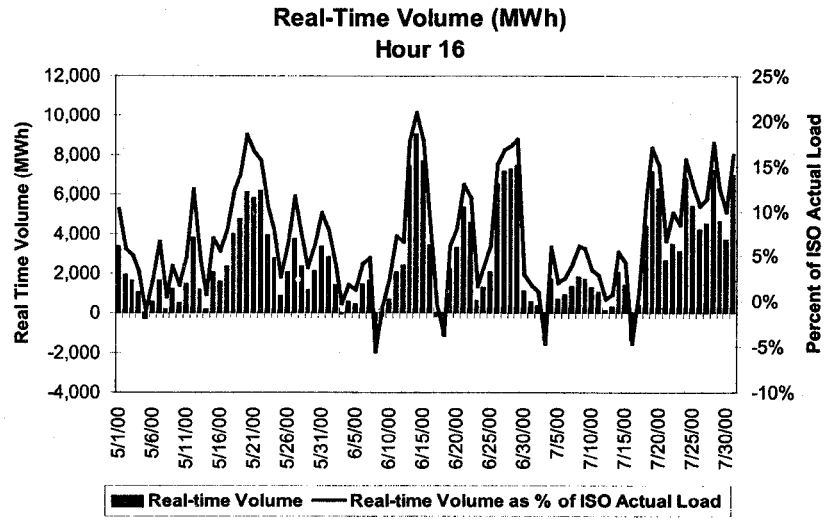


CALIFORNIA POWER EXCHANGE

Analysis of which types of participants were setting prices in CalPX markets show no consistent pattern by individual participant or participant category. In other words, there is no single entity or category of participant that can be singled out as the force driving prices during the event period.

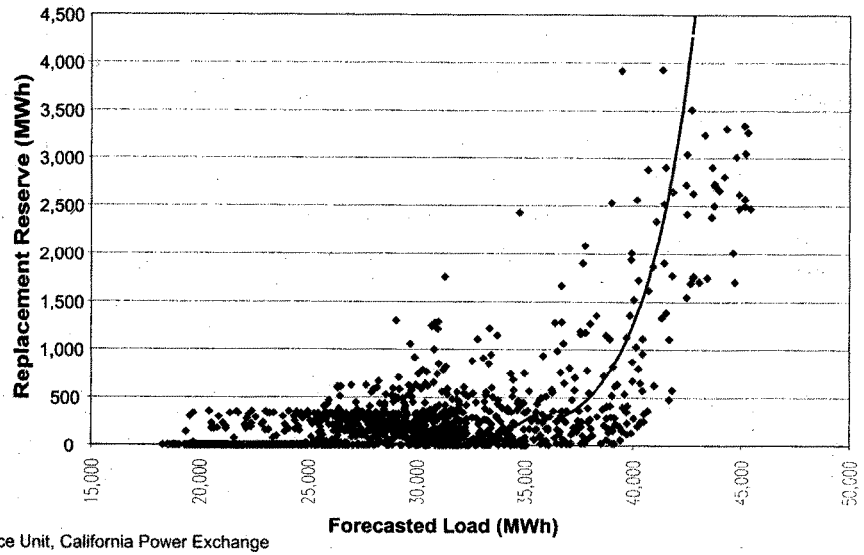


Real-Time Volume reached as high as 9,076 MW in one hour during the event period and amounted to 21% of the ISO Actual Load.

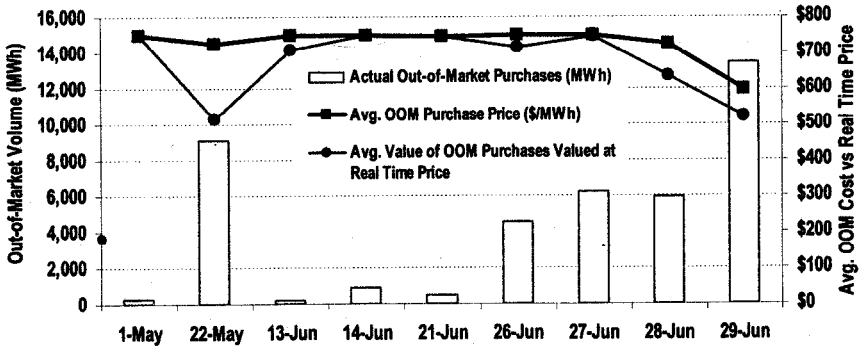


The Replacement Reserve Market grew exponentially in volume as a function of CAISO decisions in both the Real Time Market, the Replacement Reserve Market, and the Out of Market calls they executed.

May -June 2000 Total Replacement Reserves

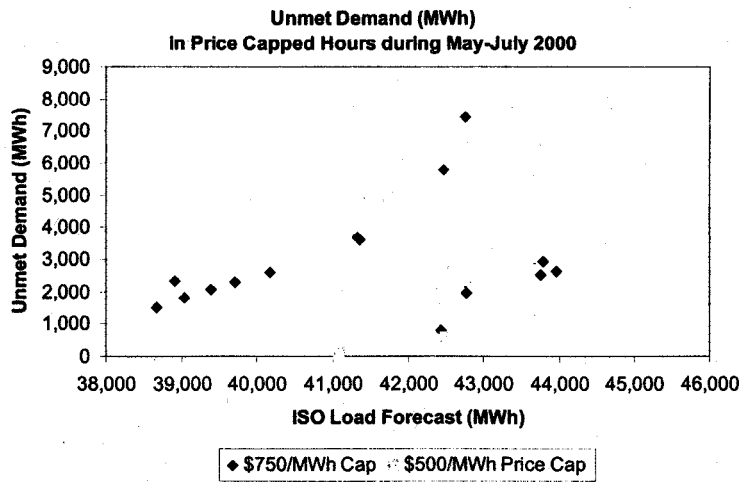


Out-of-Market costs are spread among all buyers and it is the only market not subject to the ISO price cap. The ISO restricts information on Out-of-Market volumes and prices making it difficult to analyze impacts of these purchases on the Day-Ahead market.



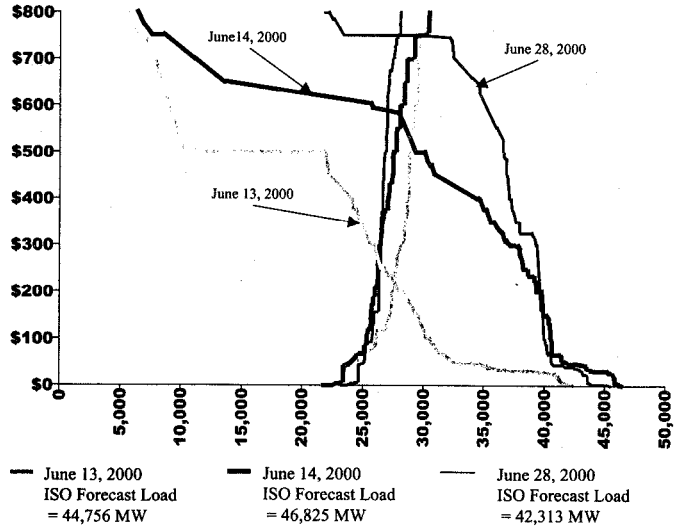
Source: Report on California Energy Market Issues and Performance, May-June 2000. Department of Market Analysis, California ISO. July 30, 2000

The combination of the lack of supply in the Day-Ahead market and price cap constraints resulted in significant quantity of demand that could not be met in the Day-Ahead market and was forced to be satisfied in the Day-Of or Real-time Markets. The unmet demand increased as the ISO Load Forecast increased.



Supply and demand curves grew more inelastic with the expectation of higher Real-time prices. This contributed to the rise in Day-Ahead prices and reinforces arguments that have been advanced for the last year that demand responsiveness needs to be a high priority.

Aggregate Market Supply and Demand Curves, Hour 16



Mr. BARTON. Thank you, Mr. Sladoje.

We're now going to do our question period. We have five members here. I'm going to recognize each member one time for 10 minutes instead of trying to do two rounds of 5 minutes each so you can get into some questions.

But we're just going to do one round. So we'll recognize myself first and Mr. Bilbray and Mr. Shadegg, Mr. Filner, and then Mr. Hunter.

So the Chair would recognize himself first for 10 minutes. And I want to say at the beginning that I understand how politically sensitive this issue is. It's very easy coming from Washington or from a State like I come from to come out here and not be sensitized to what the tripling of your electricity price means to somebody like Mr. Tyler, somebody like Oracle.

On the other hand, it does give nonCalifornians a certain ability to be more objective perhaps than those that are right here in the fight, and I hope that you'll take some of my questions in that spirit of objectivity.

Mr. Tyler, I want to ask you, as a small business representative, under the system that was put in place, could you have at any time chosen a different supplier than the incumbent utility?

Mr. TYLER. Not to my knowledge, sir.

Mr. BARTON. So you were——

Mr. TYLER. Not that would have been effectively different.

Mr. BARTON. As I understand the California law, they put a price cap in place. It was 10 percent below the average price the year before. So you were, at least in the beginning, as a retail customer, given a lower price than you had had, but did you at that time have an option to go to a different supplier from the incumbent utility who might have this year given you a lower price. And you're saying, to your knowledge, you didn't know that you had that option.

Mr. TYLER. No.

Mr. BARTON. Okay. Could somebody else, Mr. Jones or Mr. Winter, the average small businessman or woman, do they have any real opportunity at any time to go to a different supplier who might have—could have prevented some of the charges they've been paid?

Mr. SHAMES. I can probably help with that, Mr. Chair. UCAN runs a survey of all the energy service provider options for consumers in San Diego and have for the last 2 years. What I can tell you is, most small customers, meaning residential and small business customers, were offered options that were pegged to the PX so that customers could receive savings based on how the PX price went.

There were some small and medium-sized commercial customers who did have available to them service providers who would offer a fixed rate, essentially a hedge. There were a couple of these companies. The problem was, since nobody had any track record of what rates would do, very few commercial customers had the sophistication or foresight to say, "I'll take that gamble," since there was no history. But those are the options available.

Mr. BARTON. But now in the other States that have gone to competition, they've set a price to be that's a little above the market, prevented incumbent utility from matching that price and then

tried to create price competition by suppliers coming in and down-bidding. California did it differently, took an average price, cut it 10 percent, give everybody the same price, regardless of who the supplier was.

So there wasn't much incentive for a supplier to come to Mr. Tyler. Isn't that correct, or am I incorrect in that?

Mr. SHAMES. I think you're incorrect. I think the State you're referring to is Pennsylvania, which essentially took some of the stranded cost that it would obligate it to pay the utilities, instead gave it to customers in the form of a shopping credit. That's the only State that I'm familiar with that took that action.

There's no doubt that the 10 percent artificial rate reduction that was created through legislation reduced somewhat the interest of consumers to switch. But truthfully, what we saw on the market was simply 10 percent savings. The best deal was 10 percent savings over the PX, which had the 10 percent artificial reduction not existed, would have been a 20 percent reduction. Very few small customers were attracted to that deal.

Mr. BARTON. Okay. Mr. Jones, and then I've got a direct question for the gentleman from Oregon.

Mr. SMUTNY-JONES. Okay. Yeah. Let me just follow up on that. I think fundamentally one of the key problems in California is we do not have meaningful retail choice. It is an exception, not the rule. There are some exceptions.

A notable exception is my understanding is the University of California here in San Diego and the State University system saved somewhere in the vicinity of about $2 million in their June and July bills. I think this is what Michael was referring to in terms of a fixed contract in which a different type of product was being offered.

But that is the exception rather than the rule. And I guess my take on this is that whatever impediments exist for trying to get other additional retail suppliers into the marketplace need to be removed so, in fact, we have meaningful retail choice so people can get out of the way of high prices.

Mr. BARTON. I want to ask the gentleman from Oracle. As a large user, do you have the ability to directly negotiate with a power generator and create your own market, so to speak, bilaterally, or do you have to buy through the Power Exchange like everybody else?

Mr. BYRON. Mr. Chairman, we were entitled to go ahead and do a direct access agreement with someone else. There was no incentive to do so in the current market situation.

Mr. BARTON. Is there an incentive in today's market situation?

Mr. BYRON. No, sir. As I understand it, even those that have entered into a direct agreement are still going to be held responsible for these high prices because——

Mr. BARTON. Is that——

Mr. BYRON. [continuing] because they're receiving a credit. They're receiving a credit equal to the amount of these energy costs.

Mr. BARTON. Okay. Now I want Mr. Winter or Mr. Sladoje. Is that true? If a big user does a direct negotiation, are they required under California law to pay this PX price, this market-clearing

price? Or if they can negotiate something that's below the public price, are they allowed to do that?

Mr. WINTER. I'm not the expert on retail rates, but let me tell you how I understand. Yes, they could go directly, but the reason the incentive isn't there for Oracle, which I believe is in the San Francisco area, is that PG&E has not recovered its CTC rate.

So even though they went directly, they would have to still pay that CTC recovery portion of the bill, and therefore it's not attractive. Now, in the case of those in San Diego where they were off of that CTC recovery, then those people—and I understand Hewlett Packard did that. They went directly to a supplier, tied down a fixed rate and was delivered that energy from them.

Mr. BARTON. Oracle can't do it because they're in a different part of the State.

Mr. WINTER. Right.

Mr. BARTON. And under the California law, their supplier is not allowed to compete on price yet. Is that——

Mr. WINTER. Correct. Because they have——

Mr. BARTON. I know barely just enough to barely understand the answer you just gave me.

Mr. WINTER. They are allowed to compete on the energy price, but they still have to pay the stranded cost recovery.

Mr. BARTON. Mr. Jones, under this recently passed legislation here in California that the Governor just signed last week or the week before, what percentage of the new power plants that are under consideration does that legislation cover?

Mr. SMUTNY-JONES. My understanding of how it operates, those that are currently in the licensing process, it does not effect. It will affect some of those that are not into the process yet. It potentially has a pretty big impact on some of the peaking capacity that Mr. Winter's organization, the ISO, is asking to pull into California and I think Mr. Hunter was referring to earlier that could be cited.

It would basically reduce the siting time by about half, depending upon whether or not that plant was subsequently going to be what's called a combined cycle generator.

So it does have an impact. We think it's an important step, but obviously we will continue to work with the State and the Federal Government to try to streamline this even further.

Mr. BARTON. I've got about 2 minutes left. These last questions are directed generally to Mr. Winter and Mr. Sladoje. I want to try to understand this pricing mechanism and the ISO and the PX.

As I understand it, the day-before market and the same-day market, people bid into that. You've got bidders which I would say would be suppliers, and I think you've got about 80, if I understood you correctly, that can offer to supply power. But you kind of get an idea of how much power you're going to need to supply the demand. You publicized that, and suppliers come forward and offer so much power at such a price.

If I understand it correctly, once you get all the power you need for that particular time, the last price that's bid that tends to be the highest price, the market-clearing price, everybody who bid in gets that price. Is that correct?

Mr. SLADOJE. There is a uniform price in our hourly day-ahead market, but I wouldn't characterize it exactly that way. Let me just

go through it just very briefly. I was going to go through it in my remarks, but it would have taken a little bit of time.

At 7 a.m., all the bids for the following day for each hour are submitted to the California Power Exchange. And we are approximately 85 percent of the ISO grid. And these are both suppliers and purchasers, and they are required for each hour to submit a minimum of two price and quantity pairs and up to 16 price and quantity pairs.

So in other words, a supplier might say, "I will sell 100 megawatts if the price is $50. If the price is $60, I'll sell 110. If the price"—so on and so forth, going up, of course, as the quantity increases.

Mr. BARTON. Well, I've only got 14 seconds, so once everybody has bid in in these pricing pairs, and once you know that you've got enough power, what is the price that is passed through to the retail customer? Is it the highest price or is it an average price or is it the lowest price? I mean, how is all of that averaged out so that Mr. Tyler here gets charged this pass-through price.

Mr. SLADOJE. It is where the aggregate supply and demand curve intersect. That is the price, the uniform price for that hour in California.

And in most of the States, the retail customer doesn't have any idea what that price is. In San Diego, though, it's generally passed straight through to them, since they've recovered their stranded cost.

Mr. BARTON. Well, I would really appreciate somebody on your staff trying to put in layman's language how you price. I know you use the market to get enough power to keep all the lights going, and that's a good thing. I understand that.

I'm still not quite sure how you take that and convert it to the price that Mr. Tyler has to pay as a pass-through because it really seems to me that Mr. Tyler is ending up paying a lot higher price than he has to if we had some sort of an average price scheme in place that not everybody who pays into the power pool gets the highest price.

Mr. SLADOJE. Mr. Chairman, I believe that the argument would be that the generators are encouraged to bid their marginal cost so that they are for sure to be picked to supply, and that while there may be some generators who bid under the market clearing price, they don't really expect to get that price, and that if this was a traditional bid-and-ask system—and believe me, I spent 15 years in Chicago Board of Trade and 5 years in the equity market. I'm very familiar with that.

Mr. BARTON. You know more about it than I do.

Mr. SLADOJE. Anyway, if, in fact, we had a traditional bid-and-ask system here, they would then guess at what the market clearing price should be, and over the long haul, most of the academics believe that the traditional bid-and-ask system will end up with higher prices.

Now, we are appointing a blue ribbon committee at the California Power Exchange to take a look at this this fall. Because you're right, it's been the subject of some controversy and some misunderstanding, frankly. And we'll report back to you.

But I would love to send you and your staff something to go through some of the details of how this works and——

Mr. BARTON. Well, I would appreciate that because I really want to try to understand it.

Mr. SLADOJE. Okay. And then one last thing. We're only one of 40 some scheduling coordinators, so we send schedules resulting from our prices and quantities from our participants up to the power, up to the California ISO, and then Mr. Winter takes over from there.

Mr. WINTER. I think I can answer this real quickly.

Mr. BARTON. Do it really quickly.

Mr. WINTER. Okay. In the day-ahead market, a price is established based on a meeting of the load and the supply and a price. That price is then the price that the generator will get and the load will pay for it. That's the day ahead.

And if 90 percent of the load is bid in and accepted, that's the price they pay. What is happening is that either the load or the generator has such a high price or the load sets a price that they're not willing to pay above, that the day-ahead market price shortfall then moves into real time.

But even in real time, if the real time price is $250 and you've bought in the day-ahead market at $100, you're still only going to pay the $100. The $250 will only be charged to those who have not signed up an equal time. And that's why I get so concerned when I have 16,000 megawatts in the real time price, because now I'm out shopping at an extremely high price. But to either have that in the day-ahead or the hedging ties down the price you will pay.

Mr. BARTON. Well, that's a whole other issue, and we need to get it back to where you're not having 20 to 30 percent of your load in the real time market. That is absolutely idiotic to try to run a power grid when the next hour you're just praying that the Lord will provide you power. I mean, it does not work over time. That's a whole different question.

Mr. Bilbray.

Mr. BILBRAY. Thank you, Mr. Chairman.

George, I was just sort of thinking when you were saying everything was going fine, we've had no problems, it was a great cruise, and we just happened to have this quote-unquote, problem. My daughter's favorite movie is The Titanic, and I can just imagine the skipper of the Titanic saying, "It was a great cruise until we ran into this iceberg. I mean, what are you complaining about?"

But we're talking about a substantive issue here. The iceberg seems to be this issue that rather than 2, 3 or 4 percent, we're talking 20 to 30 percent being on the spot market. So let's try to melt down this iceberg and address the fact of making it clear for the next cruise that goes through here that the consumers get.

Why is there so much market going to this spot market? In fact, one of the things is, why isn't the block forward, the hedge market, being used more?

Mr. SLADOJE. First on the hedge market itself, we began trading in that hedge market in July 1999. We introduced it in 1999. The Public Utility Commission put severe limits on what the three IOUs could actually hedge in that market, for their reasons, which I'm sure were legitimate.

Mr. BILBRAY. Let's clarify. That's a State—PUC put limits on——

Mr. SLADOJE. Correct. The State——

Mr. BILBRAY. [continuing] what you can——

Mr. SLADOJE. [continuing] Public Utility Commission on what the three investor-owned utilities—how much they could purchase. Later on, they released and relaxed those requirements after about 8 or 9 months, still with a meaningful limit on what they can hedge.

And then on top of that, the hedging that was available to them, they didn't use completely. You know, you'll have to talk to the investor-owned utilities as to why they did or did not or what their strategy was.

Mr. BILBRAY. You don't have any idea why they would not utilize the resources——

Mr. SLADOJE. Well, of course, I was told by one of them that they just thought the block-forward prices were too high, so they didn't purchase several months in advance. I'm not sure why those that did stopped it where they did. I think that they'll say the market was probably thin and that they thought that they were going to move the market too much higher. But that is speculation, I think, because you don't know until you actually put bids in what the response is going to be.

So hedging was not utilized to the extent that it could have been, and now looking back on it, of course, should have been. And I don't want to say hedging always results in lower prices because for about 10 months it didn't. The prices just kind of fluctuated around the spot market.

But it does provide certainty. It does provide an opportunity to plan, and it does provide an opportunity to strategize. So it's still very important, even if you don't realize the $600 million in savings that we did. So I think it's a market that's really got to be emphasized.

The other issue on the real time market, we have worked with the ISO. We are submitting to our market monitoring committee on Friday, a meeting they're having. An independent market monitoring committee's suggestion that the price and the ISO real time market for generators be capped at the Power Exchange day-ahead market so that nobody could save generation until the 11th hour and get a premium.

And by the same token, some kind of a penalty for load, who's also kind of playing that game and going to the real time market, we want to put some device in place to encourage them both to put everything in the day-ahead market.

Mr. BILBRAY. George, the utilities that are served in the public care, can they go out and get the best bid they can or do they have to go through your exchange by State law?

Mr. SLADOJE. They are required to go through the California Power Exchange for all their purchases.

Mr. BILBRAY. So you are—you basically are the clearinghouse.

Mr. SLADOJE. That's correct.

Mr. BILBRAY. And I'm just saying I know that there is a—you set prices based on two formulas, first the bids, and then you've got what people are willing to pay, and those two lines conflict.

Mr. SLADOJE. Correct.

Mr. BILBRAY. Why are the utilities, their projected—what they were willing to pay, why is that inflated so much? Why would they constantly be increasing that number? Because I saw that it was a substantial increase, and that by themselves increases what the consumer is going to get hit with, not just the producer, but also utility, what they're proposing.

Mr. SLADOJE. When we get into these shortage situations or tight situations, the utilities frankly, just from an economic standpoint, really have no choice. They've really got to pay because they've got customers out there that they've got to provide power for.

Mr. BILBRAY. Okay. I think that—and I guess when you get down to it, it's just like you said. They really have no choice from two points. One, they have to provide the power. The other is the State law requires them to go through you and doesn't allow them to go out and try to shop around for a better price outside. So they basically are tied to a system that is regulated—the majority of it. You said 85 percent. What is the rest of the market doing outside that 85 percent?

Mr. SLADOJE. Well, the rest of the market, I guess, just consists of some of these generators who are not required to bid into the Power Exchange and——

Mr. BILBRAY. Like who?

Mr. SLADOJE. Like the new generator owners that bought the generators that Edison, PG&E, and San Diego divested, like Dynagy, like Enron, Southern, Williams, Reliant and so on. They're not required to bid into the Power Exchange.

Mr. BILBRAY. Why don't they have to go through the market?

Mr. SLADOJE. Just not required by the Public Utility Commission. Now, they do bid into our market on occasion, most of them haven't bid that heavily into our market during these 3 or 4 months.

Mr. BILBRAY. Okay. Especially if they can go sell it someplace else.

Mr. SLADOJE. I believe that's true.

Mr. BILBRAY. Terry, what percentage of the market out there is going through your process?

Mr. WINTER. Well, in the whole State?

Mr. BILBRAY. The whole State. Or will when it's all done.

Mr. WINTER. Well, it would be 100 percent less——

Mr. BILBRAY. A hundred percent.

Mr. WINTER. [continuing] less the municipalities. So what——

Mr. BILBRAY. Less the municipalities. Now, those are Los Angeles, Alameda and Sacramento?

Mr. WINTER. Yes, generally. IID, I think, also.

Mr. BILBRAY. Why aren't they going through the process, and why are they exempt? In San Diego, we're reading articles about L.A. as selling power out of the State and making these huge windfall profits and celebrating all these great rates. And down here in San Diego, we're saying, "Wait a minute. What's going on? Why is Los Angeles being given that special carve-out?"

Mr. WINTER. The reason is that Los Angeles is a separate control area. Now, as the ISO, I schedule all load that goes through the grid. And that grid is comprised of those utilities who turn their transmission facilities over to me for the operation.

So when I say 100 percent goes through the ISO, 100 percent of the power scheduled goes through the ISO. Hewlett Packard can schedule a 100-megawatt deal with Dynagy, a generator, and I will see those schedules, but I will not see the price or know even what the price is.

So from a control area, I schedule it and keep track of whose power went where, but from a market standpoint, they do not then get involved in the real time market because they've already made their bilateral deal outside the market.

Mr. BILBRAY. And so—explain this again. Where Alameda and Los Angeles—they had a special carve-out in the original legislation?

Mr. WINTER. Yes. It wasn't in the legislation. The legislation encouraged them to join the ISO and put their facilities under the control, but they have not done that.

Mr. BARTON. They had an opportunity to either opt in or opt out, and the municipals chose to opt out.

Mr. WINTER. Correct.

Mr. BILBRAY. Okay. Now, did anybody else have that choice?

Mr. WINTER. Not who were in the investor-owned utilities, no.

Mr. BILBRAY. So they were—they didn't have the choice, but the L.A. utilities had that option.

Mr. WINTER. Correct.

Mr. BARTON. Isn't it true that the investor-owned utilities were basically forced to divest because their rate of return was below market, that they didn't—they weren't required to, but if they didn't, they were—they got about a 5 percent rate of return? So in point of fact, like San Diego Gas & Electric was almost forced to divest its generation?

Mr. WINTER. I think you would have to ask San Diego that question. In the PUC decision, it required Edison and PG&E to divest one half of their generation. I do not believe San Diego was put under that requirement.

Now, what that means in the rate return, et cetera, I don't know.

Mr. BILBRAY. George, when Bonneville—the Federal Government's generation comes into the State and is trying to get to San Diego consumers through SDG&E, are they required under the State law to come through you or could SDG&E try to work out some separate agreement with the Federal Government like they have with Los Angeles?

Mr. SLADOJE. I just want to correct just one thing. Right now, the Public Utility Commission, just last month, gave three IOUs the opportunity to do bilateral forward purchases going out in the future.

Right now—the situation has been if San Diego wanted to purchase power from Bonneville, Bonneville would sell that power into the California Power Exchange.

Mr. BILBRAY. And so——

Mr. SLADOJE. And that's the way that we'd get the power.

Mr. BILBRAY. You'd end up paying the higher price anyways because everything that goes through yours has that set number.

Mr. SLADOJE. Yes. If indeed our price was higher, that's correct.

Mr. BILBRAY. Now, in Los Angeles, though, they don't have to go through—Bonneville doesn't have to go through your exchange to get to the consumers in Los Angeles?

Mr. SLADOJE. That's correct. I believe they've got to go through the——

Mr. BILBRAY. And that is because the State law specifically gave them that carve-out.

Mr. SLADOJE. That's correct.

Mr. BILBRAY. Okay.

Mr. SLADOJE. I think the muni's were exempt. That's correct.

Mr. BILBRAY. Michael, are you—Michael, I wanted to just point out something that Mr. Jones—they were talking about this—just new projects up north, an environmentaler basically trying to upgrade an old unit, come up with a new one, and that the sign-off of the EPA sort of holding it up for 4 months or whatever and causing basically a financial and time problem, but also not necessarily addressing any new environmental stuff. Do you agree with that statement?

Mr. SHAMES. I don't know enough about the facts of the case. I'm sorry.

Mr. BILBRAY. Okay. I just saw you nodding, and I was just——

Mr. SHAMES. We were talking about a response that Mr. Sladoje had given concerning what would happen in a situation where SDG&E wanted to buy power from Bonneville, and it would have to be done through the PX. But if it was a bilateral forward contract, it would not pay the higher PX price. They would pay the terms of the bilateral contract and scheduled through the PX, but they would so—I think Mr. Sladoje, I think you misstated the facts. Did I——

Mr. SLADOJE. Well, I tried to correct it a minute ago when I said they did get bilateral authority just about a month ago. That's correct. They got that authority for forward purchases into the future.

Mr. BARTON. But that's only in the last 3 months.

Mr. SLADOJE. That's correct.

Mr. BARTON. Prior to that time, if SDG&E decided it could get a bilateral contract from Bonneville, they could do it, but the price they'd pay would be based on this market-clearing price at the time the power was delivered.

Mr. SLADOJE. Well, they couldn't a few months ago actually do a contractual arrangement.

Mr. BARTON. They couldn't even go out and negotiate.

Mr. SLADOJE. No. They'd have to just go through the California Power Exchange and hope that the price was driven down.

Mr. BILBRAY. Thank you. I appreciate that.

Mr. Chairman, I just think that—and George, I didn't mean to be hitting on you, but it just looks like, from a layman's point of view, 100 years ago this country started outlawing systems where industries got together and cooperated to be able to set a price that was, you know, congenial to their provider capabilities. We call them trust—you know, monopolies or cartels.

And frankly, it almost looks like, from a layman's point of view, if I can say this sincerely, that it looks like a cartel has been developed here and that you guys are the ones that are carrying the

mantel of a—you know, basically some kind of cartel that works it all out so no one gets burned in the long-run except the consumer.

Now, I know that's just—that's just a layman's perception, but I think that's what we need to address to make sure that that isn't what the reality is.

Mr. SLADOJE. I understand. And I hope you look at us as being something comparable to the New York Stock Exchange or the Chicago Board of Trade where we actually bring the buyers and sellers together. I mean, that's really what our mission is.

Mr. BILBRAY. Okay. Thank you.

Mr. BARTON. Gentleman's time has expired. The gentleman from Arizona, Mr. Shadegg, is recognized for 10 minutes.

Mr. SHADEGG. Thank you, Chairman.

I begin again by saying, Mr. Tyler, I deeply sympathize with the situation you're in. It seems to me that, as I listen to your testimony and listen to what happened to your own utility bill and saw you put it up there, I recognize that my wife and I, simply in the Shadegg family budget, couldn't afford to see that kind of an increasing in our energy price, and it seems stunning that we have created a situation where this has been allowed to happen.

I also—I think my colleague, Mr. Hunter's testimony about what is going to happen to the business climate in this community backs up your assertion that we need a solution and we need one very, very quickly. And I think Mr. Winter and Mr. Sladoje are the ones that we're going to have to look to to try to at least in the short-run provide that.

I have to tell you that I find this rather confusing from an outsider's perspective because I see some things here that violate all the principles that we've been talking about in energy deregulation at the Federal level. And the first principle that I see violated is the notion of a level playing field. It looks to me like we have created an unlevel playing field on at least several different tiers.

First of all, as near as I can tell, the new law essentially applies to only investor-owned utilities, and as near as I can tell, it's largely three investor-owned utilities. Is that correct?

Mr. WINTER. That's correct.

Mr. SHADEGG. And as a result of the structural law, the municipals in the State have not been required to participate in this new process. Can somebody explain a—I understand there's a technical reason for that. Mr. Winter, I heard from your testimony, which had to do with them being in a different distribution area, except it seems to me that other than perhaps interconnection issues, that should not have been allowed to cause them to be given a different playing field to play on.

And I guess one of the questions I have to ask you is, is that were they given a different playing field or not required to be on the same playing field as the investor-owned utilities simply as a matter of politics.

Mr. WINTER. Boy, what a question. No. I think it really related to the FERC jurisdiction. In other words, FERC has jurisdiction over the investor-owned utilities. FERC does not have jurisdiction over Government municipal entities.

And so the State found itself in a position where the ISO operates under the tariffs of FERC, and therefore, that's where we get

our authority to actually schedule and demand people to provide generation, all the things that we can force people to do. That could not be applied to the municipality, since they were not under the FERC rules, and therefore, they could not be forced to join.

Mr. BARTON. Would the gentleman yield?

Mr. SHADEGG. Sure.

Mr. BARTON. Is it not also true that the municipals in California have power generation surpluses so they could opt out simply because they had enough generation capacity to serve their market? And if they did opt out, they could serve their market, and they didn't have to let people come into their market. Is that not correct?

Mr. WINTER. Again, I'm not an expert, but that is my understanding. Now, I want to be careful not to say that all the municipalities had excess generation. There were many of them which are, in fact, in the same position and are buying out of the ISO to meet their needs.

Mr. BARTON. But Los Angeles, which is the largest municipal, does have surplus generation capacity.

Mr. WINTER. That's correct.

Mr. SHADEGG. Largely through WAPA and hydro-electric generation. Okay.

The second unlevel playing field that I observed here, which is some concern to me—and I understand a little bit less than the first one—is that it appears that of the three major investor-owned utilities, one of them was in a different position, and that is San Diego Gas & Electric.

And the structure, as I can read it, is that the other two IOUs serving other parts of the State have an incentive to forward contract and did so to a greater degree than San Diego Gas & Electric. Is that right?

Mr. WINTER. That's correct.

Mr. SHADEGG. And as a result of having done so, you have not—they have not experienced or their customers, the Mr. Tyler living in their district, has not suffered the same kind of price spikes as has been experienced here in the San Diego Gas & Electric territory; is that right?

Mr. WINTER. The difference that I would say is their customers have not suffered it, but believe me, those investor-owned utilities have suffered it because their prices to the retail market have been frozen at a level. And so what they have been trying to do over the last 4 years is to recover all of their stranded cost.

San Diego was fortunate or unfortunate in getting their stranded cost paid off first, so they went to the free marketplace first. But the investor-owned utilities of PG&E and Southern California Edison clearly have been paying prices for wholesale energy well above what their retail rates would support. So they are losing money from the standpoint of not having collected CTC, but also having lost money in total.

And because of that, they have opted to do more forward contracting to try and hedge against that eventuality.

Mr. SHADEGG. Mr. Sladoje, as I understand your testimony, the restrictions on buying through a bilateral contract and forward

buying have now been—have they been lifted or have they just been raised to some degree?

Mr. SLADOJE. They've just gotten permission in the last couple of months to do bilateral forward contracts, again, with limits, the same limits that they had on them as far as what they could purchase through the Power Exchange. So it's still not unlimited, ability to do bilateral forward, but they can do some.

Mr. SHADEGG. Have you seen an improvement in rates with them being able to take advantage of that?

Mr. SLADOJE. No. I don't think they've made any long-term bilateral deals yet. I know Edison just put out an RFI or an RFP just this week, we haven't seen the result of any of that yet.

Mr. SHADEGG. Are you optimistic that that will have that effect?

Mr. SLADOJE. Hopefully, I am. Or I'm hopeful that they'll put more bids into our forward markets that go out 5 years. Because we have seen some offers to sell going out 5 years, but we haven't seen much activity on the other side.

Mr. SHADEGG. I want to follow up on some questions by the chairman. The materials we've been given lead me to understand that, in fact, when the bidding process is concluded, everybody who has bid gets the highest rate bid. And that was the question that I think Mr. Barton put to you, and it's the information we've been given as an explanation of—by our staff of the way the structure works here.

Instead, you and—you and Mr. Winter have indicated it's where the aggregate supply and demand curve intersect.

Mr. SLADOJE. That's correct.

Mr. SHADEGG. I guess my question is, if there is a price below that and somebody has bid below that price, why isn't that electricity purchased at the lower price?

Mr. SLADOJE. There are—I don't know—a dozen power exchanges in the world. They all use this methodology. And the belief is that those bidders who bid less than the market clearing price generally bid that price just to be sure that they end up selling, and that once we change to a traditional bid-and-ask system, then they're going to be guessing as to where the market clearing price should be, and the suppliers are liable to bid higher. That's the theory behind all of this anyway.

Mr. BARTON. Would the gentleman yield?

Mr. SHADEGG. Certainly.

Mr. BARTON. Well, why don't we give them a chance, for God's sake. I mean, you know, if you're ending up with a price that poor Mr. Tyler and his people have to pay, if somebody will bid into the market at 10 cents a kilowatt hour, we ought to take them up on it. And then if they change their behavior, then you can go back to the system you have today.

Mr. SLADOJE. Well, as I mentioned, we do have a blue ribbon committee going to look at that this fall, going to review the results of the first 2½ years and going to make a recommendation as to whether or not the theory that was originally espoused holds true.

Certainly it would be easier from our standpoint to run a bid-and-ask market. But there's several reasons, I think, that this method was chosen. First of all, it is everywhere. PJM, everywhere

in Europe, everywhere in Australia and New Zealand and so on, they utilize this method.

Second, you've got to keep in mind that two of the IOUs are about 70 percent of the demand and still 50 to 60 percent of the supply. Consequently, I don't need to explain to you that that looks as though there would be an opportunity to have the perception that they're controlling too much of the market on both sides.

Third, this methodology does allow small generators to jump into the game. Those who have 10 to 20 megawatts to sell, they can sell at our market, whereas at a bid-and-ask price, when PG&E and Edison come in and want to buy 2,000, they have no chance.

So it's not an all black and white issue. And I hate to quote the academics, but I will quote the academics. Severin Borenstein from Berekely who told Senator Pease the other day when he was criticizing this methodology saying, "You should go to a bid-and-ask type of system and get lower prices." Borenstein said, "That would hold true if the bidders were morons." And these bidders are not morons.

So as I mentioned, we'll report back to you this fall after we have a distinguished blue ribbon committee look at it, and if you have people that you think should participate in that, I'd be glad to hear from you on it.

Mr. BARTON. Well, it just seems to me that you can—and I'm not an mathematician, and I'm not a power supply marketeer, but it would seem to me you create a system that the people that first bid in at a lower rate, the suppliers, if they're first into the market, they get some incentive later on, some bonus for selling at a lower price than what turns out to be the higher price.

I mean, smarter people than me could devise a system that at least gives the price that's passed through an opportunity to be a lower price than apparently you're getting today. But look, it's always easy when we don't have to do it, to question how it is done.

Mr. Shadegg, I took some of your time, so——

Mr. SHADEGG. Some.

Mr. BARTON. That's the prerogative of being the chairman, you know.

Mr. SHADEGG. It is the prerogative of being the chairman. Give me a few more years.

I'll try to conclude fairly quickly, Mr. Chairman. Mr. Byron, I want to thank you for your testimony. I think it was very thoughtful. I think several of the suggestions you made, I'd like to see the Federal Government do, and I'd like to follow your testimony and work with you in the future on that.

Clearly, your company has been very far-sighted in looking out on how to deal with this. I found it also fascinating, since one of the issues we face is the reliability issue, and having had great difficulty getting through a broad spectrum deregulation bill in the U.S. Congress, we are now looking at what can we do in the balance of this section on the issue of reliability.

And with one of my colleagues on the other side of the aisle, I am sponsoring a reliability piece of legislation. And having listened to what your testimony and read what your testimony says can happen with regard to reliability and, quite frankly, looking at the

whole situation here, I think that's very useful information, and I'd like to work with you on that.

Mr. Shames, I want to thank you for, I think, contributing positively to this discussion. Lots of times people in you position simply point fingers and talk about blame, and I think that it's been fairly helpful that you are not doing that.

Looking at it in a productive way, I found it interesting that—and I actually was thinking—suggesting to the chairman that we hold a hearing in Pennsylvania and look at why it seems to be working in Pennsylvania. Your comments on what's going on in the northeast kind of enlighten me on that point and are somewhat helpful.

Mr. Smutny-Jones, I want to conclude by simply asking you, the three recommendations you made, the first one had to do with expediting Federal rules regarding siting here in California.

Mr. SMUTNY-JONES. In general, what I have in mind there is when a request comes in, for example, to the Fish & Wildlife Service, that that application is processed immediately, that it doesn't go to the bottom of the stack. It's put on the top of the stack. And they may say no. I mean, there are places that power plants don't belong, but—Mr. SHADEGG. It's worth a shot. Have you ever dealt with the Fish & Wildlife Service?

Mr. SMUTNY-JONES. Yeah. That's why it's on the list.

Mr. SHADEGG. One of our colleagues in Northern California can tell you about some people killed by our inability to repair a levy where there was an endangered species that happened to live on the levy. I was, I think, discovered—the levy was damaged 11 years earlier, and ultimately a flood killed somebody because we weren't able to fix the levy. But perhaps just moving it to the top of the pile is worthwhile.

The last one you mentioned was—had to do specifically with the EPA, and I guess I wanted to get clarification on that.

Mr. SMUTNY-JONES. Right now, my understanding, it may be part of the Clean Air Act. My understanding of the way the appeals process works now is you could come in and build a power plant. If the local agency says, "Yes, you've met our standards," California Air Resources Board can say, "Yes, you've met our standards," and then EPA says, "Thank you very much. Yes, you've met the standards as well."

A one-page letter comes in saying, "I protest that," and it's automatically stayed, regardless of its merits or not. Now, we're not suggesting that people should not have the ability to participate in this process and challenge decisions of administrative agencies, but the automatic part of that stay basically means that no matter how silly that appeal may be, EPA is required to automatically put a stay on that.

And the example I was talking about happened in Sutter County. They were already moving dirt when that came in. They basically had construction workers sitting around for 4 months. Ultimately, EPA said, "No, the plant is, in fact"—"meets all the standards that we need, and the plant happily now is under construction."

The problem is, whether it's here in June 2001 when we need it is now being called into question. And so, you know, that—any

other appeals process in a court of law or anywhere else, you have to show that you're probably going to succeed on the merits.

Mr. SHADEGG. The likelihood of prevail standard.

Mr. SMUTNY-JONES. Right.

Mr. SHADEGG. Thank you very much.

Mr. BARTON. Thank you, Congressman.

Maybe we should let the people that asked for the stay pay the deferred costs that are being delayed. That might be an incentive to think about before they send those letters in.

We now recognize Mr. Filner for 10 minutes.

Mr. FILNER. Thank you, Mr. Chairman. And I appreciate my colleagues trying to really understand the situation.

Just first briefly, Mr. Tyler, your explanation of the situation of an earthquake, et cetera, I thought, was very important for our colleagues from out of San Diego to hear. Do you have—you said all you equity was gone. Do you see any hope of getting that back?

Mr. TYLER. Actually, the hope lies that someone at all the committee levels will find an immediate answer to this. Eventually, I think it'll go past the point of return.

Mr. FILNER. I agree with you, and I understand your support of Mr. Hunter's ideas, which I also support. But I will tell you, the only way that the victim, which is you and your colleagues and the individuals, are going to recover their equity is if the original folks who gouged us on the prices, that is, the energy—the energy generators, pay that price.

Right now, they are not paying any price. And I have—after talking to FERC, I understand that they don't have the authority to make that happen. I have a bill to make them make that happen. So I would hope you tell Mr. Hunter and tell Mr. Bilbray to support HR-5131 because that will give you your money back immediately. Your equity is protected in this legislation. They have—they are the criminals here, not you, and yet the victim is going to pay.

So I'm trying to get the criminal to pay here with my legislation. And that's something we can do now. And I hope that you in El Cajon and all others will tell Mr. Hunter and tell Bilbray and tell Cunningham to support this legislation because that's the only thing that's going to save you equity. I guarantee it.

Mr. HUNTER. Bob, sign me up. And I need your help in getting this plant cited at Miramar with all the bird and turtle people.

Mr. FILNER. We've got a coalition here—we've got a coalition here that's going to take it over to Congress. Thank you, Mr. Hunter.

Mr. TYLER. And if I may say so, I think the important thought or perhaps answer in the whole thing lies with what you just mentioned, that the folks that profited from this mistake pay in business, on a business level.

Mr. FILNER. Thank you. That's what my aim is. By the way——

Mr. TYLER. We pay. When we make a mistake, we pay.

Mr. FILNER. Right.

Mr. BARTON. Would the gentleman yield just for a second?

Mr. FILNER. And I'm sure your frustration at hearing that a blue ribbon committee would set up was just what you were talking about. You want something now.

Mr. TYLER. We can investigate it, study it, question it and report it back, but we're all dead by the time you get your report back.

Mr. FILNER. I think we could—I think we can give you that action in the next 3 or 4 weeks if this committee acts and if the leadership of the Congress allows that to happen.

Mr. BARTON. Would the gentleman yield?

Mr. FILNER. Yes, sir.

Mr. BARTON. And I'll give you additional time.

The gentleman from California just used the word "criminal." Is there any allegation outside of the political arena of criminal activity in this?

Mr. FILNER. There's investigation.

Mr. SHAMES. As I understand it, the Attorney General of the State of California is currently looking into that. There has been no finding thus far.

Mr. FILNER. I appreciate that, Mr. Chairman. I use that word advisably. In fact, I am thinking of going to the district attorney, going to the State attorney general and saying that these guys have attempted murder of small business people. They have committed grand larceny. We're talking about—we say they're business practices. I want to get into what the gentleman said was gaming.

But these are criminal actions, in my view, because they have—they're robbing you of your equity, they are threatening you with dying, with death, and our whole economy with death.

I don't think we should be sugar-coating this and saying, "Well, this is a business practice. This is supply and demand. This is where those curves intersect." We are affecting people's lives here, and people ought to be—talk in those areas.

I know Mr. Smutny-Jones, it looks like you're just anxious to have a whack at me here. Tell me——

Mr. SMUTNY-JONES. Actually, I'm waiting for you to whack at me, but——

Mr. FILNER. Well, with that invitation. You represent the Independent Energy Producers Association. Like who are your—who are the people you represent?

Mr. SMUTNY-JONES. I represent a large number of the generators. Here in the San Diego area, it would be Dynagy energy plant, Carlsbad. I represent Duke, who has a deal with the port here. I represent PG&E Gen, who has been trying for 7 years to build a power plant at Otay Mesa.

Mr. FILNER. These are people who have basically the whole market of San Diego Gas & Electric, right?

Mr. SMUTNY-JONES. They have a large portion of the market here in San Diego.

Mr. FILNER. How much profits have they made in the last 3 months?

Mr. SMUTNY-JONES. I don't have any idea.

Mr. FILNER. You don't have any—you've given us—you spent—I have this whole thing about every little megawatt and every little kilowatt, and you don't have any idea of the profits? If you had to go to a shareholders meeting, you couldn't say to the people what they were making?

Mr. SMUTNY-JONES. I assume that my individual members can, in fact, make those statements, given the fact that they are——

Mr. FILNER. You have no idea?

Mr. SMUTNY-JONES. I do not have any idea in terms of any specific——

Mr. FILNER. Do you know how much it costs to produce a kilowatt hour or a megawatt?

Mr. SMUTNY-JONES. I know the ranges of it, yes.

Mr. FILNER. What does it cost?

Mr. SMUTNY-JONES. Well, right now in California, with gas prices pushing about $7. It depends on the type of generating unit. Some of them can operate around $80. Some of them are peakers, I'm aware of a peaker that's a municipal-owned utility that's up over $220.

Mr. FILNER. Eighty dollars is, what, 8 cents a kilowatt hour?

Mr. SMUTNY-JONES. That's about right.

Mr. FILNER. And what are being charged, 21 cents and up to much higher?

Mr. SMUTNY-JONES. That was my understanding of someone's testimony, yes.

Mr. FILNER. Would you agree there's no relationship here between the cost and the price?

Mr. SMUTNY-JONES. I would basically say people have been bidding into the markets. And let me—Mr. Filner——

Mr. FILNER. Wait. You want to talk about everything about supply——

Mr. SMUTNY-JONES. Mr. Filner, let me answer.

Mr. FILNER. [continuing] and demand. There is sufficient supply here. We have heard that somebody would supply this at this price, but they would supply more at a higher price and more at a higher price. That means the supply is there. They just want to do what Mr. Hunter said earlier—and I thought that was a very important metaphor—that when you're 5 minutes away from the operation and need the oxygen, the guy who controls that oxygen can say anything he wants about the price. It's not a question of supply. It's a question of gouging that person who needs the operation.

We need electricity. It's there. There is no—I would like to build more plants, and I would like to have alternative energy sources, but I will tell you, the supply is there. This is manipulation of the market.

Now, you don't tell—you won't tell me how much profits your guys made. We're told that the costs that were charged to San Diego consumers on the last 3-month period over the year before was approaching $350 million. With no significant things that I've seen, an increase in cost, that means that's all profit that was made this year over last year. Now, is that a wrong way of looking at it?

Mr. SMUTNY-JONES. Yes.

Mr. FILNER. Tell me why.

Mr. SMUTNY-JONES. Three reasons. Reason No. 1, a significant amount of the generation that's produced in San Diego and elsewhere was sold in the forward markets. Okay? As Mr. Sladoje indicated, those forward markets back in May and June were selling somewhere between $40 and $50. That power was available. It came out of these plants. It's in the market. I don't know who bought it, okay, but it was out there. That's option——

Mr. FILNER. What does that mean?

Mr. SMUTNY-JONES. That's option one.

What I'm basically saying is is that if San Diego Gas & Electric, which did not buy any hedging product, had purchased power in the May/June timeframe—they were allowed to buy up to 400 megawatts—they could have been buying it at between 4 and 5 cents. Okay? That's issue one.

Issue two, since then——

Mr. FILNER. Those aren't their plants. They had to divest their own by somebody else, their own by somebody——

Mr. SMUTNY-JONES. They're currently owned by someone else. I am not certain if they were required to divest those plants. They may have because they went through a merger with Southern California Gas, which resulted in a company called Sempra being formed.

So they may have been required to sell that generation because of that. Prior to that, however, they were not required to sell their plant. That's issue A.

Issue B, Mr. Filner, is that since then, people have come forward with a variety of deals. For example, one that was published here in the newspapers—I believe it was Duke—offered to sell power at 5 cents for 5 years. Now, there's a lot of people saying, "Well, that's too expensive because we're worried about maybe in year 4 it's going to be 3.5 cents." But the point is is that people have stepped forward offering those products out there.

The third point—because I think it's very important. You're presuming that where the money going is necessarily to California generators. This is a western regional market that includes a large number of public entities, not only municipal utilities here, but BPA, WAPA, Salt River project and Canada, okay, all of whom——

Mr. FILNER. Whatever it is, they're putting Mr. Tyler out of business. And the supply is there. There is no reason for them to be killing him off. Do you know that one of your clients, Dynagy, bought this plant in Carlsbad, paid off the cost in 1 year instead of the 20 that they had anticipated? That, to me, says that they're making 20 times the profit that they had anticipated.

And he is threatened to be going out of business. I have seniors making choices between food and air conditioning. I have small businesses in my district who have—are out of business. And I will tell you, when they look at this balancing account that the State legislature has set up, they're going to look at it—Mr. Tyler is going to look at it. He's going to get his bill from SDG&E, and I suspect—although I'll ask SDG&E when they come—it's going to say, "What you paid this year under the cap, this month, and what you owe."

And he's going to look at that, and that's going to grow with interest, and that's going to be the cost that he's worried about, not what he's paying now. And I will tell you, if we don't solve that, we are killing off our economy. He said it much more eloquently than I. Mr. Hunter said it very eloquently about the death of our economy. And this is all going into excess profits. And I have an excess profits bill I'm going to put in the day I get back.

One last—if I can—1 more minute, Mr. Chairman.

Mr. BARTON. I took some of your time.

Mr. FILNER. Mr. Sladoje, you used words like "gaming," they played games. You know, this is basically what's going on here. Whether it's illegal in the criminal sense, in the official criminal sense or not, what you call gaming, I call criminal action.

When you say that the pricing pairs are there, that means the supply is available. When you say they're holding back from the forward market into the real time market, that's not a question of supply and demand. That's pure manipulation. If you say 20 or 30 percent of what we need is not in the—not in the exchange, but in the real time—or the forward—I'm sorry. I'm not an expert here. That's games being played with this guy's life.

That's why I call it criminal. They are playing games. They are—they are doing what is called congestion gaming. They are doing what's called market gaming. They are doing what's called day-ahead energy market gaming.

Do any of your folks—do you think any of your folks, Mr. Smutny-Jones, have engaged in that?

Mr. SMUTNY-JONES. Well, I did ask for a study—a report to be done by the market surveillance committee of the ISO. That report is available. And I think——

Mr. FILNER. And that's exactly what they said has happened by some of your clients, that they have played the games, they have held back supply to increase their price, they have used—they have used congestion gaming to make it appears that the supply is available. They can't use it, so they increase the price. On and on and on.

And my seniors and my small business people are being killed off by your gaming. And I resent it, and I'm going to have legislation that I hope this Congress will pass and improve that situation. Thank you.

Mr. BARTON. Thank you, Mr.——

Mr. SMUTNY-JONES. Mr. Barton, if I might.

Mr. BARTON. Briefly.

Mr. SMUTNY-JONES. Very briefly. Actually, what the report did, in fact, conclude is that there are indeed fundamental structural changes that need to be made on a retail level in California, Mr. Filner. So your seniors and the businessmen here actually have an opportunity to buy competitive products.

Mr. FILNER. But they need structural changes because you guys are playing games with it. That market could work if you didn't hold back 30 percent of it to get the extra price. That market would—it's not a question of supply and demand here that you guys keep talking about. It's a question of, "What price can I get at this moment because everybody is going to get it?"

And the way—so the rules were set up to allow, quote, gaming. It's—you didn't have to play this game. Your guys did not have to play this game. And it's a question of holding back the oxygen from the patient who needs it to get a price. And it sucked our economy out for 3 months at $350 million, and the consumers ought to be rising up in rebellion as a result of that.

Mr. BARTON. Well, before I recognize Congressman Hunter, as the chairman of the subcommittee, I want to make just a couple of points.

We think it's important in Washington to let States have as much flexibility as possible. The great State of California did decide to initiate this voyage on restructuring, and they did it in a little bit different way.

I don't think any of the State legislatures that passed the law back in 1996 expected the kind of result that's happened this summer. I would point out for the first 2 years, Californians have had what I would say below market prices compared to the national average.

This summer, because of a series of situations, they're in San Diego experiencing higher than market prices. But I cannot let things said in this hearing indicate that unless we have factual information, that there's a criminal activity underway.

Now, if the Attorney General of California has a criminal investigation, we ought to see what that says. But in the meantime, these are arbitrary rules that the California legislature put in place, and they gave authority to various State regulatory authorities to set additional regulations.

Obviously, in hindsight, we can second-guess some of those mechanisms. That doesn't mean there's criminal activity going on. It is human nature if you have the ability to maximize whatever it is, whether it's us maximizing votes or private sector maximizing profits, you're going to tend toward that maximization unless you change the rules.

And that's what we're here to do today, find out what the rules are and how either Washington can help change the rules or we can encourage the State of California to change the rules. But I can't let people throw around charges of criminality unless there are facts to back those up.

Mr. FILNER. But don't you think those who played by those rules and made unconscionable profits by it should pay the price, and not Mr. Tyler and our small business people here in San Diego?

Mr. BARTON. Well, it is not unconstitutional to make a profit.

Mr. FILNER. It's unconscionable and unethical the way the profits were made for a basic commodity, the way they—again, Mr. Hunter said it best. The patient needed oxygen, and they charged a fortune to get it.

Mr. BARTON. The State of California can change the oxygen distribution system if they choose to do so.

Mr. Hunter.

Mr. HUNTER. Thank you, Mr. Chairman. And thank you for the hearing. I want to thank Brian for his work in putting this thing together. I think this has been a good hearing.

I want to thank Terry Saverson, the CEO of the East County Chamber of Commerce, for all the work in bringing these bills forward, along with Roy's literally hundreds of bills that we've analyzed and tried to—tried to figure out about how long these folks can last until businesses are extinguished, which has already happened in some cases over—and the other aspect is, until the business climate is judged to be so adverse in San Diego County that good, high-paying businesses which provide good jobs will not come to the county.

Mr. Sladoje—is it Sladoje?

Mr. SLADOJE. Sladoje.

Mr. HUNTER. Sladoje. Okay. Let me ask you, because this has been—this has been—the speaker has been used. At some time during this—on this real time market where you have, it's been fairly well established, a captive consumer in people like Mr. Tyler, the other thousands of small businesses who are totally passed—who have the total cost passed through to them by their utility company.

In that real time market, that market has gone up—if you took 10 cents a kilowatt hour—but the market has gone up to as much as $9 a kilowatt hour; is that right? It's been sold off at that cost.

Mr. SLADOJE. Oh, I think it's been higher than that.

Mr. HUNTER. Been higher than that?

Mr. SLADOJE. Yes.

Mr. HUNTER. That's a nine—if you took 10 cents a kilowatt hour as a base, that's a 9,000 percent increase. How high has it gone?

Mr. SLADOJE. At one time when there was a price cap of $750 a megawatt hour or 75 cents a kilowatt hour back in, I guess, May and June, it hit that level a couple of times. And then the price caps were then established at $500 and——

Mr. HUNTER. Well, now, this—I said $9 a kilowatt hour. That's 90 times—if you used 10 cents a kilowatt hour as a base, that's 90 times the base. Is that accurate, that it's gone that high?

Mr. SLADOJE. It's gone—it's gone to—well, not quite nine times, but almost.

Mr. HUNTER. Almost nine times?

Mr. SLADOJE. Yeah. Yeah.

Mr. HUNTER. That's a 9,000 percent increase.

Mr. SLADOJE. That's correct.

Mr. HUNTER. Now, is it true, then, that a customer like Mr. Tyler, who is using electricity—he's got a 24-hour restaurant—at that peak time is having—whether he's a volunteer or not, he's having that 9,000 percent increase passed through to him at that period of time of the day; is that right?

Mr. SLADOJE. That's correct. Unless he's on some kind of a bill evening program with his utility, that's correct.

Mr. HUNTER. Okay. Mr. Sladoje, you said you wanted—that what we brought to the California power distribution system is a stock exchange type of a system. I think that's our problem. I mean, do you agree that it's appropriate to have a commodity like electricity subject to the volatility of a market that is like a pork belly futures market where individual consumers can have passed through to them increases that are 9,000 percent increases in the cost of something which they have—they have no ability to resist. They're captive customers. Do you think that's a working system that you've just described?

Mr. SLADOJE. Mr. Hunter, I spent 15 years at the Chicago Board of Trade, and there was a time when the farmers circled the Chicago Board of Trade with their tractors because they thought the prices were too low.

I think that this type of market can and should work in electricity. I think we've got to remember we're in a transition period here, and we have to smooth these things out. I do believe that this type of market can and will work here ultimately.

Mr. HUNTER. What—I'm trying to establish what you think is fair and reasonable. What do you think is—do you think a 9,000 percent increase in a matter of hours is fair and reasonable?

Mr. SLADOJE. No. I'm a consumer also, Mr. Hunter.

Mr. HUNTER. What do you think is a reasonable range?

Mr. SLADOJE. I don't know what a reasonable range is because, you know, we're talking to Jan Smutny-Jones here a few minutes ago about what is the cost of each generator, what is their cost of production.

Mr. HUNTER. Yeah, but wait a second.

Mr. SLADOJE. I have heard——

Mr. HUNTER. Obviously, if the generators can work, if you take 10 cents a kilowatt hour as a base price, it may yield a small yield to a generator or may be right on the margin, and you'd multiply that by 90, by a 9,000 percent increase. I think you've covered his costs. Wouldn't you agree with that? If he can live at—if he can live at 10 cents a kilowatt hour, he's making some big profit at $9 a kilowatt hour, 9,000 percent increase.

Mr. SLADOJE. Yes, but——

Mr. HUNTER. Now, let me just analogize that to a situation you might—if your mother-in-law needed heart medicine and sent you down to get a $10 bottle of heart medicine, and you got there at 2 o'clock in the morning at the all-night pharmacy, which is when these prices might spike.

The equivalent of what Mr. Tyler and our consumers in San Diego County and the other businesses are going through is having you come back to your mother-in-law and say, you know, "I'm sorry. I know you have to have this medicine. It's a nonnegotiable. You've got to have it now. Between the hours of 1 in the morning and 2 in the morning, your $10 vial of heart medicine went to $1,000. Now, I had one of your checks. I'm just the pass-through. I had to buy it for you. I bought it for you."

That's precisely what this system is delivering to our consumers. So I would offer to you that the system is absolutely broken, absolutely unworkable.

Our people in San Diego County don't have the financial legs—some of them have already lost their business. They don't have the legs for a system to work out in which you think the volatility is going to disappear.

The volatility has never disappeared from the futures market or from the stock exchange when you're talking about real time spot purchases. It's always been highly volatile. That's why there's always been the possibility of major profits and major losses.

To give that volatility to a customer who may end up paying 10 times as much 2 hours later that they were paying at 10 o'clock at night is incredible. It's totally nonworkable.

Let me ask the rest of you. Go back to a central program that we've put together. And that is the only way I think we can survive this in San Diego County is to have a steady, predictable supply of electricity that we can offer to our job suppliers and our consumers.

If we put a site in San Diego County, maybe at Miramar where—the head of Miramar Air Base, General Bowden, is interested in siting a plant, a generating plant. If we put some of the new high-

tech generators that you folks have, Mr. Barr, we put it next to a 36-inch natural gas line that we've got here, and next to a part of the grid that we can plug into, do you see any impediment to San Diego County producing effective, efficient electricity prices in the range of the 2 to 3.5 cents per kilowatt hour that the generators that Sacramento is now using in their municipal district? Do you see any impediment to that? Do you think that's doable, and could you expand on that?

Mr. BARR. Certainly if the political initiative is there, the political will, that can be done. The engineering part of generating electricity at those levels of costs is certainly achievable, with equipment today is that efficient and environmentally friendly.

Mr. HUNTER. So you—and let me ask you this. We've looked at the prices of the LM-6000. That's the G.E. generator belt around their aircraft engine, 2 to 3.5 cents per kilowatt hour based even on today's high prices of natural gas, relatively high prices. Are you folks that efficient or are you close to that with your solar system?

Mr. BARR. We're just as efficient.

Mr. HUNTER. Have you got—what's your production market like? Do you have the capability of supplying—if San Diego should put together a district and site a plant, could you folks meet a fairly ambitious schedule?

Mr. BARR. The question is always timing. We annually produce about 400 megawatts of power. That production can be ramped up. It's a question of when we can begin. Because lead time equipment will tend to be 4 to 6 months. And it really depends on having it in place and sold and operating by next summer.

Typically, it's timed by the permit acquisition part before you can begin construction. But having a power station running at Miramar within a year will not be limited by the availability of equipment.

Mr. HUNTER. It wouldn't be limited by availability of equipment.

Mr. BARR. It wouldn't.

Mr. HUNTER. Okay. Mr. Jones, do you have any comment on that in terms of siting, the time it would take to site a plant?

Mr. SMUTNY-JONES. Well, you could probably get peak—or hopefully, if you knew you were going to install it by next summer and you were working on that right now, you might be able to get in by that period of time. You're going to have significant longer term air quality problems, because San Diego—I mean, the reason it's taken so long to build Otay Mesa is there is nothing to offset in San Diego. There's not a lot of heavy kind of industry that throws a lot of NO_X out there.

Mr. BILBRAY. Mobile sources are the only thing.

Mr. SMUTNY-JONES. Yeah. You have a very big challenge on the air quality piece of it. I would caution the 2 to 3 cent range, simply given the fact that where natural gas prices are right now. That may be the fixed cost recovery, the capital cost. But I'd be cautious about that number because——

Mr. HUNTER. Well, that's a number that—that's a number that Sacramento is generating at right now with their new generators. They said 3.5 cents a kilowatt hour. They said it goes between 2 and 4.

Mr. SMUTNY-JONES. They may have longer term gas deals that they can actually operate at that level. What I'm saying is is that those plants have been there for a while.

Mr. HUNTER. They've got four.

Mr. SMUTNY-JONES. The last thing is is that there are—there continue to be offers being put out in the market in terms of longer term contracts at lower prices. So if San Diego wanted to lock some of that in, you could, in fact, do that in the current marketplace and continue to go forward and build power plants if you like.

I mean, I'm in the business of encouraging people to build power plants, so anything we can do to help you build at Miramar, happy to help you. But there are other alternatives out there now. And the question actually is, you know, what is the price of electricity, you know, 2 or 3 years out.

What we've seen happen—and Mr. Shames has referred earlier, what happened in PJM, prices are down 70 percent over last year, largely because of weather and also because 20,000 megawatts of generation showed up.

Mr. HUNTER. Well, I think we've established—and Mr. Chairman, thank you for the time. I think we've established that this futures market real time spot market or spot prices that can go up to 9,000 percent increase in a matter of hours is not a function of supply and demand. It's a function of opportunity to exploit a market that we put in place with this deregulation bill.

And Mr. Chairman, I think one thing that I think should come to the committee very strongly is that the folks that are affected by this have very limited endurance. Some of them have already gone broke, and a number of consumers have lost literally the money they were going to send their kids to school with, pay their mortgages with. I know a lot of folks——

Mr. BILBRAY. Pay their Federal taxes.

Mr. HUNTER. [continuing] are just not paying their bills.

So I think a roll-back is in order. I think also expediting these distributive systems or sited systems with a municipality. And I think that's the only way you can avoid having to sell back into the energy exchange, which then can be sold back to you with enormous increase, is the only—the only game in town at this point. I think a roll-back to save our consumers and businesses has to occur. These guys need the oxygen.

Mr. BARTON. We thank the gentleman from San Diego.

We're going to excuse this first panel. Unless—Mr. Winter, we'll give you the last word here before we excuse you.

Mr. WINTER. Just one thing. I'm getting into an area I don't know a lot about, but I know a little bit, and that's always dangerous. But clearly, the ISO next year—we've already submitted an RFP for what we call peaking units, which is 3,000 megawatts we're trying to go out and find. That is exactly what Congressman Hunter is talking about in putting these units in place.

I have to tell you that I will be very surprised if the price comes in at 2.5 to 3.2 cents because if you look at an LM-6000, that's a single pass unit, and I don't remember their efficiencies, but it's not all that great. And I think if you were to put those in place and then——

Mr. HUNTER. That's Sacramento's record right now. They're doing 3.5 cents, according to their director.

Mr. BARTON. Well, it depends——

Mr. WINTER. Well, then we've got to talk about what's all in that 3.5 cents. Because if you look at paying for the fixed cost, clearly a combined cycle with efficiencies in 55 to 60 percent, which are the larger power plants, they, if you spread their costs over time, are going to give you a much more efficient price.

And the other thing that we haven't talked about is we've really centered on the hours when it's very expensive, and rightfully so. But I have to tell you, there are also times in the real price market when generators are paying me to supply power.

And so that gets averaged over the total day. So there are times when you need to look at averages, and there's times when you need to look at spiked prices and how they're affecting the total cost of energy. So I would just caution you to keep that in mind.

Mr. BARTON. For the absolute last word before we let this panel go, Congressman Bilbray.

Mr. BILBRAY. Mr. Winters, I'd like—my concern was I've been working with Solar Turbines for the last 4 years over the fact that there is institutional barriers to allow people to get on grid, be able to provide clean, cost-effective power on-line now.

There is institutional barriers that have existed historically in this country that still haven't been torn down. And until we do that homework and build that foundation of allowing true competition, much like we did with telecommunication, we're always going to have the problem with the fact that there's not enough sources out there for the consumer to be protected in the long term.

So those barriers really—and remember, this is not pork bellies we're talking about. We're talking about a utility that is mandated by the government. Local Government will condemn your home if you don't have it hooked up to some power source. This is something that Government mandates.

So it does catch the consumer in the Catch-22 when you have Government mandating you have it and Government actually creating barriers and stopping people from providing you cost-effective services. So I think the real challenge is to tear down a lot of those barriers and not just create a whole new monopoly.

Mr. WINTER. I agree. And one of the other things that we continue to work on is what we call the gird interconnection agreement, which goes right to the heart of the subject you're speaking of.

Mr. BILBRAY. That was my responsibility under the Federal——

Mr. BARTON. You and Congressman Bilbray can agree out in the hall. We are going to have to suspend this panel so we can get our second panel.

We appreciate your attendance, and there will be follow-up written questions for the record. Our first panel is excused, and we'll ask our second panel to come forward.

While the second panel is coming forward, a few housekeeping announcements. I have an airplane to catch, so we won't take any breaks. Let's expedite the exchange of panels.

I believe we have our second panel at least at the witness desk, so if you all could be seated. If everybody in the audience could reclaim your seat or step outside.

We want to welcome the second panel. I think we have the entire Federal Energy Regulatory Commission here in terms of commissioners that are actually approved by the President and on duty. We understand you're going to have a similar hearing tomorrow, and so this is kind of a dry run for you. We appreciate your testimony.

We're going to start with the Chairman, the distinguished Chairman of the Federal Energy Regulatory Commission, Mr. Hoecker, and then we'll go right down the line.

I have a plane that leaves at 1:40, so I'm going to have to excuse myself around 1 p.m. I hope we can get all the testimony on the record, and then maybe I can ask some questions and turn it over to Congressman Bilbray to continue the hearing.

So Chairman Hoecker, welcome, again, before the subcommittee, normally in Washington and here in the great city of San Diego. We recognize you for 5 minutes.

STATEMENTS OF HON. JAMES J. HOECKER, CHAIRMAN; HON. LINDA KEY BREATHITT, COMMISSIONER; HON. CURT L. HÉBERT, JR., COMMISSIONER; HON. WILLIAM L. MASSEY, COMMISSIONER, FEDERAL ENERGY REGULATORY COMMISSION; LORETTA M. LYNCH, PRESIDENT, CALIFORNIA PUBLIC UTILITIES COMMISSION; EDWIN A. GUILES, CHAIRMAN, SAN DIEGO GAS AND ELECTRIC; JOHN STOUT, VICE PRESIDENT, SOUTHWEST REGION COMMERCIALIZATION, RELIANT ENERGY; AND STEVEN J. KEAN, CHIEF OF STAFF, ENRON CORPORATION

Mr. HOECKER. Thank you, Mr. Chairman. It's nice to see you. I want to commend you personally and members of your subcommittee for having this hearing in San Diego. It's very timely, and there is a need for public examination of this energy crisis.

The Commission, as you mentioned, is having its hearing in town tomorrow, and we plan on probing deeply into the causes of San Diego's plight as far as electric prices are concerned.

Your witnesses today have already painted a clear but pretty disturbing picture. It is a picture of electricity markets dramatically out of sync with the needs of the digital economy. It's a picture of an electricity market out of sync with the expectations of public policymakers, and most importantly out of sync with the economic well-being of the average electric consumer in Southern California.

Granted, the causes and proposed solutions to all this are very complex, but that must not be allowed to obscure what I think are two basic facts. First, the California electricity markets were not competitive during periods of peak demand in the summer. There should be a risk to wholesale generators that they will lose money if they insist on selling at an extraordinarily high price. We are finding that during current supply shortages, sellers can often name their price.

Likewise, at the retail level, if retail competition is about choice, where were the options for San Diegans in buying electricity? It appears to me there were none. There were few, if any, suppliers

competing with San Diego Gas & Electric for the business of energy consumers here. Citizens of this community had no information, they had no warning, and most of all, they had no options.

I agree with Supervisor Jacob that San Diegans were blameless in what is an awful situation. At some point, it's my belief that when markets don't work, rationing an essential commodity like electricity by price alone is unacceptable.

The second fact I'd mention is that it ought to be clear that the efforts of State and Federal Governments, and the private power companies to anticipate and avoid this crisis simply proved inadequate. There is plenty of responsibility for this market's performance and its prices to go around. That's to be sure. But this ought to be about accountability and not about blame. And I appreciate you setting that tone.

In that connection, I therefore commit the Commission to work with you and the policymakers in this State to identify and address the real problems to the fullest extent of the Commission's authority.

Now, if that means devising new ways to thwart market power, we will try to do that. If that means changing market rules and wholesale market structures, then we will do that. If it means imposing stricter controls on the ability to collect market rates at certain times, then we will do that. And if it means making rates subject to refund during high-risk periods, at least until we can reasonably be confident that Californians will be receiving price signals instead of price shocks, then the Commission will undertake that as well.

We will be assessing the need for these actions tomorrow and in the future, as we go through our investigation and hearings on these issues.

Now, I am enormously gratified by the CPUC's actions to lift restrictions on the ability of wholesale purchasers like SDG&E to hedge in forward markets and to buy outside the ISO and PX markets, and the CPUC's order to refund stranded cost overcollections. And I would also congratulate Governor Davis and the legislature for their leadership in getting rates back to normal levels in San Diego and working to expedite the siting of new generation facilities.

Meanwhile, the FERC has allowed the ISO to reimpose purchase price caps in the wholesale market. The Commission is vigorously pursuing its investigation of this summer's price spikes and reliability problems in California. The report of the Cal ISO's market surveillance committee, which I just received, promises to be a great help.

And while Federal law does not allow the Commission to impose rate remedies retroactively, we are prepared to do all in our power to get the facts and then fix the problems.

Thank you, Mr. Chairman. Thank you for inviting the Commission, and we'll be pleased to respond to your questions.

[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: Good morning. I am James Hoecker, Chairman of the Federal Energy Regulatory Commission (Commission).

Thank you for inviting me and the other members of the Commission to participate in today's hearing on recent developments in California's electricity markets. I commend Chairman Barton and the members of this Subcommittee for responding quickly and constructively to the plight of southern California ratepayers and I want to assure the Subcommittee that the Commission is prepared to take appropriate action based on a factual understanding of what went wrong and to work hard to ensure that competition brings benefits, not risks, to consumers in the future.

I want to stress four key points:

1. The Commission is very concerned about high electricity prices in California and their effect on consumers. The Commission is actively investigating the causes of high wholesale market prices, and is committed to taking prompt action to correct identified problems.
2. Since California's 1996 enactment of landmark legislation establishing electric retail competition (AB 1890), the Commission and the State have cooperated in restructuring power markets in California. California's restructuring legislation affected matters within the Commission's jurisdiction. However, the Commission chose at the time to work hard to give deference to the State's approach to restructuring and to implement the State's approach to restructuring on an aggressive schedule. It is still unclear whether this summer's events require fundamental changes in that approach, but we should be willing to make them if necessary.
3. Possible causes for the sharp price increases include insufficient additions of new generating facilities, rising demand for electricity, lack of hedging by buyers, unusually hot weather over a large region, inefficient market rules, and, according to some observers, collusion or other anticompetitive behavior by generators. While our investigation is not complete, my preliminary view is that California's markets are being affected primarily by an imbalance of supply and demand, and that wholesale market rules and structure may have exacerbated the resulting price increases.
4. The Commission has responded to these events by approving programs for eliciting voluntary load reductions from customers on peak days, rejecting a challenge to the decision of the California Independent System Operator Corporation (ISO) to lower its payments to power sellers, and initiating a fact-finding investigation as well as a formal proceeding with refund protection. However, the Commission has limited ability to relieve the immediate customer crisis. Important aspects of this problem are a State responsibility, such as authorizing construction of new generation and transmission facilities. Moreover, plans for competitive bulk power markets in the long-run would be aided immeasurably by Federal legislation.

I. RESTRUCTURING IN CALIFORNIA AND THE COMMISSION'S ROLE

AB 1890 radically restructured the electric industry in California. Prior to enactment of AB 1890, most electricity consumed in California was supplied by vertically-integrated utilities with franchise service territories. These utilities owned power plants to generate the electricity, as well as transmission and distribution facilities to deliver the power to customers. The utilities were required to serve the retail customers within their territories, and retail customers within those territories were required to buy from those utilities.

AB 1890 "unbundled" the traditional service of California's three major investor-owned utilities, creating a new structure and new institutions to allow competition for retail power sales. Under AB 1890, generators may sell power directly to customers or into the markets operated by a new entity created under AB 1890, the California Power Exchange Corporation (PX), except that the three major utilities were required to buy and sell exclusively through the PX for a period of time. Operational control of the high-voltage transmission facilities of the three major utilities was transferred to the California ISO, another new entity created under AB 1890. The three utilities divested most of their generation assets in response to State stranded cost incentives, but they continue to provide distribution services within their franchise territories.

Under AB 1890, the retail rates of California's three major utilities were frozen until they finished recovering their stranded costs, through a Competitive Transition Charge. Last year, San Diego Gas & Electric finished recovering its stranded costs and its rates were no longer frozen. The rate shocks occurred when this utility, after fully recovering its stranded costs, continued to buy all of its power through the California PX at spot (short-term) prices and immediately flowed through these high short-term prices to retail customers.

The Commission's primary role in electricity markets under the Federal Power Act (FPA) has remained unchanged since the 1930s. FPA Sections 205 and 206 give the Commission jurisdiction over the rates, terms and conditions of sales for resale of electric energy and transmission service in interstate commerce by public utilities. FPA Section 203 gives the Commission jurisdiction over public utility transfers of ownership or control of facilities used for these services. Public utilities regulated under FPA sections 203, 205 and 206 include investor-owned utilities but exclude government-owned utilities (such as the federal power marketing agencies and municipal utilities) and most cooperatively-owned utilities.

Developments in the market itself, such as competitive generation by non-traditional utilities, have made the wholesale market more competitive, dynamic and commercially important. The unbundling of services in California expanded the Commission's role in California's electricity markets. Both the California ISO and the California PX are public utilities, and their sales for resale and transmission services are within the Commission's jurisdiction. Additionally, the three major utilities in California are public utilities, and their sales for resale and transmission services also are within the Commission's jurisdiction.

For over four years, the Commission has made a significant investment of resources in carrying out the fundamental mechanisms of AB 1890. We issued extensive orders authorizing the initial creation of the ISO and PX and, since then, have acted on almost 30 filings by the ISO alone to amend various rules and procedures. Often, the Commission has been asked to expedite action on these matters in order to address problems needing quick attention, and we have done so consistently. In addition, the Commission has deferred to the policy choices made by state legislators, regulators and stakeholders in the California restructuring, such as the total separation of the ISO and PX, a requirement that the three major IOUs buy and sell electricity exclusively through the PX's short-term markets, a requirement that the ISO rely exclusively on short-term markets to obtain reliability services, a governance board for the ISO and PX consisting of representatives from defined stakeholder groups and a state-appointed oversight board for these two entities.

We deferred to these choices in part because our own experience with bulk power competition and institutions like independent system operators had not advanced to the point where the Commission felt comfortable being prescriptive. Today, with Order No. 2000 on the books encouraging the formation of regional transmission organizations (RTOs), the Commission is in a very different posture with respect to the structure of wholesale markets under RTOs.

Today, the Commission continues to regulate transmission and sale for resale activities in California's electricity markets, and the State continues to regulate retail activities. For example, sales of electricity to end users are retail sales, a matter left to the States under the FPA. States likewise have jurisdiction over local distribution facilities and the siting of generation and transmission facilities.

Let me emphasize two points. The Commission does not prescribe how states should open their retail markets. In addition, most states have been less prescriptive than California in telling the Commission how their wholesale markets should operate. Despite this, I think it is still fair to say that California and the Commission share the same goal—an electric industry that provides reliable and efficient service to consumers at reasonable prices. The constructive working relationship developed between California and the Commission in recent years is particularly important as we seek to serve the public interest under conditions that stress the power system. The State and the Commission must continue to work together to ensure that any regulatory response to current events does not undermine reliability of the electric system or unduly delay the maturation of competitive wholesale electricity markets to the detriment of consumers.

It is my belief, and the position of the Commission, that consumers will benefit from competition in wholesale markets. Competition requires a sufficient number of competitors and a market structure and market "rules" that do not interfere with efficient market operation. In properly structured markets, wholesale buyers can choose from a wide range of sellers, and sellers can reach many more buyers. Effective competition can allow investment decisions to be driven by the market forces of supply and demand, not by regulatory decisions. The result is lower prices for wholesale buyers (and, ultimately, their end-use customers) than if we continued to rely on cost-based regulation of these markets.

However, the Commission's encouragement of competition in wholesale markets is not driven by a blind ideological devotion to deregulation. Instead, our policies are based on the practical belief that, in today's wholesale power markets, competition will produce the most benefits for consumers. Our goal, consistent with the FPA, is to use our regulatory authority to serve the public interest and ensure benefits for consumers, whatever approach that may require. In general, the Commission

has adopted policies that involve thorough regulation of access to, and prices for, essential transmission services; careful attention to mergers and other corporate consolidations that may concentrate generation markets; and relatively light-handed regulation of wholesale rates for sellers that lack market power.

Various parts of the country have different utility operations and business cultures, different market structures, and different retail competition policies. But, utilities are tied together commercially and operationally by a network of transmission that will support an ever-widening traffic in electrons in the years to come. Large regional markets can be made to work effectively. For example, in the case of Pennsylvania, whose utilities operate within the PJM Independent System Operator and whose retail customers were allowed to choose their power suppliers several years ago, the results contrast with what has happened in California. Pennsylvania's Department of Revenue estimates that, to date, the total benefit of competition over regulation to the state's gross state product is $770 million. Individuals have saved $562 million in inflation-adjusted dollars.

II. RATE SHOCKS THIS SUMMER IN CALIFORNIA

Wholesale prices in California appear to have increased significantly this year, at least for the summer peak months. According to San Diego Gas & Electric Company, for example, prices in June and July of 1999 rarely exceeded $150/MWh, while prices for the same period this year exceeded $250/MWh in 167 hours and $500/MWh in 59 hours. According to Southern California Edison Company, the total cost of electricity charged to the California market for June 2000 was nearly half of California's total electricity cost for all of 1999.

In addition to price increases, California's retail consumers have increasingly been alerted of the risk of brownouts or blackouts. In mid-June, this risk was realized for thousands of consumers in the San Francisco area, during a virtually unprecedented heat wave.

These events have prompted a number of actions in recent weeks. Earlier this summer, for example, the ISO lowered the price at which it would buy certain types of energy from $750/MWh to $500/MWh, and later to $250/MWh. In response, a market participant filed a complaint with the Commission, arguing that the ISO improperly exercised its authority to reduce the purchase price caps in its markets. The Commission resolved this case quickly, concluding that it need not evaluate the ISO's decision to lower the maximum price at which it will buy imbalance energy and ancillary services.

Recognizing the need for pro-active steps in California as well as other parts of the country, the Commission in late July directed its staff to investigate the conditions in bulk power markets in various parts of the country. Staff was told to determine any technical or operational factors, regulatory prohibitions or rules (Federal or State), market or behavioral rules, or other factors affecting the competitive pricing of electric energy or the reliability of service, and to report its findings to the Commission by November 1, 2000. In addition, I have asked staff to accelerate its investigation as it relates to California and Western markets because the serious events here warrant special attention to California.

In July of this year, San Diego Gas & Electric Company filed a complaint with the Commission, seeking immediate imposition of a seller's price cap of $250/MWh for all public utility sellers in the California ISO and PX markets. On August 23, the Commission ruled on this complaint. The Commission instituted formal hearing proceedings under FPA section 206 to investigate the justness and reasonableness of the rates of public utility sellers in the California ISO and PX markets, and also to investigate whether the tariffs, contracts, institutional structures and bylaws of the ISO and PX are adversely affecting the efficient operation of competitive wholesale power markets in California and need to be modified. The Commission was unable to grant SDG&E's request for a seller's price cap because it had not provided sufficient evidence to support immediate imposition of such a cap. However, the Commission left undisturbed the ISO's $250 per MWh purchase price cap, and explained that this will serve to mitigate price volatility in both the ISO and PX markets. By establishing the hearing proceeding in the August 23 order, the Commission will have the ability under the FPA to order refunds, if appropriate, if it finds that rates for sales by public utilities to the ISO or the PX are unjust and unreasonable.

Other important actions were taken to provide more immediate relief to hard-hit retail ratepayers. For example, in late August, President Clinton extended $2.6 million in federal emergency loans to low-income residents in the San Diego area to help pay their electric bills. This amount doubled the funds that the affected region in Southern California receives under the LIHEAP program. The California Public

Utilities Commission (CPUC) has authorized SDG&E to refund certain stranded cost overcollections to its customers, to help offset increased retail rates. Similarly, Governor Davis has recently signed legislation adopting a rate stabilization plan for San Diego customers and expediting the authorization of construction of new generation and transmission facilities. Finally, the CPUC, the California Electricity Oversight Board and the California Attorney General have undertaken investigations of the problems in the State's electric markets. The Commission welcomes all these measures. Now, we must focus on longer-term and structured market issues.

III. POSSIBLE CAUSES FOR THE PROBLEMS

As I noted, the Commission is undertaking careful and thorough investigations to address the recent problems in California this summer. I cannot prejudge the results of our investigative work. There are complex questions of fact involved. As a preliminary matter, however, there appears to be a select list of problem areas that command our closest scrutiny. Clearly, the problems that may have otherwise caused aberrant prices in California were exacerbated by the unusually high temperatures over the West, limiting California's ability to import power from neighboring states. Market-specific issues that are of more direct interest to the Commission include:

- Most observers agree that additions of new generating facilities in recent years have not kept pace with rapidly rising electrical demand in California and neighboring states. Among other things, this limits California's ability to import power from other states. The 12 percent estimated increase in California's electric demand since 1996 is unmatched by expansion of the infrastructure or means to manage the demand-side response;
- inefficient market design including, for example, flawed rules for managing transmission congestion;
- a lack of long-term contracting strategies for purchasing electricity;
- a lack of demand-side response programs that would allow buyers to receive and respond to price signals, ensuring that both the demand and supply side of this market are fully functioning;
- alleged collusion among sellers or other anticompetitive behavior by market participants;
- little competition at the retail level by energy service providers; and,
- transmission congestion that may have restricted imports.

A combination of these or other factors may have contributed to the problems California faced at various times. My preliminary view is that the fundamental issue is an overall imbalance of supply and demand. When demand increases and supply does not, prices can be expected to go up. The lack of adequate supply may be an inheritance from a pre-competitive era but it cannot be allowed to endure. Nevertheless, wholesale market rules and structure may have exacerbated the resulting price increases.

IV. WHAT CAN THE COMMISSION DO AND WHAT CAN IT NOT DO?

The seriousness with which we view the situation in San Diego is shown by the Commission's quick resolution of the complaints filed with the Commission this summer. In the cases presented to us, the Commission still afforded the industry, market participants, and members of the public opportunities to comment on the complaints and how the Commission should address them. Similarly, earlier this summer, the Commission carefully reviewed and approved the ISO's proposed demand response programs. These programs allowed the ISO to prearrange for load reductions from customers when necessary to meet peak demands. Tomorrow the Commission will be holding a public meeting here in San Diego to learn more about the problems in California's wholesale markets and hear what others recommend as appropriate courses of action.

The Commission is hard at work on completing its fact-finding investigation into California's wholesale markets. As soon as the staff provides its report to the Commission, the Commission is prepared to implement further measures, if appropriate, to address the issues we are discussing today. If we need to fix market rules or market structures within our jurisdiction, we will do so. If market power is being exercised as some have alleged, we will respond accordingly, by revoking market-based rates or otherwise. We may order refunds to the extent allowed by the FPA, if refunds are justified by record evidence. We also intend to act promptly on the recently-filed cases addressing these issues, and on any other filings that we may receive in the coming weeks.

However, the FPA defines the boundaries of the Commission's authority, and prevents us from taking certain actions that have been suggested. For example, we can-

not change the rates, terms and conditions of services until we have a record supporting such action. Also, the statutes we implement do not permit us to order retroactive refunds of amounts charged this summer to San Diego Gas & Electric Company. And, we cannot unilaterally change the status of municipal utilities.

V. WHAT CAN OTHERS DO?

Others also have a role to play. For example, the State of California should continue working to remove any unreasonable impediments to the siting of new generation and transmission facilities. The State also should ensure that State-regulated wholesale buyers can choose prudently among the full range of possible buying options, including entering into long-term contracts or into hedging arrangements. The State also should take further actions to facilitate demand response to prices through such measures as real-time metering, and encourage entry by retail competitors so that retail customers may be offered a broader array of pricing options.

Congress, too, has a role to play. In this industry, as elsewhere, uncertainty can deter new investments. I believe the uncertainty about Federal restructuring legislation is among the factors chilling investment in new generating and transmission facilities. As I have testified previously before this Subcommittee, I believe Congress should enact legislation that includes four main elements:

(1) placing all electric transmission in the continental United States under the same rules for non-discriminatory open access and comparable service;
(2) reinforcing the Commission's authority to foster regional transmission organizations;
(3) establishing mandatory reliability rules to protect the integrity of transmission service, relying on a self-regulating organization with appropriate Federal oversight of rule development and enforcement; and,
(4) providing the Commission with appropriate authority to remedy market power.

The other components of balanced restructuring legislation for the bulk power market are reform or repeal of the Public Utility Holding Company Act and clarification of Federal/State jurisdiction.

While each of these legislative reforms is important, the issues we are discussing today emphasize the Commission's need for effective tools to address market power. Currently, the Commission has only limited remedies available to address market power problems. The Commission can prevent enhancement of market power when utility mergers or other corporate transactions require authorization under FPA section 203. This remedy does not address market power that is already built into current commercial and operational arrangements, however. The Commission also can deny or revoke authorization for market-based wholesale rates. But, when this approach is employed to reimpose cost-based rates, the Commission does little or nothing to promote efficiency or competition. And, in California where generation plants have recently been sold at well above book value, cost-based rates may not represent a real reduction.

Reforms to the Federal statutory scheme are appropriate to permit regulators to keep up with the challenges posed by market power in evolving markets. Without such reforms, and without adequate remedial authority, market power could be used to impair competition and the related benefits to consumers. For example, the Administration's bill would even allow the Commission to address market power in retail markets, if asked to do so by a state lacking adequate authority to address the problem. The Administration's bill would also give the Commission explicit authority to address market power in wholesale markets by requiring a public utility to file and implement a market power mitigation plan. I believe it would be helpful to close these gaps in the Commission's remedial authorities, and to provide future protections in circumstances like those in California.

VI. CONCLUSION

Recent events cast doubt on anyone's ability to predict or prevent aberrant prices in complex electricity markets. Price spikes are a timely reminder that, while we are involved in the intoxicating work of re-inventing a major industry, we must look diligently after consumer needs throughout this difficult transition. We must do so because electricity is so essential to people that it cannot always be rationed purely by price. We must also do so to ensure that competitive market initiatives are not summarily reversed before their benefits to the public become real and apparent.

In conclusion, the Commission remains committed to effective competition in wholesale power markets, as the best means to ensure reasonable rates for electricity. If competition is not working well, our current investigations will allow us to identify the problems and take appropriate remedial action.

Thank you.

Mr. BARTON. Thank you, Chairman Hoecker. We'd now like to hear from distinguished member of the Commission, Commissioner Linda Breathitt.

STATEMENT OF HON. LINDA KEY BREATHITT

Ms. BREATHITT. Thank you, Mr. Chairman. Good morning to you and to other Members of Congress. Thank you for inviting me to appear before you to discuss the price spikes and volatile electricity markets confronted by California consumers this summer. And you also asked us to comment on the continuing need for Federal electric utility restructuring legislation, and I have done so in my testimony.

This is an urgent matter deserving careful attention by Congress, the administration, the FERC and California regulators, legislators and market institutions. I can assure you that my colleagues and I share your concerns and are just as anxious to understand this difficult situation.

My experience as a regulator at the Federal level has taught me a lot about how wholesale markets work, but my experience as a State regulator in Kentucky taught me a lot about retail customers' concerns and problems.

This is an important session for me to hear firsthand the plight and concerns of California consumers, and I have begun to do that with the excellent panel you put together this morning.

The price volatility experience by California consumers this summer are complex, as we have heard, and many have speculated as to the causes of these problems. I list nine causes that I have heard about, and I'm not going to list them all because they're in my testimony, but several of them are higher than expected loads, a lack of demand side response, impediments for utilities to hedge in forward markets, et cetera.

But when combined, all of these and other conditions have led to higher market prices and higher bills for consumers, and it is crucial that we continue to examine this situation and look for other factors, if there are any, for this price volatility.

And once we have this information, we will be better able to decide on the appropriate steps that will be necessary to correct the problems. But our fact-finding has already begun, as the chairman stated. We are holding our meeting tomorrow.

Second, we have directed our staff to initiate a thorough fact-finding investigation of factors affecting competition and market fluctuations, and we have directed staff to identify any technical, operational or behavioral factors affecting competitive pricing. They're to report to us on November 1 for that market investigation.

Third, in response to a complaint filed by San Diego Gas & Electric, we instituted hearing proceedings pursuant to Section 206 of the power act. And there, we will investigate the justness and reasonableness of the rates charged by public utilities that sell energy and ancillary services to and through the ISO and the PX.

A Section 206 investigation provides a mechanism for the Commission to exercise its remedial powers to change the rates, terms and conditions of jurisdictional services that are found to be unjust and unreasonable, and if appropriate, to order refunds.

So our goal of these investigations is to detect, and to the extent within our jurisdiction, to resolve as expeditiously as possible any defects in the bulk power markets in California and elsewhere.

Because regulation of the California market is shared between FERC and various State regulators, it will be imperative that we work closely together in order to arrive at a reasonable and timely resolution of these problems. I am committed to such a partnership with my State colleagues.

Since the enactment of AB-1890 by the legislature in 1996, the State legislature, which dramatically restructured the utility industry and implemented retail access, FERC has devoted significant resources to processing tariffs and agreements proposed by the ISO and PX.

And in fulfilling our jurisdictional responsibilities with regards to these markets institutions, we've had to make some tough decisions regarding the formation of the competitive markets in California.

And I believe we've been mindful of the ambitious goals of the PUC and the legislature. However, there are flaws in the existing market that must be repaired, and the solutions must result in a lasting solution. We must find ways to encourage supply into the market, which includes generation and transmission.

So the opportunity to benefit consumers through the creation of competitive markets is too important to squander, and I urge all of us to work together to achieve these benefits that consumers are entitled to have. Thank you.

[The prepared statement of Hon. Linda Key Breathitt follows:]

PREPARED STATEMENT OF HON. LINDA KEY BREATHITT, COMMISSIONER, FEDERAL ENERGY REGULATORY COMMISSION

Mr. Chairman and Members of the Subcommittee: Thank you for inviting me to appear before you this morning in San Diego to discuss the price spikes and volatile electricity markets confronted by California consumers this summer and the continuing need for Federal electric utility restructuring legislation. Let me begin by commending you, Mr. Chairman, Congressman Boucher, and other Members of the Subcommittee for sensing the urgency of the situation in southern California and convening this important congressional hearing in San Diego. This is a matter deserving careful attention by Congress, the Administration, the Federal Energy Regulatory Commission, and California regulators, legislators, and market institutions. I can assure you that my colleagues and I share your concerns and are just as anxious to understand fully this difficult situation. I have no doubt that today's hearing, as well as recent actions taken by FERC, which I discuss below, will result in significant findings that will lead us to real and long-lasting solutions to the problems affecting the energy markets in this region.

The electricity market abnormalities experienced by California consumers this summer are complex and multi-faceted. Although many in the energy industry and media have speculated as to the causes of these problems, the exact origin is not known. What is known, however, is that the result of these market flaws has been alarming for consumers and policy makers alike. For instance, we have learned that prices for electricity in the San Diego area have more than doubled this summer, with the average monthly residential bill rising from around $50 to more than $100. Some accounts even estimate that, during the second week of June, purchasers of California power paid 300 percent more than they paid during the same period in 1999. These are troubling estimates that have caught the attention of the entire Nation.

Several causes of this price volatility have been proffered by various industry analysts. These include: (1) a lack of new generation resources being sited and constructed in California, leading to tight regional demand/supply conditions; (2) a lack of new transmission facilities leading to reduced availability of imports into California; (3) higher-than-expected loads (i.e., a 15 percent increase in average daily peak since 1999); (4) a lack of demand-side programs that allow consumers and businesses to receive and respond to price signals; (5) impediments for utilities to

hedge in forward markets, resulting in an over-reliance on the spot market; (6) flawed market structures, such as congestion management and ancillary services markets; (7) underscheduling of loads and generation in the Day Ahead market; (8) possible exercise of market power by both in-state and import suppliers; and (9) unusually high temperatures in southern California. When combined, these and other conditions would likely lead to higher market prices and ultimately, to higher electric bills for consumers. However, since we cannot identify the exact underlying causes, it is crucial that we delve deeply into this situation in order to ascertain whether these or other factors are to blame for the price volatility. Once we have this information, we will be better able to decide on the appropriate steps that will be necessary to correct the problems. This important fact-finding process has already begun.

Earlier this summer, FERC undertook definitive actions to address market abnormalities in California. First, and most recently, on September 1, 2000, we announced that we will convene a public meeting here in San Diego to allow interested persons to give us their views on recent events in California's wholesale markets. This public meeting will be held tomorrow, September 12, 2000, beginning at 9:00 a.m. at the San Diego Concourse. This public meeting will be an important forum for FERC to obtain first-hand information regarding the concerns of consumers that were affected by these price spikes and to hear from policy makers on recommendations they may have to address this situation.

Second, on July 26, 2000, we directed our Staff to initiate a thorough fact-finding investigation of factors affecting competition and market price fluctuations in electric bulk power markets in various regions of the country, including California and the Western region. We directed Staff to determine any technical or operational factors, regulatory prohibitions or rules (Federal or State), market or behavioral rules, or other factors affecting the competitive pricing of electric energy or the reliability of service. Staff is to report its findings to us by November 1, 2000. Since the issuance of that order, Staff has been directed to concentrate its initial efforts on the California market and to report to us on that portion of the investigation as soon as possible.

Third, on August 23, 2000, in response to a complaint filed by San Diego Gas & Electric Company (SDG&E), FERC instituted hearing proceedings pursuant to Section 206 of the Federal Power Act. As part of these proceedings, we will investigate the justness and reasonableness of the rates charged by public utilities that sell energy and ancillary services to or through the California Independent System Operator (ISO) and Power Exchange (PX). We will also investigate whether the tariffs and institutional structures and bylaws of the California ISO and PX are adversely affecting the efficient operation of competitive wholesale electric power markets in California and need to be modified. As our order explains, a Section 206 investigation initiates a formal evidentiary process where all interested parties are assured an opportunity to present evidence and arguments on the record before the Commission. In addition, it provides a mechanism for the Commission to exercise its remedial powers to change the rates, terms and conditions of jurisdictional services that are found to be unjust, unreasonable, unduly discriminatory or preferential and, if appropriate, to order refunds.

Our overarching goal in these investigations and hearings is to detect and, to the extent within our jurisdiction, to resolve as expeditiously as possible, any defects in the operation of competitive bulk power markets in California and elsewhere. It is important to understand that, while FERC has jurisdiction over certain aspects of the California market, such as wholesale electric prices and the market design and rules of the ISO and PX, certain other factors fall within the jurisdiction of state regulatory authorities in California. In particular, these include the siting of new generation and transmission facilities, the removal of constraints on hedging in forward markets, and the implementation of consumer demand-side programs. These are important functions that must receive serious consideration by the California regulators.

Because regulation of the California electric market is shared between FERC and various State regulators, it will be imperative that we work closely together in order to arrive at a reasonable and timely resolution of these problems. I am committed to such a partnership with my State colleagues.

Although FERC has undertaken important activities over the past few months to address the current situation in southern California, our involvement in the California energy markets has not been limited to this summer. Since the enactment of A.B. 1890 by the California Legislature in 1996, which dramatically restructured the California electric utility industry and implemented retail access, FERC has devoted significant resources to analyzing and processing the myriad tariffs and agreements proposed by the ISO and PX. In fulfilling our jurisdictional responsibilities

and duties with regard to these market institutions, I believe FERC has been especially diligent over the past four years in addressing the interests and concerns of California regulators, legislators and industry stakeholders. We have had to make some tough decisions regarding the formation of competitive bulk power markets in California, but I believe we've been mindful of the ambitious goals of the California PUC and Legislature to create competitive markets in that State.

However, there are flaws in the existing market structure that must be repaired and the repairs must result in a lasting solution. That is why I supported our decision on August 23, 2000, to deny SDG&E's request for an immediate cap of $250 per MWh on seller's prices in California. In my opinion, approving the seller's price cap at this time would have been an inappropriate and rash action that would have sent the wrong signal to the market. I am concerned that such a cap would only exacerbate the current scarcity of supply by discouraging generators from serving California markets. We must find ways to encourage supply into the market and to ensure a sufficient generation and transmission infrastructure.

I continue to believe that robust competitive wholesale bulk power markets are attainable. Moving forward, not retreating, is the right thing to do. In order to accomplish this challenging work we will need the assistance and commitment of Congress. As I testified before this Committee last October and before the Senate Committee on Energy and Natural Resources in April, I continue to believe that Federal electricity restructuring legislation is needed. I urge Congress to pass comprehensive restructuring legislation as soon as possible. Such legislation, I believe, is necessary to address important and unresolved issues in the Nation's electric industry, such as reliability, jurisdiction, and transmission access. Legislation is needed to enable FERC to achieve its goals of creating fair, open, and competitive bulk power markets. The opportunity to benefit consumers through the creation of truly competitive and efficient wholesale bulk power markets is too important to squander. Therefore, I ask Congress to become a partner with FERC and California officials in our attempt to ensure that competitive markets are achieved and that consumers enjoy the intended benefits.

In conclusion, let me reiterate that FERC is on a fast track to understand the causes of the abnormalities that currently exist in the California electricity market and to decide on the appropriate remedies. Our Staff will complete its preliminary investigation of bulk power markets by November 1, 2000. The California and Western regional portion of that investigation should be completed in advance of that date. Our investigation will identify those areas of the market that are in need of repair. FERC is committed to doing all that it can to make those repairs that are within our jurisdiction in a timely and resolute manner.

Mr. BARTON. Thank you, Commissioner. We appreciate your testimony.

We now welcome a very tanned and California-looking commissioner, the Honorable Curt Hebert, for your testimony.

STATEMENT OF HON. CURT L. HÉBERT, JR.

Mr. HÉBERT. Thank you, Mr. Chairman. I have been working with the Naval Academy on the—some boats, so they have contributed to my tan.

But it's good to be here. I want to thank you for your leadership and for the legislation that you've been working so hard to push through the U.S. Congress. I also want to thank Congressman Bray (sic), who I understand has stepped out, but if you would thank him for his leadership as well and tell him I appreciate him bringing us here. And Congressman Shadegg and Hunter and Congressman Filner as well. Always good to be here and be before you.

The recent rise in electricity prices in Southern California is sadly not simply a California problem, nor is it simply an aberrant one-time summer of 2000 problem. Rather, it represents a manifestation of a larger problem, that if left unchecked surely will reemerge, perhaps with equal or greater severity in other parts of the country, during future months and future years.

The problem is a failure of the current administration in the Federal Government, including the Federal Energy Regulatory Commission, to commit itself to promoting the adequacy of energy supply and energy delivery.

Competition in energy markets, which I vigorously support, cannot be successful if regulatory policies fail to ensure that supply will be available to meet surging demand. Without this equilibrium, breakdowns in energy markets inevitably will occur, Mr. Chairman. California is merely one of the first.

What is needed and is currently lacking is a comprehensive plan that understands that all forms of energy production are vital to maintain this country's energy needs. Regulatory policies that inhibit the construction of generation plants, transmission lines, natural gas pipelines and hydro-electric facilities are counter-productive. So too are regulatory policies that fail to commit to competition in emerging markets for energy products.

Price controls which have been approved by California by the majority here at FERC and supported by the administration do not work, Mr. Chairman. This is not a political statement. It's not partisan at all.

I've always felt and always thought that if the truth kills granny, let her die, but the truth has to be told here. Price controls didn't work in the Nixon era. They didn't work in the Carter era.

Mr. BARTON. If the truth does what?

Mr. HÉBERT. If you'll not take away from my time. If the truth kills granny, let her die.

Mr. BARTON. Let her die. Well, I didn't say that. I want to save granny.

Mr. HÉBERT. And my grandmother hates that statement, by the way. She fears I'll tell the truth at some interval.

Mr. FILNER. You haven't killed her yet?

Mr. BARTON. The truth is not always pretty, but the truth is the truth.

Mr. HÉBERT. Well, that's correct.

Mr. BARTON. It's a little more polite way to say that.

Mr. HÉBERT. It's probably more polite. I'm not always polite, Mr. Chairman, even though I am from Mississippi and I should be.

But this is important, and it's not partisan or political. As I said, it didn't work in the Nixon administration with price controls, it didn't work in the Carter administration, and it's not working in the Clinton-Gore administration. And we've got to move forward.

Price caps are not the solution. Recent events have demonstrated that they mask and significantly exacerbate the problem. Since price caps in California were lowered in July, the average market price seen in the California ISO market has increased. This is no coincidence.

The causal effect is that price caps have dampened the need of wholesale buyers to hedge their position and suppliers to build or sell in the California markets. It's caused sellers to turn their generation elsewhere and also slow the emergence of an active and liquid hedge market for both buyers and sellers that is needed in order for competitive markets to thrive. In short, price caps have impeded the very market responses that the public clamors for.

In addition, it has been reported by market surveillance committee of the Cal ISO that utility distribution companies called UDCs that are able simply to pass through their wholesale cost of power to retail customers without fear of retail competition have insufficient incentive to hedge, given the little risk of customer departures that they face.

The California Public Utility Commission further has placed restrictions on the quantity of forward financial contracts that UDCs are able to enter into. Rather than impose price caps that decrease the liquidity of the market and eliminate price signals that would otherwise encourage trading activity and investment in new generation that you speak of, Congressman Hunter, FERC and the CPUC should work together to modify the market's rules that are currently constraining the market.

Limitations on UDC's ability to hedge in the forward market should be lifted. Delays in the siting and permitting process for new generation and transmission line construction should be eliminated. Parties should be permitted to enter into bilateral purchase and sell agreements as they deem prudent.

If we look at two areas, Mr. Chairman and committee members, that have done well, we can look at the Midwest price fights of 1998 where several people were urging this commission to put up price fights. We didn't—price caps. I apologize. We didn't do that, and they were covered, and they built generation, and they've got adequate supply.

On the other hand, there's only one State that has an ISO that doesn't have price caps. It's the State of Texas, Mr. Chairman. Ercot does not have those price controls, and they appear to be doing very well.

The evidence would suggest that price caps are part of the problem. And I understand Supervisor Jacob and what she's trying to do, and I think she's well-intentioned, but I would say that when you talk about supply and that none is likely to come on the scene soon, you have to look at what's happening here. It could come on line soon.

Take a lesson from what they did in Shelby, Illinois. They actually had it permitted, and in 6 months time turned dirt and had to switch on. Six months time. Twelve months time from permit to turning the switch on. It can be done, but you've got to change the way you're thinking. You've got to change the way you're acting.

There are only two thoughts here and two ways you can go. You can either have adequate supply or you can understand forecasting and forward markets and bilateral contracts. Hopefully, you'll understand both of those. But if you're like California is and you've got the low supply so you've got to depend on the other, you better work hard to understand the forecasting.

And I'll close with this. Congressman Bray said—and I think it's a great example—that as a lifeguard, he had to always look at how you changed it, how you went in and re-evaluated it and made sure the same thing didn't happen again.

Well, while California rate payors are now swimming in high energy costs, regulators and policymakers continue to flounder in the past. We've got to look forward. We've got to change the conduct.

If you want to know what we can do short-term—we don't have jurisdiction over San Diego. That's right. But we do have jurisdiction over the ISO and the PX, and we can get in and assist that, and we can make changes. We can do that at FERC, and we're going to have to do it. The consumers deserve it. Thank you for your time.

[The prepared statement of Hon. Curt L. Hébert follows:]

PREPARED STATEMENT OF HON. CURT L. HÉBERT, JR., COMMISSIONER, FEDERAL ENERGY REGULATORY COMMISSION

OVERVIEW

I thank the Committee for the honor of testifying here this morning. What brings us all here this morning, specifically, is the topic of recent price increases for the supply of electricity in Southern California. I applaud the Committee for listening to testimony on this topic, as it has extreme significance to the future of competition in electricity markets, wholesale and retail, in Southern California and in the rest of the United States.

I am greatly disturbed by recent events in California energy markets. It is truly a disgrace that San Diego ratepayers now face electricity bills that are double or triple those that they paid last summer. No one should have to face the decision whether to pay for electricity service, on the one hand, and groceries or prescription drugs, on the other. Something is clearly wrong. I take second place to no one in extolling the virtues of competition and choice. However, those virtues need not come at the expense of the low price and high degree of reliability of electric service that all Americans have come to enjoy and expect.

Nevertheless, I caution against labeling the current situation as simply a "California problem." Nor is the problem one that is fleeting; it is not simply a "summer of 2000 problem." Rather, the problems that are now confronting Southern California represent a manifestation of larger, deeper problems that may confront other portions of the country in later months and years.

There is, unfortunately, no easy fix. Rebates, refunds, and emergency releases may offer some relief right now. However, these short-term bandages do nothing to mask the larger problem that surely will reemerge next summer and future summers until something is done to address the true, underlying nature of the problem. At bottom, the situation in Southern California demonstrates that the Federal Government—in particular, the Federal Energy Regulatory Commission, of which I am a Member—can and should do much more to promote energy supply, energy delivery, and utility innovation.

Regrettably, the Federal Government and the FERC have done little to address the issues of supply, delivery and innovation. There is no comprehensive energy strategy. Decisions are made on an expedient, ad hoc basis, with little regard for long-term impacts. And policies made in one energy sector (electricity, natural gas, oil, etc.) fail to take into account their impact on other sectors.

What is needed is a new form of thinking. Most regulators claim to support competition, but their decisions belie their stated intentions. What regulators need to do is to demonstrate the courage of their convictions by allowing competition actually to operate—by trusting that markets will make appropriate allocative decisions. Regulatory policies that claim to help consumers by inhibiting the operation of market forces—such as through price controls—actually work to their detriment. Consumers will never truly enjoy the benefit of lower prices, enhanced service options, and unimpaired reliability until regulators make decisions that promote entry into competitive markets and capital investment in generating plants and delivery lines.

I now discuss my understanding of the problem as it applies to the United States as a whole and California in particular. I offer suggestions as to what the FERC can do to promote energy supply and deliverability and, thus, lower prices. While I appreciate and applaud the initiative of the Committee, I believe that the FERC already possesses considerable authority, without the need for additional legislative authority, to redress the problem at hand. What is needed most is political resolve, rather than political posturing, to do what is best for the American people.

A NATION-WIDE PROBLEM

Today's headlines, unfortunately, announce one type of energy crisis after another. Last winter, residents in New England experienced sharp increases in the price of home heating oil. Earlier this summer, automobile owners—especially those

in the upper Midwest—faced gasoline prices in excess of $2.00/gallon. Natural gas inventories are down steeply and experts expect sharply higher natural gas prices this winter. There remains no political will to solve the issue of nuclear waste disposal.

To complicate matters, the FERC has demonstrated its reluctance to authorize, in a timely manner, the construction of natural gas pipelines to those portions of the country that are particularly starved for gas supply. *See Independence Pipeline Company, et al.,* 91 FERC ¶61,102 at 61,366-67 (2000) (Hébert, Comm'nr, dissenting). Moreover, the FERC is pursuing a hydroelectric dam decommissioning policy, of dubious legality, when it is not debatable that the Federal Power Act contains no such express authority. That policy threatens to tear down existing dams and complicate the already glacial process of dam relicensing. *See State of Maine,* 91 FERC ¶61,213 at 61,773-76 (2000) (Hébert, Comm'nr, dissenting).

The energy crisis of the moment concerns the price and reliability of electric service. Geographic pockets of the country are starting to experience disruptions in the price and delivery of electricity, just as competition is starting to open up markets and induce the participation of non-traditional utilities. Two summers ago, the Midwest experienced dramatic spikes upward (more than 100-fold) in the price of wholesale power. Last summer, several major metropolitan centers (New York, Chicago, San Francisco) experienced temporary blackouts when local delivery systems failed. This summer, southern California and, to a lesser extent, New York are experiencing price spikes of their own.

The underlying causes of these disruptions in electricity supply are many and are vigorously debated. What is certain is that reserve margins are shrinking, as a growing, computerized economy increasingly demands more power, and as electricity supply fails to keep pace. In addition to supply and demand disharmony, the nation's electricity delivery system—millions of miles of transmission and distribution lines—increasingly is being stressed by competitively-driven transactions for which they were never intended.

In my three years of service as a FERC Commissioner, and for six years before that as Chairman and Commissioner of the Mississippi Public Service Commission, I have advocated a balanced approach. It is perfectly appropriate for federal and state governments to factor environmental considerations and landowner objections into their siting and certification decisions. Every form of energy production—whether based on fossil fuels or renewable fuels—has its attendant advantages and disadvantages. What is not appropriate is for regulators to summarily dismiss a form of energy production, through outright rejection or overly laborious procedures, without considering what alternatives will be available to meet demand. When a state blocks the siting and construction of generating plants or transmission lines, it needs to figure out how the energy demands of its consumers (and those of neighboring states) will be met. When the FERC blocks the construction of a natural gas pipeline or the development of a hydroelectric project, energy customers are all the more susceptible to the rigors of a fluctuating market.

(I discuss in a later section of my testimony what more the federal government can do to promote market entry, induce supply, and enhance deliverability.)

A CALIFORNIA PROBLEM

At this juncture, I can only speculate as to the principal causes of the sharp rise in electricity prices in Southern California. The FERC recently has initiated investigations into wholesale electricity markets and practices, both on a nation-wide basis and on a California-specific basis. When presented with the reports of its investigative staff, the FERC can then determine what policies to pursue that can alleviate immediate pressures and can act, hopefully, to ensure that California and other regions do not experience similar crises on a regular or periodic basis.

At this time, however, I have four prime suspects: (1) California utilities; (2) the California Independent System Operator; (3) the California Public Utilities Commission; and (4) the FERC. We are certainly not without blame in Washington, D.C. This Administration has done little to promote, and nothing to develop, a positive energy policy, with adequate supplies and necessary investments, to give consumers choices of fuels and reasonable prices.

Electric utilities are starting to grapple with competitive choices and are developing a number of different corporate strategies. Some are proving more successful than others. While strategies may differ, all load-serving utilities should be expected to hedge their risks in certain respects. Utilities such as San Diego Gas & Electric Company that sell off their generating units are susceptible to market forces. Those that rely on the spot market, rather than entering into long-term power supply arrangements or capacity buy-backs, or purchasing financial instruments, are particu-

larly susceptible. While my information is imperfect, it appears that SDG&E, for whatever reasons, may have exposed its ratepayers to considerable market risk by failing to employ adequate risk management techniques. If so, it would hardly be alone in failing to shield its ratepayers from the whims of market forces. *See New York Independent System Operator, Inc.; New York State Electric & Gas Corp. v. New York ISO,* 92 FERC ¶61,073 at 61,315-18 (2000) (Hébert, Comm'nr, dissenting).

Though it employs capable people, the California ISO, as an institution, lacks the incentives and accountability to make difficult decisions necessary for the transition to competition. Most recently, we have seen the ISO compromise its independence. Bowing to pressure, it met over and over again until, against its own professional judgment, it adopted price caps that the ISO itself acknowledged will cause harm in the short and long term. Lowering price caps may look good but does not work. In fact, evidence not yet presented to the Commission may demonstrate that price caps during peak hours have the effect of raising rates during off-peak hours and, possibly, on an annualized basis. This is because suppliers that cannot recover their costs during peak hours must raise their bids during remaining off-peak hours. Thus, the decision by the ISO to adopt and lower price caps only makes matters worse and electricity more expensive for California ratepayers.

(This is not mere speculation. In a report dated September 6, 2000, the Market Surveillance Committee of the California ISO concludes that price caps have little ability to constrain prices. Specifically, it notes that monthly average energy prices in California during June of this year, when the price cap was $750/MWh, were lower than monthly average energy prices during August of this year, when the price cap was $250/MWh—even though energy consumption was virtually the same in both months.)

The problem of the ISO, however, goes back further. Over the years it has reached many decisions that make sense as politics, but not economics. FERC orders have found, among other things, that the ISO restricted imports without reason, encouraged suppliers to bid when prices would be the highest, and failed to penalize customers who understated their demand or generators that failed to deliver what they promised. In addition, the ISO mishandled congestion management by creating price zones that obscured the cost of locating in the wrong place. Like a political institution, it sought to spread the pain, and have other customers subsidize the high costs in congested areas. Most ISO filings state, not that it has adopted the right solution, but that it has reached a compromise that pleases all parties.

The California PUC deserves some attention for policies that fail to allow for the timely siting and construction of badly-needed generation. There is nothing wrong, of course, with the CPUC considering seriously the environmental consequences of new construction. It should. That intense consideration, however, comes at a cost. Suppliers are much less likely to enter California markets when the review process is uncertain and requires many difficult years of prior review and public input.

Moreover, the California PUC needs to reconsider regulatory policies that, in practice, fail to motivate its utilities to respond to the needs of their ratepayers. If SDG&E has no incentive to keep its wholesale costs down, and if it can act merely as a conduit by passing those costs on to its retail customers, without limitation, the utility has less of an incentive to engage in responsible risk management. The California PUC may wish to consider performance-based measures of regulation similar to those I helped implement in Mississippi. Under policies adopted by the Mississippi Public Service Commission, utility earnings depend on the number and duration of interruptions, customer satisfaction (using actual complaints), and price. In response, Mississippi utilities have figured out how to set and meet reserve margins, safety standards, and capacity goals. In this manner, state regulators can better align private economic interest with the public interest.

Finally, much of the finger-pointing deserves to be directed at my agency. The FERC has been sending inconsistent signals to energy suppliers. On the one hand, it offers negotiated, market-determined rates to all suppliers who can demonstrate that they cannot exercise market power. On the other hand, it has signaled that it is willing to impose price controls and readjust bids if prices threaten to rise higher than anticipated. As a result, suppliers are wary of entering into markets that are not truly competitive—such as California—and if they cannot be confident of recovering a reasonable profit. The operators of peaking units—which are expensive and are intended to run only in periods of peak demand—are particularly disenchanted with pricing policies that may hinder their ability to recover the costs of operation.

Moreover, the FERC has been much too deferential to the operation of the California ISO that, as explained above, has hindered the operation of the competitive market. I have been willing to give ISOs, such as the California ISO, some time to commence operations and develop familiarity with competitive energy markets. Un-

fortunately, with experience, ISOs have turned out to be flawed institutions that have proved successful only in perpetuating and expanding their bureaucratic reach.

In contrast, I believe that independent transmission companies (transcos) offer a vastly superior alternative. Because they are independent of other market participants, and have no incentive to favor any one particular source of supply, transcos offer truly non-discriminatory transmission service to market participants. Moreover, because they have a profit incentive to maximize transmission and throughput over their lines, transcos (unlike ISOs) have an incentive to operate their facilities efficiently and to expand their network when necessary to meet increased demand.

California needs new capacity, to feed a growing population and to meet the new demands of prosperity. It no longer needs a government institution—the ISO—that performs merely as a debating society, catering to all affected stakeholders. After three years of oversight under the ISO, which has focused short-sightedly on getting through the upcoming summer, rather than adding transmission and generating capacity, it is now time for California to turn to a different model. A transco, to be sure, just like any other business, operates to make money. But such a business model—rather than a governmental model—is what is needed to satisfy customer needs cheaply and quickly.

WHAT THE FEDERAL GOVERNMENT CAN DO TO ADDRESS THE PROBLEM

As I already said, the FERC has done little to avoid the type of pricing and reliability problem we now see in California. If inclined to act decisively on electricity pricing and reliability, there is much the FERC can do right now—without a single drop of additional legislative authority.

For starters, if the FERC is serious about increasing generation supply, it should act *immediately* to withdraw all price caps in generation markets. They distort price signals and inhibit entry into competitive markets. By facilitating efforts to minimize short-term price disruptions, and placing regulatory shackles on what should be competitive markets, the FERC is inhibiting precisely the type of investment in the grid that it should be supporting—and that is crucial to assuring true electrical reliability.

Another important means of enhancing reliability and promoting customer accountability is to give energy providers an incentive to provide reliable, efficient service. Conventional pricing methods provide no such incentive. It is my strong preference to afford utilities some type of performance-based measure of accountability to their customers and their regulators. Consistent with its existing authority, the FERC could—and should—tie earnings and profits to reliability-based and performance-based criteria.

Despite my urgings, the FERC has refused to adopt performance-based pricing measures of the type previously adopted in Mississippi. I was tremendously gratified when the FERC made its first tentative moves in this direction last winter, when it adopted its Order No. 2000 rulemaking on the development of regional transmission organizations. As the FERC explained, a RTO that meets the enumerated characteristics and functions— and that has demonstrated a commitment to promote grid reliability and efficiency—will be eligible for a number of incentives. These incentives include performance-based rates, accelerated depreciation, and return on equity enhancements (formula and risk-based).

While I appreciate the FERC's baby steps on performance-based pricing, it will take awhile for RTOs to develop, win the FERC's approval, and qualify for innovative pricing. If it were up to me, I would adopt pricing measures now that would give both regional and individual electricity providers an incentive to minimize or eliminate service disruptions and to keep prices down, this summer and future summers.

I can think of numerous other measures the FERC can adopt to promote reliability and price stability, without delay and without additional authority conferred by Congress. The FERC could afford transcos an additional incentive to build transmission facilities by providing a higher rate of return on transmission assets. The FERC could articulate greater receptivity to proposals to build and invest in merchant transmission facilities. The FERC could pique additional interest in investment and corporate restructuring by allowing acquisition adjustments on the sale of transmission assets that confers benefits on ratepayers.

In addition, the FERC could greatly advance the cause of reliability by indicating its support for stand-alone transmission companies. As I have explained, a transco—much more so than any other type of regional institution or model—has a strong economic incentive to provide reliable, efficient and low-cost service. I wish the FERC would give a transmission company the chance to operate—and give an un-

equivocal green light to other utilities that might be considering participation in similar for-profit ventures.

And the FERC—if truly committed to providing supply alternatives—could do much more to promote the development of hydroelectric facilities and the construction of natural gas transmission facilities. The answer to our nation's energy reliability needs lies not in the development of additional regulatory bodies and responsibilities—as the Administration, with the acquiescence of a majority of the FERC, now argues. Rather, the answer lies in promoting policies that encourage capital investment in all types of energy technologies and that allow competitive markets to operate as they should.

What the FERC should **not** do is now embrace calls for a return to cost-based regulation. Nor should the FERC encourage hybrid forms of rate regulation that graft cost-based ceilings on top of otherwise negotiated rates. In either event, suppliers would turn their back on California and investment would dry up. California increasingly would operate as an island amidst a sea of competition, and no longer would be able to turn outside the state for supply during times of peak demand. In addition, customers would lose a signal to conserve during periods of peak demand, and entrepreneurs would lose an incentive to develop and bring to market innovative, technological solutions (such as fuel cells, electricity storage, and other forms of distributed generation) to relieve capacity bottlenecks.

Rather, the FERC should follow its own example, when it refrained from adopting "retro" measures in response to the upward spike in Midwestern wholesale electric prices during the summer of 1998. Numerous market participants and observers implored the federal government to do something, and to do something quick, to ensure that prices never rise to extreme levels again. Keeping a cool head, the FERC (as well as state commissions) instead focused its attention on determining whether any market manipulation or anticompetitive behavior had led to the price spikes. Finding none, the FERC decided to allow high prices to signal to suppliers that there is strong Midwestern demand for additional capacity. This is exactly what happened. Two years later, the Midwest has ample new supply of electricity and is now an exporter of power to other capacity-starved regions. Prices have stabilized, and reliability has remained unimpaired.

I encourage all regulators of California energy markets to adopt the same cautious, courageous, long-term approach.

WHAT THE CONGRESS CAN DO TO ADDRESS THE PROBLEM

In the past year, I have had the privilege of testifying twice before Congress on the subject of electricity restructuring. On October 5, 1999, I testified before the House Commerce Subcommittee on Energy and Power on the subject of H.R. 2944, the "Electricity Competition and Reliability Act of 1999" (the Barton Bill). On April 27, 2000, I testified before the Senate Committee on Energy and Natural Resources on eight pending electricity restructuring bills.

Despite the events of the past summer, in California and elsewhere, my opinion has not changed on the subject of additional federal legislation. I continue to believe strongly that any new legislation should remove—not add—obstacles to the natural evolution of the industry in the direction of competitive markets. As I have explained, what the FERC does need to do is to take decisive action under its existing authorization to promote capital investment in all forms of energy supply and delivery, and to enhance operational efficiencies.

Such action would benefit ratepayers in California and throughout the rest of the United States. There is no need for a California-specific congressional solution.

For this reason, I continue to believe that legislation is needed merely to repeal outdated laws of general applicability. Both the Public Utility Holding Company Act (PUHCA), dating from the Depression, and the Public Utility Regulatory Policies Act, dating from the Clinton Administration, act as serious brakes on utility restructuring. They stifle, rather than promote, competition. Similarly, there is no reason for the FERC to be in the business of reviewing electric utility mergers and to duplicate the efforts of the Antitrust Division of the Department of Justice and the Federal Trade Commission. FERC merger review, under section 203 of the Federal Power Act, brakes utility efforts to restructure themselves as they deem best to respond to and take advantage of competitive opportunities and challenges. More troubling, FERC uses mergers to further policy goals that it has no authority to order directly.

Beyond that, I do not see the need for additional legislative action. In particular, I do not see the need for the FERC to assume additional reliability authority. I favor business over government solutions to the issue of maintaining electric reliability in a restructured market. A quasi-governmental reliability organization, under

FERC oversight, and with FERC having last-resort authority to impose mandatory reliability standards on the industry, will operate no more effectively than any other quasi-governmental organization—such as the California ISO.

Instead, I prefer to advance market-oriented policies that offer incentives for badly needed investment. I favor injecting reliability standards in the performance-based rate plans I advocate for utilities. Specifically, I favor tying profits to performance. Each plan for each RTO would contain a target for reliable performance. An RTO's earnings would rise or fall on how well it meets its business plans (safe, reliable and low-cost service; maximizing transactions) and serves its customers.

Similarly, I do not see any need for additional FERC authority over "market power." Unlike some observers, I am not quick to assume an exercise of market power whenever price rises above marginal (operating) cost. FERC staff already possesses sufficient authority to investigate whether actual manipulation or collusion has led to high prices that are not justified by market conditions. (Indeed, this is what FERC staff is doing right now, in responses to unconfirmed accounts that market mis-behavior has led to high prices in California and elsewhere.) Should FERC staff detect improper or illegal behavior, the FERC (or, if appropriate, the Antitrust Division or the Federal Trade Commission) can craft an appropriate response.

Finally, I see no need to legislate rules governing the connection of generators to the grid. An RTO, especially a for-profit, stand-alone transmission company, has no reason to favor any particular source of generation. To the contrary, a transco, with an economic incentive to push power over the grid, would welcome interconnection from as many generators as possible.

Mr. BARTON. Thank you, Commissioner Hébert.

We'd now like to hear from Commissioner Massey. Last, but certainly not least, we welcome your testimony to the subcommittee.

STATEMENT OF HON. WILLIAM L. MASSEY

Mr. MASSEY. Thank you. Is this on, Mr. Chairman?

Mr. BARTON. The bigger mic is a little bit better microphone.

Mr. MASSEY. Mr. Chairman and Members of Congress, thank you for inviting me to testify at this hearing.

There is indeed a crisis in California electricity markets caused by skyrocketing prices. Consumers are suffering. This demands our urgent attention. Existing prices are not just and reasonable. We must take the actions necessary to ensure that jurisdictional markets produce consumer benefits and just and reasonable rates.

A FERC staff investigation is underway, and we do not yet have their findings. There have, however, been a number of reports by market monitors and economists outlining the serious flaws in the California markets, many of which have been mentioned today.

But let me offer my preliminary observations. First, a shortage of generation as well as constraints in the transmission network are fundamental problems in the California market.

A shortage of generation creates an imbalance between supply and demand, and it causes high prices. And transmission constraints prohibit cheaper generation from reaching the California market. Siting rules must be streamlined consistent with sound environmental policy, and generation interconnection rules must be standardized.

Second, it appears to me that the market rules and market conditions allow market power to be exercised to drive up prices, particularly during high-demand conditions when most or all generators know that they are likely to be dispatched, regardless of how high they bid. This serious problem must be addressed.

Third, there is virtually no demand side response to a high price. In other commodity markets besides electricity, consumers pur-

chase less when the price is too high, and this consumer response has a substantial price dampening effect on the market.

But without a demand side response to prices, there is virtually no limit to the price that suppliers can charge during shortage conditions. This must be remedied quickly.

Fourth, there has been too much reliance on volatile spot markets and too little use of hedging tools, such as forward contracts. The use of these tools can levalize prices and substantially dampen the exercise of market power in the more volatile spot markets operated by the ISO and the PX. This must be accomplished.

Fifth, the underscheduling of both generation and load in both the day-ahead and day-of hourly markets puts pressure on the ISO to purchase substantial generation in real time in order to keep the lights on. The generation purchased in real time is considerably more expensive. Underscheduling has contributed to high prices and raised reliability concerns. This must be urgently remedied.

We must form a partnership with appropriate State authorities to solve these and any other problems that are identified. Neither the State of California nor the FERC acting in isolation can solve these problems alone. The FERC can promote competitive wholesale markets, but we cannot site the facilities necessary for wholesale markets to thrive. That is a State responsibility under existing law.

The State must also play a key role in encouraging the use of hedging tools by power purchasers and in facilitating a demand-side response. By the same token, the State of California cannot police market power in interstate wholesale markets. That is a Federal responsibility, as is the regulation of the high-voltage grid. We must work together to solve these problems at hand. And as I have said, we must proceed with all speed.

Now, turning to the issue of Federal legislation, it is my view that many of the market design flaws in California can be addressed under existing authorities. Nevertheless, this summer's events demonstrate, among other things, that electricity markets are inherently interstate in nature.

Prices throughout the western U.S. rose and fell with events in California. Thus, I continue to believe that legislation should facilitate a reliable and efficiently organized grid platform upon which vibrant wholesale markets can be built.

I respectfully suggest that jurisdictional uncertainties and anomalies should be eliminated. The development of regional transmission organizations should be ensured. Reliability of bulk power markets should be subject to mandatory rules.

The FERC should have direct authority to mitigate market power in wholesale markets, and the authority to site interstate transmission facilities necessary for interstate commerce should be transferred to an interstate authority as it is for natural gas pipelines.

I stand ready to work with this subcommittee to accomplish these goals. I continue to believe that well-structured wholesale markets will produce consumer benefits, but the California markets are severely flawed. Consumers are bearing the brunt. This is not reasonable. We must attack these problems. Thank you.

[The prepared statement of Hon. William L. Massey follows:]

PREPARED STATEMENT OF HON. WILLIAM L. MASSEY, COMMISSIONER, FEDERAL ENERGY REGULATORY COMMISSION

Mr. Chairman and Members of the Subcommittee on Energy and Power: Thank you for the opportunity to testify on the subject of the recent events in the California electricity market. The Federal Energy Regulatory Commission has been moving the electricity industry to a structure that relies on well-functioning wholesale markets to produce an economic and reliable supply of electricity for the nation. In supporting that policy, my expectation continues to be that markets will produce consumer benefits and lower prices compared to cost of service regulation.

Thus, I am very concerned about the behavior of California's electricity market this summer and its effects on consumers. I am concerned that this summer's events are causing a crisis of confidence in California wholesale electricity markets that threatens to erode the political consensus necessary to sustain a market-based approach to regulation, not just in California but across the country. The Commission must act forcefully and decisively to reassure market participants, policymakers and consumers that jurisdictional wholesale markets will produce consumer benefits and just and reasonable rates.

California's Experience This Summer

Based on the records of proceedings at the Commission this summer, I believe that there are sufficient indications that California wholesale markets are not producing prices that are just and reasonable. For example, California wholesale electricity costs for June 29 of this year were seven times what they were for the same date in 1999 ($340 million vs. $45 million) even though energy usage was only about 3% more.[1] During the month of June, 2000, the total cost of electricity (energy and ancillary services combined) charged to the California market was nearly half of California's total electricity cost for all of 1999. In two separate five-day periods in June, 2000 (when demand was at least 3,000 MW to 5,000 MW below the projected annual peak) California's total cost of electricity exceeded $1 billion, with one of those five day periods reaching $1.3 billion.[2] During June and July of 1999, prices in the Power Exchange rarely exceeded $150/MWh even during the highest load levels. But during the same period this year, prices have multiplied to three and four times the levels reached last year whenever load levels exceed 33,000 MW.[3] I would also note that the California Public Utilities Commission states that every analysis of the California markets since their opening has found substantial exercises of market power.[4] I believe that there are serious flaws in the California wholesale markets.

Ensuring Well-functioning Electricity Markets

The events in California this summer provide an opportunity for the Commission and all policy makers to gain a better understanding of what elements are needed for well-functioning electricity markets and to act decisively to ensure that such elements are in place. Taking a laissez-faire approach, letting the markets police themselves, is not an acceptable answer in my view. We must ensure that the road to market-based solutions and customer benefits is well paved, and we must proceed with a real sense of urgency.

A few weeks ago, the Commission directed its staff to conduct a thorough investigation of bulk power markets. That investigation is now focused primarily on California, and I am confident that staff's report will shed much needed light on the problem. However, I believe that there are a number of shortcomings in the California market that have become fairly evident, and that these should be regarded as lessons that can be applied to all electricity markets.

First, policy makers must ensure that there are no impediments to expanding the supply of generation and transmission facilities. This is critical. Markets will not work if supply cannot enter easily in response to demand. There seems to be widespread agreement that a shortage of generation as well as constraints in the transmission network are fundamental problems in California. I recognize that some of these shortages were the result of unforeseen events, exceptionally hot weather or sustained demand growth due to the economy's continued strong performance. Nonetheless, necessary facilities must be sited and built for competitive markets to

[1] See Attachment B to Notice of Intervention of the Public Utilities Commission of the State of California in Docket No. EL00-95.

[2] Motion to Intervene and Response of Southern California Edison Company in Docket No. EL00-95.

[3] Complaint of San Diego Gas & Electric Company in Docket No. EL00-95.

[4] Notice of Intervention of the Public Utilities Commission of the State of California in Docket No. EL00-95, at 8.

produce benefits. State siting authorities must respect this fundamental truth, and ensure that reasonable and time limited siting rules are in place, balancing the need for new generation capacity with a responsible environmental policy. It is my hope that California authorities will accomplish this goal.

Streamlined, standardized interconnection procedures and agreements are also needed to facilitate generation entry. I have been pushing for such a policy at the Commission. Interconnection legerdemain is anticompetitive and anti-consumer. But not all interconnection authority resides at the federal level. The interconnection of many generators, including many applications of distributed generation, is at the state level. We still have a lot of work to do in streamlining and standardizing interconnection procedures and agreements.

Transmission capacity must be adequate to support competitive markets. There are two aspects to this piece of the puzzle. One is to provide adequate financial incentives to encourage grid expansion. The Commission recently demonstrated its willingness to allow higher rates of return on transmission facilities in a case involving Southern California Edison. And I believe that performance-based rates and other financial incentives for members of Regional Transmission Organizations, or RTOs, will help to spur transmission investments.

The other part of the transmission issue is siting. This, too, is in the hands of the individual states. Just as with generation, California authorities must develop time limited processes for siting new transmission facilities. I would point out, however, that electricity markets are interstate in nature. Transmission lines provide the highway for interstate electricity commerce. California and other states depend on regional trade. I am not confident that the current state-by-state approach to siting interstate transmission facilities will get the job done. I believe that the siting of interstate facilities should be carried out by an interstate authority. I continue to strongly recommend federal siting authority with the power of eminent domain.

A second broad area that must be addressed is market design. California's experience this summer has demonstrated that market power can be exercised during extreme demand conditions with very dramatic price impacts. During high demand periods, it was impossible to meet all demand without relying on all or almost all of the available generation resources. The relatively high-cost generator operators—those on the upper end of the supply curve—know when these conditions are likely and can bid very high prices with a fair degree of confidence that they will be dispatched. Moreover, the market rule in California is that the generator that clears the market sets the price for the entire market. This means that all generators benefit from that exercise of market power and consumers suffer. Thus, market prices can be manipulated by one or very few sellers. The Commission must examine whether the so-called single price auction for generation is appropriate in these circumstances. The Commission should also consider whether there may be a need to place some limits on wholesale price levels in these conditions until all the pieces of a well-functioning competitive market are in place. Generation entry is spurred by the price signal that results from a well-functioning market. But if a high market clearing price is pegged by market power, such an extreme price does not serve a legitimate market function.

A third factor contributing to high prices in California is underscheduling of both load and generation. Scheduling imprecision is to be expected to some degree, but my understanding is that deliberate underscheduling is done in the California PX day ahead markets by both load serving entities and generators in order to affect market prices. Substantial underscheduling then forces the ISO to go into the real time markets to make up the difference between what has been scheduled and what is needed to keep the system in balance. Under such conditions, the ISO is vulnerable to paying very high prices. Perhaps even more important, last minute resource imbalances pose reliability concerns. I understand that the California ISO is attempting to improve the incentives for market participants to schedule as accurately as possible. The Commission should examine such rules during our investigation.

A fourth critical issue is demand responsiveness to price. This is a standard means of moderating prices in well-functioning markets, but it is all but absent from California's and other electricity markets. When prices for other commodities get high, consumers can usually respond by buying less, thereby acting as a brake on price run-ups. Without the ability of end use electricity consumers to respond to prices, there is virtually no limit on the price that suppliers can fetch in shortage conditions.

We must urgently seek ways to increase demand responsiveness. There are two aspects to this. One is showing an accurate price signal to the consumer before consumption decisions are made. The second is the ability of the consumer to react to the price signal. The first may be addressed by appropriate metering and communications, and that is the easiest part of the equation. However, residential cus-

tomers cannot easily respond to price signals. I do not believe any of us want to sit at home watching the hourly price signal so we know whether we should postpone dinner or adjust the thermostat. The capability for residential and even commercial customers to adjust consumption lies in so called "smart houses" or "smart buildings" that allow computers to adjust the operation of certain equipment in response to market prices and "strike price" instructions.

Until such "smart" technology has penetrated a large part of the market, I think electricity providers should concentrate on arrangements that compensate large industrial and large commercial customers for reducing consumption. That will provide the biggest bang for the buck and may even capture enough of the demand curve to help discipline price run-ups. I understand that the California ISO is aggressively pursuing such demand side programs to be in place by next summer.

It has also been suggested that RTOs operate demand-side markets where demand aggregators bid negawatts. The Commission could consider this as part of our RTO policy. All options for improving demand responsiveness to prices should be considered. All reports and analyses I have seen have emphasized this lack of demand responsiveness as a critical problem. We must attempt to solve it.

A fifth area that needs attention is risk management. The California market design places entirely too much reliance on the spot market. Spot markets are almost by nature volatile. While the spot market is the appropriate venue to secure limited portions of needed supply, it should not be relied upon for most or all of the supply portfolio. Yet that is the case in California. The painful results are almost predictable.

My understanding is that there were state regulatory restrictions placed on the degree to which load serving utilities in California may forward contract. This policy should be changed. Regulators must ensure that everyone on the demand side of the market is given appropriate incentives and are well informed regarding hedging. Surely a balanced portfolio of long-term and short-term supply must be an ingredient of well-functioning markets.

It is clear that we should move forward by ensuring well-functioning markets. This is surely a long-term effort, at least in some respects, but market problems in California and in other regions are here and now and we must deal with them. What should we do in the meantime, before we have all the elements of efficient markets in place?

Some form of price caps or bid caps may be needed as temporary stopgap measures. The California ISO currently has adopted a $250/MWh purchase price cap. Such a cap on the market does serve to keep down the exceptionally high price spikes that dramatically increased bills in California earlier this summer. To that extent, it is valuable. But price or bid caps, especially market wide caps, are not the long-term answer. Such caps water down the price signals we need for bringing about new supply and for hedging. In addition, while the price spikes are avoided, existing market imperfections can still keep prices well above competitive levels yet remain below the $250 cap. We must explore more precisely targeted mitigation measures.

Going forward, California authorities and the FERC must form a partnership for ensuring well-functioning markets. Neither the FERC nor state policymakers, acting in isolation from each other, can solve all market flaws because our respective jurisdictions are sharply delineated under existing law. State policymakers cannot effectively define or police market power in interstate wholesale markets. They cannot require a wholesale market structure, based upon an efficiently operating interstate transmission grid, that will produce just and reasonable rates. These are federal responsibilities. By the same token, under existing law the FERC cannot site the generation and transmission facilities that are necessary to bring supply and demand into equilibrium, and it has no direct authority to require purchasers of power to hedge price volatility risk in forward or financial markets. These are state responsibilities. Both federal and state policymakers have a role in pursuing policies that will facilitate an effective and price-dampening demand side response. We must work together to solve the problems at hand.

The Need for Federal Legislation

I strongly believe that there is a need for federal legislation to ensure that the nation reaps the benefits of well-functioning electricity markets. I would not advocate a legislative solution for all of the problems experienced in the California market this summer. Many market design flaws, hedging, and the lack of demand side responsiveness can be addressed under existing authorities. But I do believe that this summer's experience has demonstrated that electricity markets are inherently interstate in nature. Prices throughout the western United States rose and fell with events in California. In order to thrive, such markets must have an open, non-dis-

criminatory, well managed, and efficiently priced interstate transmission network that links buyers and sellers of power. The existing patchwork of inconsistent and outdated jurisdictional rules for this essential interstate delivery system, coupled with splintered network management, create obstacles and uncertainties that undercut the market. If buyers and sellers lack confidence that electric power will be delivered reliably and on reasonable terms and conditions, they will not commit resources to those markets.

Legislation should facilitate the development of a reliable and efficiently organized grid platform upon which vibrant wholesale markets can be built. Jurisdictional uncertainties or anomalies should be eliminated, the development of Regional Transmission Organizations should be ensured, and the authority to site interstate transmission facilities should reside with an interstate authority.

My recommendations for federal legislation fall into five broad areas.

First, Congress should place all interstate transmission under one set of open access rules. That means subjecting the transmission facilities of municipal electric agencies, rural cooperatives, the Tennessee Valley Authority, and the Power Marketing Administrations to the Commission's open access rules.

Moreover, the majority of transmission—that is, the transmission that underlies bundled retail sales—is arguably now subject to state control under existing law. This has a balkanizing effect on what is essentially an interstate delivery system. State rules may discriminate against interstate transactions. The solution is to subject all transmission, whether it underlies an unbundled wholesale, unbundled retail, or bundled retail transaction, to one set of fair and non-discriminatory interstate rules administered by the Commission. This will give market participants confidence in the integrity and fairness of the interstate delivery system, and will facilitate robust trade. All transmission should be subject to one set of rules, while local distribution wires are governed by state regulations.

Second, I continue to strongly believe that the development of well structured Regional Transmission Organizations is a necessary platform on which to build efficient electricity markets. Having said that, I realize RTOs are not a panacea. Indeed, California already has an ISO that operates its transmission grid. However, the causes of the problems plaguing California are related to market design, an inability to site new facilities, and the restricted scope of the ISO. The problems were not due to transmission grid operation.

The widespread development of RTOs is needed to ensure open access to an efficiently organized transmission grid. Discrimination in access is still a problem, and the current utility-by-utility approach to grid management is inefficient. RTOs that meet the requirements of Order No. 2000 will help ensure access to large power markets, better transmission pricing, improved regional planning, improved congestion management, and consistent market rules within a trading region. We know for a fact that resources will trade into the market that is most favorable to them. Trade should be based on true economics, not the idiosyncracies of differing market rules.

Grid reliability is one of the unsung benefits of the RTO institution. Existing grid management is scattered among more than one hundred operators. Consolidating grid operations through RTOs (in the form of ISOs, transcos or hybrid entities) will eliminate seams and facilitate institutions that are more congruent with reliability management regions and evolving markets. A large RTO can manage congestion and plan for loop flow efficiently. An RTO can also facilitate regional consensus among market participants, transmission owners and state siting authorities about the need for new transmission siting and construction. A large RTO also provides the appropriate scope and forum for transmission pricing reform. As such, an RTO can, by adopting performance-based rates, provide the incentives for needed new transmission facilities. These features of the RTO can provide a reliable platform for emerging markets.

The full benefits of RTOs to the marketplace will not be realized, however, if they do not form in a timely manner, if they are not truly independent of merchant interests, or if they are not shaped to capture market efficiencies and reliability benefits. While the Commission may have more authority regarding RTOs than it has exercised thus far, I nevertheless recommend that the Congress clarify existing law to authorize the Commission to require the formation of RTOs and to shape their configuration.

The current tax codes may be an obstacle to participation in RTOs. Public utility transmission owners cite unfavorable tax consequences of spinning off or selling their transmission facilities to RTOs, and public power entities cite difficulties staying within the bounds of private use restrictions on their transmission facilities if such entities join RTOs. Legislation has been introduced (H.R. 4971) that addresses these problems. For public utilities, this legislation would defer taxes on the sale,

and eliminate taxes on the spin off, of transmission facilities to independent entities in Commission approved RTOs. The bill also would modify the private use restrictions to enable public power entities to provide open access service and participate in RTOs without losing their tax-exempt bonds. This legislation appears to be a reasonable compromise and could be important in attracting RTO participation by public utilities and public power entities. I commend this legislation to the Subcommittee.

Third, we need mandatory reliability standards. Vibrant markets must be based upon a reliable trading platform. Yet, under existing law there are no legally enforceable reliability standards. The North American Electric Reliability Council (NERC) does an excellent job preserving reliability, but compliance with its rules is voluntary. A voluntary system is likely to break down in a competitive electricity industry.

I strongly recommend federal legislation that would lead to the promulgation of mandatory reliability standards. A private standards organization (perhaps a restructured NERC) with an independent board of directors would promulgate mandatory reliability standards applicable to all market participants. These rules would be reviewed by the Commission to ensure that they are not unduly discriminatory. The mandatory rules would then be applied by RTOs, the entities that will be responsible for maintaining short-term reliability in the marketplace. Mandatory reliability rules are critical to evolving competitive markets, and I urge Congress to enact legislation to accomplish this objective.

Fourth, the FERC needs the authority to site new transmission facilities. The transmission grid is the critical superhighway for electricity commerce. But it is becoming congested due to the increased demands of a strong economy and to new uses for which it was not designed. Transmission expansion has not kept pace with these changes in the interstate electricity marketplace. Under current law, however, the Commission does not have the authority to get the job done alone. The Commission has no authority to site electric transmission facilities that are necessary for interstate commerce. Existing law leaves siting to state authorities. This contrasts sharply with section 7 of the Natural Gas Act, which authorizes the Commission to site and grant eminent domain for the construction of interstate gas pipeline facilities. Exercising that authority, the Commission balances local concerns with the need for new pipeline capacity to support evolving markets. We have certificated thousands of miles of new pipeline capacity over the last few years.

I strongly recommend legislation that would transfer siting authority to the Commission. Such authority would make it more likely that transmission facilities necessary to reliably support emerging regional interstate markets would be sited and constructed.

Finally, I recommend legislation that would give the Commission the direct authority to mitigate market power in electricity markets. It should be clear by now that, despite our best efforts, market power still exists in the electricity industry. The FERC, with its broad interstate view, must have adequate authority to ensure that market power does not squelch the very competition we are attempting to facilitate. However, the Commission now has only indirect conditioning authority to remedy market power. This is clearly inadequate. Therefore, I recommend legislation that would give the Commission the direct authority to remedy market power in wholesale markets, and also to do so in retail markets if asked by a state commission that lacks adequate authority.

Conclusion

I stand ready to assist the Subcommittee in any way, and I thank the you for this opportunity to testify.

Mr. BARTON. Thank you, Commissioner Massey.

We now want to welcome the president of the California Public Utilities Commission, Loretta Lynch. She's accompanied by Commissioner Wood. Mr. Wood does not have a statement, but he's available to take questions when we get to the question period.

We just got your statement, or at least I just got your statement, so I'm going to kind of glance through it as you give it. You're recognized for 5 minutes, and welcome to the committee.

STATEMENT OF LORETTA M. LYNCH

Ms. LYNCH. Thank you. Thank you for inviting the California Public Utilities Commission to your hearing today.

As a result of California's experiment in restructuring its electricity market, wholesale electric energy prices in California have risen significantly.

As Michael Kahn, the Chairman of the Electricity Oversight Board, and I found in a report we prepared for Governor Gray Davis in August, prices for electricity in June 2000 were seven times higher than comparable prices California paid in June 1999.

Analyzing this monthly data, wholesale energy prices have risen significantly in just the last year, reaching an average monthly price of 17 cents a kilowatt hour in June, 12 cents in July and 18 cents in August.

The total bill for energy purchased for those same 3 months in California was over $10 billion. California experienced historic billion-dollar weeks in paying over $1 billion for electricity purchases from the Power Exchange and the ISO ancillary services markets.

The August electricity prices are especially troubling as California experienced the coolest August on record with concomitant lower levels of electricity use. The substantial cost to California from higher energy prices caused real harm to California families and businesses, as you heard this morning.

Families and businesses have seen their electricity bills double and in some cases triple over what they paid just last year, in most cases for basically the same amount of electricity consumed.

For instance, San Diego schools must now divert funds previously committed to improve their classrooms and their playgrounds to pay for their higher energy bills. The additional funds that Governor Davis and the California State Legislature provided to San Diego schools are now being paid just to keep the lights on and the computers working and are not available to improve our children's education.

Governor Davis and the California Public Utilities Commission have now both done what we can to minimize the effects of these wholesale energy prices. My testimony indicates some of those actions. But California's efforts represent only part of the solution. Under California's past electric restructuring experiment, we ceded to the Federal Government, specifically to the FERC, the ability to control a significant portion of the energy costs paid by California consumers.

Almost all of the energy consumed by customers at California's investor-owned utilities is now regulated by the FERC, not the PUC. It is the FERC, not our PUC, which regulates both the ISO and the Power Exchange, as you read this morning.

So while California can work at the retail level to mitigate these price problems we face, it is now in the hands of the Federal Government and the FERC to solve the problem at the wholesale level.

Several factors have been ascribed to the run-up in these prices, and we'll have robust debate on that. But certainly increased costs for some of the components of producing electricity cannot explain away a significant portion of the price increases experienced in California.

As numerous reports already document, as Commissioner Massey detailed, a major reason for the run-up in energy prices appears to be the problem of market power where a few generators on the margin can set the price for energy, particularly on peak demand days when all generating units are needed.

Data from May and June 2000 show that wholesale energy prices were 37 percent higher than could possibly be expected and 186 percent higher in June than should have been expected in a competitive market, according to Professor Frank Wollock, professor at Stanford and a member of the ISO's market surveillance committee.

Some preliminary estimates peg the amount at which actual prices diverge from even the highest prices that could have been expected in a competitive market at close to $2 billion. This $2 billion price signal that California has already paid this summer simply cannot be justified. Had we just directly invested $2 billion into California's electricity infrastructure, we could have built 4,000 megawatts at new power plants or made untold but vast improvements in energy efficiency.

Equally troubling are the higher off-peak energy prices that we have seen, particularly for the month of August. While high on-peak prices might be justified theoretically, the high off-peak prices that California is experiencing for virtually every hour of the day are difficult to justify, absent the existence of market power.

And market power is particularly pernicious in the electricity arena, as electricity constitutes a fundamental necessity that has no effective substitutes. California cannot run its information-age economy on candles.

The electricity market is unique, and the theories that work in other markets, for instance, like ones for applies and oranges, do not apply to the workings of electricity. In this market, electricity cannot be stored. Thus, buyers, the utilities, must always purchase a continuous real time supply for every hour of every day. Supply must always balance with demand to maintain system reliability.

Given the realities of how the electricity market works in California and nationwide, the calculation of prices on an hourly basis provides a strong incentive for sellers to engage in strategic bidding to increase prices. I believe that Representative Hunter called that his oxygen analogy. At some point, you'll pay for it at any price.

As the high energy prices we have seen clearly show, the wholesale market in California is not working properly and is not workably competitive. While we remain hopeful that a truly competitive wholesale market can be achieved in the long term, we believe that the FERC must address the market power and market structure problems immediately.

We hope that Federal regulators and California will work closely together to bring down these unconscionable prices. Both Congress and the Federal Government should give California the maximum flexibility to craft solutions to our problem and to recognize our individual needs to address and solve this problem before this problem causes further harm both to California citizens and California's entire economy. Thank you.

[The prepared statement of Loretta M. Lynch follows:]

PREPARED STATEMENT OF LORETTA M. LYNCH, PRESIDENT, CALIFORNIA PUBLIC UTILITIES COMMISSION

The reason we are here today is to address the extraordinary rise in electric energy prices in California and to identify how to mutually work together to solve this problem.

As a result of California's experiment in restructuring its electricity market, embarked upon in the Wilson Administration, wholesale electric energy prices in California have risen significantly. As Michael Kahn and I found in a report we prepared for Governor Gray Davis in August, prices for electricity on selected days in June 2000 were seven times higher than comparable prices California paid in June, 1999.

Analyzing a monthly data, wholesale energy prices have risen significantly in the last year, reaching an *average* monthly price of 17 cents a kilowatt hour in June, 12 cents in July, and 18 cents in August. The *total* bill for energy purchased for those same three months was over $10 billion. California experienced historic "billion dollar weeks" in paying over $1 billion for electricity purchases from the Power Exchange and ISO ancillary services markets. The August electricity prices are especially troubling, as California experienced the coolest August on record, with concomitant lower levels of electricity use.

The Substantial costs to California from higher energy prices cause real harm to California families and businesses. Families and businesses have seen their electricity bills double and in some cases triple over what they paid last year—in most cases for the same amount of electricity consumed. San Diego schools must divert funds previously committed to improve their classrooms and playgrounds to pay for higher energy bills. The additional funds Governor Davis provided to San Diego schools are now being paid to keep the lights on and the computers working—and are not available to improve our children's education.

Residents and businesses in the service territories of Pacific Gas & Electric and Southern California Edison have yet to be directly affected by the run-up in wholesale energy prices as they are still covered by a state legislatively mandated rate freeze. Once the rate freeze ends, however, and it will statutorily expire no later than March, 2002, these California customers will also face significantly higher prices for electricity unless appropriate action is taken. In the meantime, higher wholesale energy prices have cut into the ability of California's other utilities to provide electricity to their customers and to stay in business.

Governor Gray Davis, and the California Public Utilities Commission, have both done what we can to minimize the effects of these high wholesale energy prices.

California has:

- Adopted a ceiling on energy commodity costs for all families and for most businesses in the San Diego area, especially safeguarding schools and hospitals, of 6½ cents/kilowatt hour pursuant to Governor Davis signing AB 265, an urgency bill authored by state Assemblywoman Susan Davis;
- Freed up electricity used by state buildings to put it back on the grid and available to others during periods of short supply;
- Reinvigorated California's commitment to energy efficiency including reallocating $72 million in uncommitted funds toward programs designed to reduce peak demand for the Summer of 2001;
- Streamlined, where possible, the siting of new power plants, and
- Removed constraints to upgrading the state's transmission and distribution systems.

California's efforts represent only one part of the solution, however. Under California's electric restructuring experiment during the Wilson Administration, California ceded to the federal government, specifically to the Federal Energy Regulatory Commission (FERC), the ability to control a significant portion of the energy costs paid by California consumers. Almost all of the energy consumed by customers of California's investor-owned utilities is now regulated by FERC, not the Public Utilities Commission. It is FERC, not our Commission, which regulates both the ISO and the Power Exchange. While California can work at the retail level to mitigate the retail pricing problems we face, it is now in the hands of federal regulators at the FERC to solve the problem at the wholesale level.

Several factors have been ascribed to the run-up in these prices. Among the listed causes are higher natural gas prices, higher prices for air pollution emission credits in the Southern California area, and increased demand for electric energy as the result of a robust economy. Our Commission held a hearing to examine these issues last Friday in San Diego. My personal conclusion is that these factors pale as causes for any of the run-ups, contributing at most what amounts to pennies while electric bills have skyrocketed. Increased costs for some of the components of producing elec-

tricity cannot explain away a significant portion of the price increases experienced in California.

As numerous reports document, a major reason for the run-up in energy prices appears to be the problem of market power, where a few generators on the margin can set the price for energy, particularly on peak demand days when all generating units are needed.

Last week, Professor Frank Wolak, Professor of Economics at Stanford and member of the ISO's Market Surveillance Committee, presented the results of a study comparing estimates of the marginal cost of generation compared to actual prices seen in California's energy markets. In a competitive market place, energy prices should be close to marginal costs, except at times of scarcity when prices may be higher.

Data for May and June of 2000, the last two months for which data is available, show that wholesale energy prices were 37% higher than could possibly be expected in May 2000 and 186% higher in June. Some preliminary estimates peg the amount at which actual prices diverged from even the highest prices that could be expected in a competitive market at close to $2 billion.

The $2 billion "price signal" that California has already paid this summer cannot be justified. Had we just directly invested this $2 billion into California's electric infrastructure, we could have built 4,000 megawatts of new power plants or made untold but vast improvements in energy efficiency.[1]

Equally troubling are the higher off-peak energy prices that we have seen, particularly for the month of August. While high on-peak prices might be justified theoretically during periods of high-demand, the high off-peak prices (at times as high as 12 cents/kilowatt hour) that California is experiencing for virtually every hour of the day are difficult to justify absent the existence of market power.

Market power is particularly pernicious in the electricity arena, as electricity constitutes a fundamental necessity that has no effective substitutes. California cannot run its information age economy on candles. The electricity market is unique and theories that work—in other markets—like ones for apples or oranges—or even phone service—do not apply to the workings of this market. In this market, electricity cannot be stored. Thus, buyers must always purchase a continuous real-time supply for every hour of every day. Supply must always balance with demand to maintain system reliability. Given the realities of the electricity market, the calculation of prices on an hourly basis provides a strong incentive for sellers to engage in strategic bidding to increase prices.

As the high energy prices we have seen clearly show, the wholesale market is not working properly and is not "workably competitive." While we remain hopeful that a truly competitive wholesale market can be achieved in the long-term, FERC must address the market power and market structure problems immediately.

FERC must also work closely with California to bring down these unconscionable prices. Both Congress and the federal government should give California the maximum flexibility to craft solutions to our problems and to recognize the need for California to address, and solve this problem, before it causes further harm both to California's citizens and to California's entire economy.

Thank you.

Mr. BARTON. Thank you, Madam President. As indicated, Commissioner Wood is also here, and we'll ask him some questions.

Mr. WOOD. Mr. Chairman, may I make a few remarks?

Mr. BARTON. Actually, you may not.

We'd now like to hear from Mr. Edwin Guiles, who is the chairman of San Diego Gas & Electric and who has been at the center of this storm for several months.

STATEMENT OF EDWIN A. GUILES

Mr. GUILES. Thank you, Mr. Chairman. Good afternoon. I'm Ed Guiles, Chairman of San Diego Gas & Electric. Chairman Barton and Members of Congress——

Mr. BILBRAY. Ed, would you mind pulling that mic up? I'm sure everybody is dying to hear every word that you say.

[1] Assumes $500 per megawatt of installed capacity.

Mr. GUILES. All right. Anyway, good afternoon. I'm glad to be here. Chairman Barton, I want to thank you for working to enact Federal electric restructuring to mitigate the problems we're experiencing nationwide. And Congressman Bilbray, I want to thank you for bringing this issue to the forefront here in San Diego.

SDG&E and its customers are in a difficult and agonizing position as a result of the electric restructuring legislation that was enacted in 1996. Our customers are the first utility customers in the Nation truly subject to the market price of electric commodity. And as has been stated throughout the day, this has been a situation resulting in extremely high prices, far-reaching ramifications. They have been talked about, but I want to repeat them a little bit.

And Chairman Barton, I've got copies of some letters from customers that I'd like to submit to you, if I might, please.

Mr. BARTON. Without objection.

Mr. GUILES. When you think about the impact on our customers, which we have felt, we've got elderly citizens, we've got working families on fixed incomes. I've seen our bills go from $55 to $130 a month. We've got medium-sized commercial customers, large customers who are having difficulty paying bills, canceling expansion plans, talking about moving out of San Diego and other manufacturers considering moving here who are now not intending to move here until this crisis gets resolved.

Legislation was recently passed by the State Legislature to stabilize rates on an emergency basis for our smaller customers. And certainly, this bill has been well-intentioned, but we think it is really merely a short-term Band Aid that will help soften the immediate impact on our customers, but does nothing to address the long-term structural impacts that have been talked about by others here today.

By requiring the utility to continue to buy electricity at the inflated market prices that we have seen, but to deliver it to our customers at a much lower fixed price, for all practical purposes, this creates an effective balloon payment that will come due in a few years.

Deregulation was supposed to result in greater choices, more competition and competitive prices. It hasn't worked out that way. Instead, the tremendous population growth, lack of construction and new capacity and awkward—and I'll use the word "awkward"—wholesale market purchasing structure has given rise to a dysfunctional market that requires immediate Federal action and attention.

Some argue that extreme fluctuation in electric prices are simply supply and demand, but I'd like to show you a quick chart. And I tried to choose these charts carefully. This chart is a diagram of the daily power exchange price comparison for 1999 and 2000.

Mr. BILBRAY. Excuse me, Mr. Chairman. You're going to have to hold that higher because—thank you.

Mr. GUILES. Do you see that all right now, Brian?

Mr. BILBRAY. Yeah.

Mr. GUILES. It's a price comparison for 1999 and 2000. On the left-hand side is the average daily power exchange price in dollars for megawatt hour, and on the bottom, the actual scheduled megawatts of average PX daily load.

And the point I want to make here, the blue on the bottom is the prices for 1999, and on the red or pink, if you will, magenta, is prices for 2000. And if you take a look at that, I mean, the prices for 2000 are far above the level necessarily, we think, to achieve a reasonable return, attract new generation, and it's compelling evidence, in our judgment, that the market is broken, if you look at the prices that have been charged in 2000, the summer of 2000 versus 1999.

If you look at some of these rates, we saw 4 cents a kilowatt hour in the summer of 1999. We've seen rates in the 18, 20-cent and above range for the year 2000, a fivefold increase in prices.

And increased generation in the region has been talked about today, as frequent threats of service interruption. California this summer has made clear, in California, supply has not kept pace with demand. To compound matters, the approval process for siting has historically been cumbersome. And I include both generation and transmission of that.

We're hopeful that recently passed State legislation which was signed by the Governor will help bring on line new plants and increase the availability of supply, both generation and transmission.

But as the chart we put up here suggests, supply is not the only factor in creating or mitigating the current crisis. We have a market that's broken. And that market has exacted a heavy toll on energy consumers in San Diego.

It would be a major understatement to say that we've been hearing from our customers. They're angry about the extreme and sudden increase in their bills, and they have every right to be angry.

Unfortunately, SDG&E and its 3200 employees have been the focal point for the community's anger and frustration about deregulation. That's understandable. We realize we share in the responsibility for this crisis. We supported deregulation, as did many other business community and consumer interest groups.

We've also been the only energy supplier that most San Diegans have ever known, because electric costs are carried on SDG&E's bills, even though California's electric restructuring law requires SDG&E to pass on to its customers the wholesale price of electricity without markup. It's not clear to customers that the problem is beyond our ability to fix.

No one anticipated the increase in the price of electricity of the magnitude we witnessed this summer. All of us have been the unfortunate trailblazers in the deregulation of California's electric marketplace.

Along the way, we've encountered spiraling electric prices, limited supplies——

Mr. BARTON. If you could wrap it up. I hate to cut you off, but we've still got two more witnesses.

Mr. GUILES. Okay. Mr. Chairman, California's energy market structure has blurred the roles and responsibilities between the market and the regulators, which has resulted in a system with conflicting rules and regulations. There's been much discussion, and we can talk more about the arrangement of the California Power Exchange and the California ISO.

It's the only State that has this division of roles and responsibilities, and we believe this split is a direct contributor to the inflated

wholesale prices. That's why we've turned to the Federal Energy Regulatory Commission to devise a solution.

Tomorrow we'll testify before the FERC and highlight what we believe the Commission needs to do to fix the dysfunctional market in the western region. While the FERC works to help fix our market, our customers must be protected. So we also believe the FERC must act during the transition to limit prices in the region's wholesale market.

If the FERC's current investigation, which we strongly support, finds that a workably competitive wholesale market does not exist, we believe the Commission must act immediately to intervene in the market to assure that wholesale prices charged by jurisdictional sellers are just and reasonable. Our customers deserve no less.

Congress must——

Mr. BARTON. Mr. Guiles, you really do need to——

Mr. GUILES. All right.

Mr. BARTON. I've given you about 3 extra minutes, and I apologize, but we just have a lot we still have to get through.

Mr. GUILES. Thank you, Mr. Chairman. Let me just wrap up.

Hard decisions need to be made. We urge you to support the FERC to make sure that they have the tools necessary in fixing the market in the western region of the U.S. Thank you, Mr. Chairman.

[The prepared statement of Edwin A. Guiles follows:]

PREPARED STATEMENT OF EDWIN A. GUILES, GROUP PRESIDENT SEMPRA ENERGY REGULATED OPERATIONS

OVERVIEW

Good morning. I am Ed Guiles, Chairman of San Diego Gas & Electric (SDG&E) and Chairman and President of Southern California Gas Company (SoCalGas), both subsidiaries of Sempra Energy.

Sempra Energy is a Fortune 500 energy services holding company whose subsidiaries provide electricity and natural gas services. We believe it is important to work closely with federal and state regulators to provide safe, reliable and low cost service to our customers and a fair rate of return to our shareholders.

I appreciate the invitation to appear before you today to help in your examination of the energy market in San Diego, and to propose options that we believe will address the high-energy prices plaguing our customers. In particular, I applaud Congressman Bilbray for focusing attention on this critical problem, which is an issue of national importance.

I do not use the term "national importance" lightly. For more than a decade, the electric industry has faced uncertainty regarding its future, as various proposals for restructuring have been debated and implemented in a piecemeal fashion. One result of the long period of uncertainty has been a steady and rapid erosion of our national power supply reliability. As new investment in generation slowed, our population and economic growth have continued, sometimes at near record pace. The result has been that our reserve capacity margin has shrunken to the point that in some regions, like ours, a hot day sets off a scramble so that some customers have to be asked to curtail use just to keep the state from suffering rolling blackouts.

The restructuring of the electric industry was intended, in some part, to accelerate investment in new generation. There are signs it is having that effect. Roughly $10 billion in investments in new power plants to serve California have been proposed since restructuring was enacted.

But now we are facing an economic crisis caused by large increases in the generation price of electricity. The pricing markets in California are broken, and the delivered cost of electricity in California is so high that public confidence in restructuring itself has eroded. This is a problem beyond the ability of a single state to solve. Consequently, we have asked the Federal Energy Regulatory Commission (FERC) to

step in and fix what we believe is a problem in the transition to the new system. We're pleased that the FERC has responded, and will hold a hearing in San Diego tomorrow to hear from all parties impacted by recent events in California's wholesale market.

We recognize that a critical part of the operation of a competitive market is the price signal. The price signals we are seeing clearly demonstrate that supply and demand are out of balance. What we are seeing now are prices that are vastly inflated, in large part because the market structure in California is dysfunctional. The current prices are the result of immature and poorly functioning markets. This is a transitional problem, but one that comes with a very human cost to our customers, one that cannot be ignored.

I stress this to you because failure to respond quickly to this pricing crisis may create a political climate in which the solutions will be worse than the problems. Some of the solutions currently being considered will add whole new levels to the uncertainty within the electric system. That uncertainty, and its historically demonstrated effect on investment, threatens to slow or halt the development of new supply that our nation so desperately needs. A failure to act on this pricing crisis would be a step toward greater risk, more uncertainty and less reliability. These are the stakes if Congress and FERC fail to send the signal that the path has been set and that they will not allow the abuse of temporary market imperfections to undermine the commitment to restructuring.

At the same time, I would be remiss if I did not mention the projected increase in natural gas prices and the expected impact that increase will have on our customers and on other Californians. At some point, customers are no longer able or willing to shoulder the burden of high energy costs.

I should also note that in addition to the impact of high prices on residential customers, large industrial manufacturers—the companies that are the backbone of employment for our region—are not immune to the rising energy costs. In fact, some manufacturers have already moved operations to other regions where electric costs are significantly lower. Large employers planning to move to San Diego have put their plans on hold until the energy issues are addressed. And, many small businesses have already closed, and hundreds more are expected to close if change does not occur soon.

Additionally, there is a misperception that the market offers a solution to commercial and industrial customers. Even though larger customers were able to negotiate energy savings by obtaining commodity and value-added services from Energy Service Providers (ESPs), many businesses that negotiated deals with ESPs have had their contracts terminated or have not had their contracts renewed because it did not make economic sense, in light of skyrocketing electric prices, for the ESP to continue to provide services at the negotiated rates.

That's why Sempra Energy has advocated before your committee and Senate committees that Congressional action is needed to successfully restructure the electric market. In retrospect, it was unreasonable to expect that the drafters of AB 1890 would be able to anticipate all of the intricate interstate manipulations that could occur in electric restructuring, which I believe are largely at the core of the problem we face here in San Diego. Unless Congress and the FERC are willing to address the interstate issues that are beyond the jurisdiction of state legislators and regulators, I predict that our experience in San Diego is indicative of what others will encounter in trying to create a competitive electricity market.

In simplest terms, the goal of any system of electric restructuring must be to ensure the availability of and access to reliable and affordable power. However, in San Diego that clearly has not been the result of the current market structure.

ENERGY AFFORDABILITY

One reason that your committee has chosen to hold a hearing here is that the whole concept of electric restructuring is being called into question by the impact of AB 1890 on rates in San Diego. Our customers are the only utility customers in the nation truly subject to market prices for the electric commodity price. SDG&E customers have seen their electric bills double in recent months, as demand for electricity has increased during the hot summer weather. Senior citizens and working families have seen their monthly bills for the average residential customer increase from $55 to almost $130. Many small businesses have seen increases of more than $1000 per month.

Some of you may want to know why this electric price crisis has not yet spread statewide. When AB 1890, the state's electric restructuring legislation was passed in 1996, there were concerns about potential market power abuses by the incumbent utilities. Consequently, in implementing AB 1890, the California Public Utilities

Commission (CPUC) required utilities to sell their electric generating plants. The legislation also allowed utilities to pay off the debt on stranded assets and move to a competitive environment in which the cost of power obtained from the wholesale market would be passed on to customers without a mark-up. Under the state law, each utility had a rate cap until either it recovered its stranded costs or the opportunity to collect the costs sunset in March 2002. Once either condition was met, the utility became exclusively an energy delivery company, and the price of electricity would be set by the market. Because SDG&E sold all of its fossil fuel power plants and paid off the debt on its stranded assets ahead of schedule (in fact far ahead of the state's other two investor owned utilities), it became the first utility in California whose customers pay market rates for electricity.

I suspect that representatives of the state's other investor owned utilities will tell you that if the high commodity costs are not fixed when their stranded assets are paid off in 2002, there *will* be a state wide energy crisis because their customers will *also* face exorbitant energy prices. Right now these exorbitant energy prices are being charged to the state's other utilities, but their customers are not seeing the impact yet because of the AB 1890-imposed rate cap.

The extraordinarily high prices San Diegans have faced this summer suggest that supply bids into the day ahead market are being withheld and then later bid into the "same day" market where everyone pays the highest price bid, when power is desperately needed. Since the beginning of June, wholesale electricity prices in California have increased to levels that often exceed prices seen at comparable levels in prior years. The increase in prices has significantly outpaced the increase in fuel prices and greatly exceeds the cost of producing electricity. The attached chart provides an example of this unusual phenomenon.

Ironically, it is the entities who purchased the generating plants owned by utilities prior to restructuring—companies beyond the control of state regulators—who were intended to be the "fix" for incumbent utility market power who are now charging the exorbitantly high wholesale electricity rates we face today. Although market power was one of the problems AB 1890 sought to address, in retrospect the legislation could not anticipate the ability of market participants to extract remarkable profits from the auction rules in the California market.

The FERC, CPUC and the state Attorney General are conducting investigations into market manipulation. Whatever the outcome of these investigations, it is important to note that it is still possible to exercise market power and increase prices excessively if the market structure is itself dysfunctional, which we believe is the situation in California.

The political backlash in California has been swift. Elected officials are trying to mitigate the prices for the people of San Diego. The proposals have ranged from spreading payments out over time, to trying to undo the whole law. But the ability of the state to act alone is limited, and the continuing crisis is adding a whole new level of uncertainty to the whole system.

- the state Legislature passed AB 265, a bill that would cap SDG&E's customers' bills. While the legislation was well intentioned, we believe that the bill is seriously flawed and are disappointed that the Governor has signed it. We believe that the bill postpones a huge customer bill that could grow to $840 million and come due in 2004.
- Passage of another bill, AB 970, that is designed to streamline the permitting process to less than six months for projects that meet stringent environmental standards. We support AB 970.

ENERGY RELIABILITY

In addition to suspicious pricing practices, California's energy crisis is a result of the convergence of two key factors. First, the region has experienced unprecedented growth, and as a consequence, electric usage has increased exponentially. In just the past five years, more than five million new residents have moved to the region. In addition, the heightened demand due to the state's economic expansion, especially due to heavy energy users like the growing internet industries, have created significant demand growth. Current demand growth levels are about equal to an increase in peak demand of 1,000 MW per year.

To keep pace with demand growth requires two 500 MW merchant power plants to come on line each year. Yet, according to estimates from the ISO, it will not be until the summer of 2003, at current rates of development, that the generation coming on line is equal to the demand growth (assuming that all of the power plants in the permitting queue are constructed on schedule). Thus, until that time, the gap between demand and supply in California will continue to worsen. In hindsight,

California should not have unleashed its full force of deregulation on the consumer until it was more assured of additional generation.

Secondly, despite the growth in population and the resultant increase in electricity demand, no new generating plants have been built in California during the past ten years as industry uncertainty has persisted. Not only does this mean a worsening gap between supply and demand, but the existing fleet of power plants serving California is an older one, with 60 percent of the plants 30 to 40 years old (increasing likelihood of break-downs). Efforts to re-power these plants and make them more efficient have been met with many regulatory challenges.

Legislative discussions about deregulation in California incorrectly assumed that there would be new electric generation capacity built before peak demand would reach current levels. While deregulation has led to a greater willingness by business to invest in power plants, the long lag time in development of the plants means that there is a three to five year period of tight supplies facing the region.

Specifically, the approval process for building new generating plants is a time consuming process, one that can take as long as twelve to eighteen months just for regulatory reviews. In the past, the process has been greatly complicated by environmental concerns that want to slow growth and promote conservation, and local governments that practice "Not in My Backyard" (NIMBY) politics. We are heartened by the passage of AB 970 and the Governor's support of it, and anticipate that the bill will help to respond to the current energy crisis by expediting the permitting and construction of plants already "in the pipe."

POTENTIAL REMEDIES

The unintended consequences that have occurred during the transition to a restructured market threaten the continued economic success of our region. California is facing a crisis. This is a crisis that threatens brownouts and blackouts, which we have come perilously close to experiencing this summer. And California is facing a crisis in the cost of energy. The exorbitant prices for electricity in San Diego are causing widespread hardships, and cannot be allowed to go unchecked. Given California's impact on the nation's economy and as a global economic force on its own, federal action must be taken to prevent the continuation or the spread of this statewide crisis.

While we believe that the benefits of deregulation—lower prices and customer choice—are attainable over time, the system must be fixed to address the unintended consequences that the piecemeal approach has created.

I would like to propose near and long term actions that, if undertaken, we believe will enable Congress and the FERC to successfully navigate through the legislative and regulatory actions taken to date by different states to create a restructured electric market bound by national rules and regulations.

SDG&E ACTIONS

Before I address what we see as the federal government's role in helping to manage the energy crisis San Diegans face, I want to tell you about actions SDG&E has taken to address the problem:

- This summer we provided rebates to customers totaling nearly $500 million that could be used to offset high bills.
- We are trying to smooth out the impact of high price spikes by offering a level pay plan to all customers. Under this payment option, customers pay the same amount every month, regardless of actual electric usage, with a quarterly "true-up." The monthly amount is based on an average historical or regional usage (if historical data is unavailable).
- We worked with the Department of Energy and the White House to secure almost $3 million in Low Income Home Energy Assistance Program (LIHEAP) emergency funds for low-income households in southern California. The funds are double the amount that the affected region currently receives under the federal LIHEAP program. We also encouraged the Administration to direct the Small Business Administration to help San Diego businesses survive this crisis.
- We appealed to FERC to remedy the wholesale electric pricing system throughout the Western region of the United States. While FERC rejected our requested remedies until it performed further fact-finding, it did accelerate its investigation of the California market and is holding a hearing in San Diego tomorrow to better understand the crisis we face.
- We have appealed to Governor Davis and the state Legislature to streamline the permitting process for generating plants and transmission lines, which we believe can be reduced from the present 12 to 18 months to six months, without compromising existing environmental laws. AB 970 is evidence of our success.

NEEDED FEDERAL ACTIONS

While our efforts and state actions have yielded some relief, until the supply of electricity is increased, the only option available to provide meaningful relief to our customers is fixing the flawed wholesale electricity market structure for the Western region of the U.S. This is action that can only be undertaken by FERC.

Briefly, the structure of the California market has blurred the roles and responsibilities between the market regulators, and resulted in a system with conflicting rules and regulations. For example, the Power Exchange (PX) is responsible for hourly, day-ahead markets. The ISO is responsible for transmission and real time energy markets and ancillary services markets. The ISO was never intended to play the strong role it does on price setting. Its mandate is reliability. The fact that the current market has forced the ISO into this role is a significant contributor to the problem. And, the legislatively-inspired retail rate caps in the rest of the state, while shielding customers from the high prices the generators are charging, have inhibited end users from responding to real time energy prices because there is no price volatility seen by consumers. This only makes the problem worse over time.

The serious structural difficulties that face the California market are far beyond the scope of the state's ISO. In fact, recent attempts by the ISO to address the problem—lowering the maximum price it will pay for imbalance energy and ancillary services to $250 per MWh but excluding the larger PX markets—indicate that the panel has neither the tools nor the standing to address this challenge. Importantly, the ISO has yet to comply with FERC mandates to reform its pricing methodologies.

We believe that the FERC should not hesitate to impose a solution, given the apparent inability of the current ISO structure to reform itself. If findings indicate that a workably competitive wholesale market does not exist, FERC must immediately intervene in this market to assure that the wholesale prices charged by jurisdictional sellers are just and reasonable. Regardless of those findings, FERC needs to focus on the structural problems with our pricing market and make the changes needed to ensure that consumers will be protected within a restructured electric market.

Importantly, we urge Congress to monitor FERC's examination of California's market structure, and to ensure that needed reforms are undertaken. While our intention is not to tie FERC's hands or to reregulate the electric industry, some hard decisions will need to be made to create a market that provides lower cost energy and options for consumers as we make the transition to a restructured marketplace. We need Congress to support FERC and hold it accountable for fixing the market in the Western region of the U.S., and for ensuring that the rules that govern the electric industry make sense for every region and do not disadvantage one region at the expense of another. We commend Chairman Barton for his leadership in advancing important legislation that provides many pieces of the solution to the problems our nation's electricity delivery system faces.

Nonetheless, as a response to the serious issues facing our company, we submitted to FERC, and the Commission initially denied, a proposal that would have limited what sellers across the region can bid. As we will testify at FERC's hearing tomorrow, we believe that the FERC should adopt a bid cap approach for those generators that possess potential market power. We look forward to the results of FERC's review.

In the long term, other solutions to this problem may need to be considered to ensure that comprehensive restructuring is undertaken. Some of the possible long-term legislative solutions to be considered include:

- coordinating action by federal agencies to reduce the time and streamline the process to get new generation and transmission lines sited to provide needed generation;
- helping to implement Executive Order 13123 (in turn implementing the program created by Congress in the Energy Policy Act of 1992) to encourage energy efficiency at federal facilities, and
- examining the scope of FERC's responsibilities to determine that the Commission has adequate authority to manage the nation's energy system.

CONCLUSION

Thank you again for the opportunity to offer my views. I have focused primarily on actions that impact the San Diego region, actions to which you can lend your support to FERC to ensure that the deregulated electric market that is ultimately created provides low cost, safe and reliable service. I would be pleased to provide comments in the future if it would be helpful to the Committee, and am pleased to answer any questions you may have for me today.

Mr. BARTON. I want to apologize to Commissioner Wood. I'm not trying to be personally impolite, but we've had several other people that came in today that wanted to testify, and we've got your president of the Commission testifying, and it just wouldn't be fair to these other people to let you say something. We will ask you questions, I promise you, when we get to the question period.

We'd now recognize Mr. Stout, who is Vice President for the southwest region of Reliant Energy for 5 minutes.

STATEMENT OF JOHN STOUT

Mr. STOUT. Thank you, Mr. Chairman.

My company has invested about $3 billion in the wholesale marketplace throughout the country, and about 4,000 megawatts of that investment is located in California. In fact, we just opened up a brand new 500-megawatt power plant just in time for this summer's peak to help serve the California marketplace.

We are one of about six new generation owners who are participating in the California market, and we own about 9 percent market share. Beginning last summer, we began having people approach us indicating that they were interested in trying to lock in power prices for the summer of 2000.

They saw some of the handwriting on the wall that perhaps the summer of 2000 was going to be a very tough summer in terms of power prices. They wanted to make sure they had reliable supply, and they wanted to lock in the price. So we began selling portions of our 4,000-megawatt portfolio to them.

Over the course of perhaps 6 to 9 months, we sold over half of our portfolio in what we call the forward market. Those people locked in price certainty, and they were protected from the price spikes that occurred this summer.

As it turns out, that 5 percent market share that we sold to other participants actually went to about a dozen or more other market participants who are now bidding that power in various markets in the west, not necessarily the California market, but wherever they choose to bid it.

I point that out to highlight the fact that it's not just six generation owners who are supplying this market. There are literally dozens of parties who have bought into the supply in this market and are serving the needs of California.

For next year, we are already being approached by numerous parties wanting to lock in price for next summer. In fact, in the last month we sold an additional 700 megawatts from two people who were interested in locking in those prices. Next summer's supply is going away rapidly as well.

Interestingly, nearly all the power that we sold in the summer of 2000 was at prices less than half of what the market ended up being. Those people got real bargains. Who knows what the summer of 2001 will bring. That's speculation to say whether it's going to be more expensive or less expensive. But the point is, you have to hedge in this type of market in order to protect your customers, in order to give price certainty to those customers.

None of the power that we sold last year, and so far none of it that we have sold for the year of 2001 has been sold to an IOU in California. It's all alternative buyers. We want to be part of the so-

lution. We're trying to make offers and propose ideas that will help the consumers of California.

Just a week and a half ago, we made a proposal to sell energy to San Diego Gas & Electric for 24 months at a fixed price of 5.6 cents per kilowatt hour. To date, we're told that there is no response yet. And, in fact, we're told it'll probably be September 21 before we hear any response to that offer.

But that is an offer that's intended to try and help to stabilize the rates for San Diego and to help the customers of San Diego before they get hit with the same sort of price volatility next year.

I had a number of written remarks prepared, but I think I'm going to diverge from those just a minute and talk a little bit about some of the comments that I've heard earlier today.

It is very important that investigations like this get to the truth, get the facts all out on the table. Because I think when you get the facts out on the table, you'll find that some of the accusations which are being made and fingers that are being pointed perhaps are being pointed unfairly.

A good example is the allegations that we heard just a moment ago of generators withholding capacity from the market. They're supposedly doing so just to drive price up. In fact, there's at least three reasons why withholding occurs in the market for clear business reasons.

First of all, as I said just a moment ago, we have sold over half of our capacity already. We can't possibly bid that in the market. It's already been sold to someone else. In fact, statistics from the PX clearly show that about 6,000 megawatts of supply in California has already been sold in the bilateral market.

Second, we have a lot of units that are constrained in how much they can operate due to air emission constraints. They can only run a certain number of hours per year. If we just bid those in at marginal cost, they will all be used up long before the summer peak gets here.

And then Terry Winter at the ISO, when he looks to get the 300 or 400 megawatts of capacity from those peaking units that have air emissions constraints, he'll be told, "I'm sorry. It's against the law for us to run those units any longer." We have to hold those types of units back in order to make sure they're available to serve peak needs in order to keep from having blackouts in California.

And third, there's considerable financial risk associated with bidding every last megawatt you have into the day-ahead market. That is what we call a financially firm market. And if we were to do that and one of our power plants were to have an operating problem and trip off line, we would be accountable for the financial damages associated with purchasing replacement power.

Those are simple explanations of why withholding apparently occurs, and I illustrate that just to point to how important it is to get to the facts before drawing conclusions as to blame.

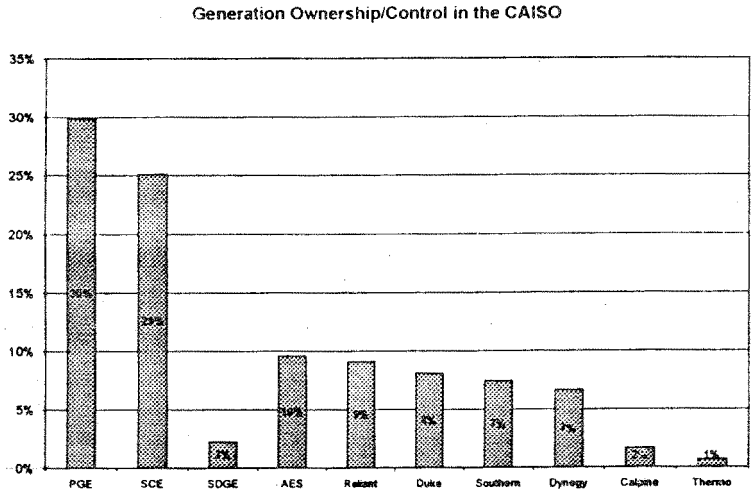
Once again, we want to be part of the solution. We continue to work with all the interested parties in California to try and develop solutions to the problem that we currently face. And I think you've heard a number of excellent recommendations, most of which we endorse, regarding opening the door for more hedging, not requiring everyone to purchase everything through the PX, and putting

proper incentives on retail providers and building a strong retail marketplace in California. Thank you very much.

[The prepared statement of John Stout follows:]

PREPARED STATEMENT OF JOHN STOUT, RELIANT ENERGY

Good morning. My name is John Stout. I have worked in the electric power industry for 28 years and currently serve as Vice President of Asset Commercialization for Reliant Energy. Our company owns approximately 4,000 megawatts of merchant generation, used to serve wholesale markets in California and the southwest United States.



As you can see from the slide, our ownership share in the CAISO market is about 9% of the total load requirement. Because of prior supply commitments we have made through forward[1] markets, we currently have less than 4% market share remaining for participation in the spot[2] markets in California.

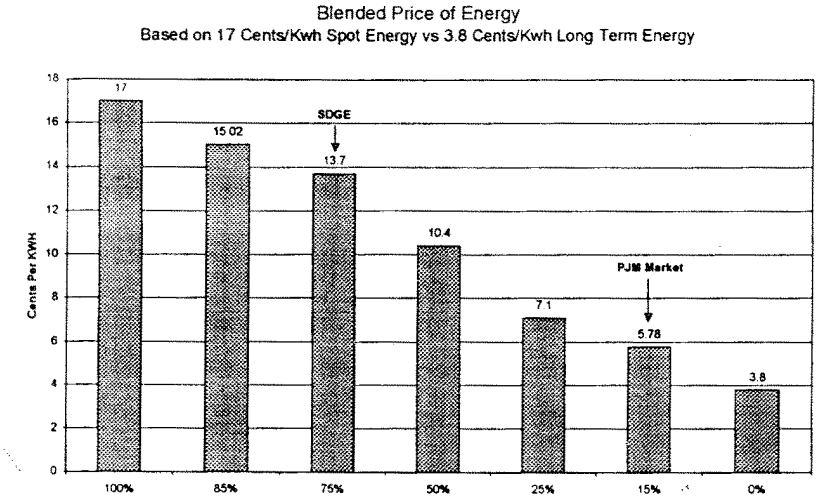
I agree with the comments you will hear from many speakers today that the market in California is flawed on both the wholesale and the retail side. My comments are intended to build consensus on the root causes, not to cast blame or to chase symptoms. But let me say up front that the events that have unfolded this summer in San Diego are not the creation of Congress of FERC. The solution to this situation does not require FERC or Congressional intervention, although those of you here today should be applauded for your willingness to examine this issue and to get the facts on the table.

As this hearing no doubt will disclose, the problems with the California market must be fixed at the state level. In fact, in recognition of this, the CPUC, the Legislature, and the Governor have, in recent weeks, taken positive steps to begin implementing corrections to these deficienciesOn the wholesale side, this market has failed because of too much reliance on spot market energy. Spot markets are inherently more volatile than forward markets and market participants who rely on spot market prices are exposed to dangerous financial risk. Other markets, such as PJM, purchase only about 15% of their energy from the spot market. California purchases nearly 100%. At least three different reasons explain this dependence. First, limits were imposed as to where the incumbent utilities could shop for power. As a result, SDG&E could not purchase NYMEX futures or enter into forward bilateral transactions. Second, limits were imposed on how much power could be bought on an advance basis. That limit was set at too low a level, only 400Mw for SDG&E. Third, a business decision by SDG&E to forgo opportunities to lock in forward prices, on

[1] The term "forward markets" refers to transactions made well in advance of the physical delivery, i.e. a sale for August 2000 power which is agreed to in December 1999

[2] The term "spot markets" refers to daily and hourly transactions made just prior to physical delivery, i.e. the PX day ahead and ISO real time energy markets

hindsight, turned out to be the wrong decision. SDG&E could have locked in prices at one fourth of subsequent spot market prices.



This slide illustrates the impact that less reliance on spot market purchases could have had, based on a estimate that San Diego procured about 25% of its June 2000 energy from resources under its control and the remaining 75% of its energy from the spot market. Assuming spot market prices which reflect the average day ahead energy market price in June 2000 and forward energy prices which reflect the prices which could have been locked in earlier this year, you can see that someone who depends 75% on spot market purchases would have an average energy price of nearly 14 cents a kilowatt hour. On the other hand, purchasing only 15% of energy from the spot market, as is the case in PJM, would have resulted in a blended energy price of less than 6 cents a kilowatt hour.

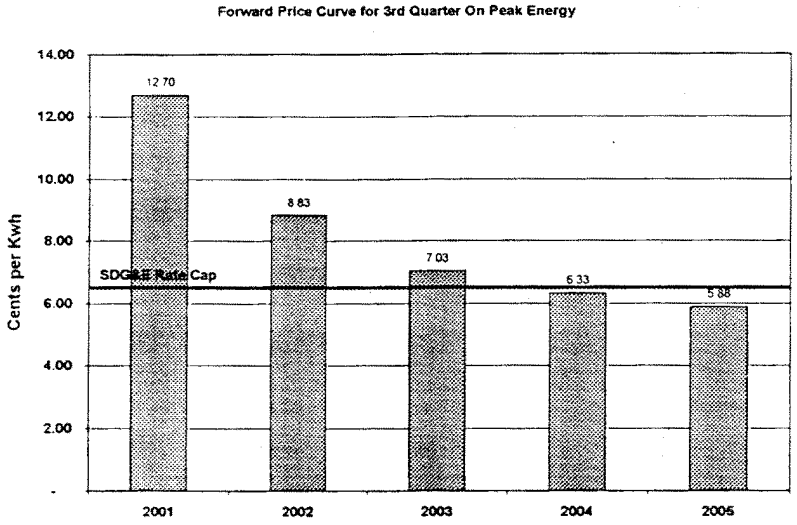
Why is the California spot market experiencing high price volatility? This is the result of a subtle, yet significant change in the way the California market now operates. Under the original "regulated" market, the cost of peaking capacity was recovered gradually across the whole year through monthly demand charges or slightly increased energy charges. Most unregulated markets have a similar recovery mechanism, such as the capacity market in PJM. The California market does not to have such a mechanism. As a result, a merchant generator who supplies summer peak energy in California must somehow recover an entire year's cost during a few hours of actual operation. During 1999, the last 10% of the peak load, approximately 4500Mw, used summer peak generation for only 33 hours. This load shape, coupled with a market design that does not provide other mechanisms for fixed cost recovery, inevitably results in large price spikes. Ironically, summer peaking related costs have always been there, but they were camouflaged by levelized cost recovery.

If those kinds of prices have always been there, why are bills in SDG&E so much higher than ever before? The reason lies with the market rule that all of the base load generation still owned or contracted by the incumbent utilities be sold into, then repurchased from, the spot market. Forcing base load energy to be purchased in a market with high volatility has inflated costs for base load generation such as nuclear, QF, hydro, and coal generation. California consumers are purchasing half a billion KWh per day of base load generation at spot market prices. Other markets purchase most base load capacity through long term forward markets. Simply stated, California residents should not be forced to buy over 40,000 megawatts from a market that exhibits peaking volatility.

On the retail side, a large number of the problems in San Diego are created by a "change in perspective" of the incumbent utility provider. SDG&E has clearly indicated the belief that they no longer have responsibility to manage the energy costs that are passed on to their retail customers. It is not hard to understand how such a perception originated with the current market structure. More importantly, if not fixed, other incumbent utility suppliers may repeat this perception. Once again, this

attitude is the result of a flaw in the policies that established the deregulated market in California. Those policies placed no economic incentives on the default utility providers to look out for the costs that are ultimately passed on to their consumers. Such is not the case in other states which typically have a "price-to-beat." A price-to-beat structure provides a natural incentive for the incumbent provider to manage purchased power costs in a reasonable and prudent fashion.

Another underlying issue with regard to the retail equation is the fact the California has established policy which inhibits the development of a retail marketplace with a healthy portfolio of retail suppliers. This has occurred because of a flawed perception on how to set the price passed on to retail customers. In an effort to produce instant savings, California has set the price expectation so unrealistically low, it virtually eliminates the ability of any third party provider to come in and provide retail service to residential and commercial customers. The prices in the market for the last three years are actually prices set in 1996 and discounted by 10%, arguably equivalent to early 1990 level prices. Furthermore, these prices reflected an artificially depressed rate base that did not reflect proper investment in new generation. Just over one week ago, the California legislature capped rates for San Diego customers at 6.5 cents per kilowatt hour for the next two years.



This slide reflects the current energy market summer prices for the trading hub at Palo Verde, an index commonly used to reflect western markets. One can see how unlikely it will be for a third party retail provider to purchase energy for the next two years at a price at or below the rate cap charged by SDG&E. SDG&E will get special "balancing account" treatment for this below market pricing. Upstart retail providers get nothing. This creates a roadblock for any retail service provider trying to get a foothold in this market.

The retail and wholesale problems which have hurt San Diego ratepayers have nearly every participant pointing fingers at someone else. Accusations of withholding, megawatt laundering, price gouging, and profiteering have been made against Reliant Energy. I would like to respond to each of these charges. I cannot speak for all market participants. My responses apply to Reliant Energy. However, upon completion of your investigations, I believe that you may find them applicable to all market suppliers.

With respect to charges of withholding capacity in order to drive up energy prices, you will find that those charges are untrue. Instead, you will find sound business explanations for why capacity is routinely not bid in the day ahead market. First, our company has sold over half of its capacity to buyers in the forward market. We do so to hedge our risk of having a mild summer with low power prices, as we did in 1999. This capacity is "withheld" from the market simply because it has already been sold and is no longer available for the spot market. Second, one of our units has run out of operating hours because of air emission limitations of only 200 hours of operation per year. It is being "withheld" because it is against the law to run it

any more this year. Several other units are being "withheld" during off peak periods to keep them available for peak periods when unavailability could contribute to a blackout. And finally, we don't bid every remaining megawatt into the day ahead energy market. If we do, and a unit breaks and cannot supply its day ahead schedule, we are exposed to significant financial penalties, often the 3 to 4 times the original revenue of the unit. To protect against this financial risk, we routinely carry an "operating reserve" to cover the loss of our largest on-line unit. We don't do such to drive up prices, we do so to prudently manage our risk. Those reserved megawatts ultimately are sold in the CAISO real time market, because there is no financial penalty for unit contingencies in that market.

Megawatt laundering is a relatively new accusation, caused by the below market price caps imposed by the CAISO. Allegedly, an in-state generator sells to a partner out of state in order to resell back to the ISO during emergencies at prices above the price cap. The theory is that the ISO will be willing to pay over the price cap if the supplier is out of state. Truth is, the ISO has rarely, if ever, paid in excess of the price cap, even for out of state emergency purchases. Second, the laws of physics don't allow the exported generation to simply be stored on a shelf until the ISO needs it back. It has to be used to serve load somewhere. Thus, in order to sell the "laundered megawatts" back, someone has to produce a new megawatt of energy for every megawatt the ISO buys back. This makes for a classic chicken and egg question as to whether or not the sale back into California is coming from the original in-state generation, or from the new source of replacement energy. Reliant Energy does not engage in this type of practice in order to get paid more than the price caps. However, we can recall an occasion when the ISO contacted Reliant Energy during one of this summer's many emergencies, asking if we could do anything to get them some extra energy. We called one of the parties to whom we had previously sold power and asked if we could buy it back. They agreed but only at a price higher that the cap. We agreed to pay the price and buy it back, and when we called the ISO, they said they didn't need it anymore. We didn't launder megawatts, we simply tried to help and ended up losing money. If megawatt laundering conduct is suspected, let's get the when and who so we can get to the truth.

Price gouging is used by some critics to explain why the prices this year appear to jump every time the demand approaches about 40,000Mw. Truth is, the bid curves that have been made public show basically the same supply curve being bid day after day, hour after hour. The last few megawatts are always bid at high prices. That's not just in California, its true in most other markets in the country. What's causing the apparent "gouging" is simply the fact that the market is actually running out of supply and those last few megawatts are being purchased. It is running out of supply *because California is clearly out of supply.* To make matters worse, California buyers keep waiting to the last minute, the real time market, after the rest of the western market has locked up all the moderately priced power, to make their last 10,000 to 15,000 megawatts of purchases. As a result, they are left with the tail end of the supply curve. They know what prices to expect, and yet the market rules and their bidding strategies consistently put them last in line. Its true that sellers can sometimes name their price in such a situation, but only because imprudent buying practices give them that ability.

With respect to charges of profiteering, Reliant Energy has seen substantial profit increases during the summer of 2000. Some of that is due to the doubling of our portfolio with over 4000Mw of additional generation, normal weather compared to the milder summer of 1999, and some is due to the higher market prices in the California market. However, as mentioned earlier, we have forward sold over half of our portfolio for this summer. That means that we didn't get the benefit of this summer's higher spot prices for the portion we sold. Furthermore, we would have made the same profits even if the spot prices had been below normal. What profits we did make, we made according to the rules. We are in business to make a profit but accept the risk that we may not always make one. Making a profit is not improper or unjust. It is the economic signal for us to do everything we can to keep our plants running and to keep the lights on in California. Those profits are also the fundamental mechanism for attracting much needed new generation to the state.

While there is a strong preference to simply point fingers at "out-of-state suppliers" for causing prices to be greater this year than last, we welcome your investigation because we believe when the truth is known, you will find that higher prices are really the market telling you something. California is short supply, and the market has flaws that are magnifying the consumer impact of these market signals. Reliant Energy is committed to work with your investigation and looks forward to the opportunity to be part of the solution.

Mr. BARTON. Thank you, Mr. Stout.

Last, but not least, we want to hear from Steve Kean, who is chief of staff for Enron Corporation, who is a supplier in the California market.

STATEMENT OF STEVEN J. KEAN

Mr. KEAN. Last guy, last panel. I'll try to be fast. I want to thank you for inviting me to speak here.

I think you've heard a lot about the problems today and a lot about the real-life consequences, and I'm going to focus my testimony on the solutions.

First I want you to understand our perspective. Enron is not a generator nor a consumer of power in the State. We buy and sell power. We buy and sell power to serve both our producers as well as consumers, as well as customers.

Mr. BARTON. You have no generating capacity in California?

Mr. KEAN. We have some wind-generating facilities in the south part of the State, but I believe they're all contracted. And we are looking at developing some generation as well. But the point is this. What matters to us is that this market works well. If it doesn't work well, then it doesn't work well for the producers who sell to us or for the customers we serve.

The solutions, one by one. California must expedite its siting process. This is a State and local matter. We have to open up the market to allow new plants to get sited. There's about twice as much capacity waiting to get sited as there is growth and peak demand in California. We need to open it up and let those facilities get sited.

There's a lot of people anxious to blame generators. I think the fastest thing you can do to undermine generator market power is to give them competition. Open it up, let more facilities get sited.

Federal regulators have to expedite the interconnection of these facilities to the grid. It's a Federal matter. We need clear deadlines, we need clear standards so that the facilities that people are willing to build can get interconnected.

State and Federal regulators should remove the restrictions which prevent utilities from purchasing outside the exchange. Last winter, if you wanted to buy power for this summer, you could have bought it for 50 bucks, and you would have had a lot of producers who would have been tickled pink to sell it to you for that.

It's ridiculous that every last megawatt that a utility purchases is forced to go through an exchange, forced to go through a single market when there are competitive venues available.

Federal regulators must ensure that all transmission into, out of and inside the State is available on a nondiscriminatory basis. This is particularly important at the seams. There are some issues which make it more difficult to move ancillary services in particular from the northwest United States into California. We need to examine the seams, and we need to open up the system so that transmission is available so we can get power from where it is to where it's needed.

The information that's available to the ISO and the Power Exchange must be made available to everybody. If market participants know how the system is loaded, we know where the constraints are and we know what temperatures are and what loads

look like, we can help find solutions to problems. We can have 50 hands and 50 heads searching for solutions rather than one or two.

And customers should be encouraged to choose. Many are. Those customers who chose us are doing fine. They've got fixed price power. We went out and hedged our position in the marketplace by buying from producers, and our customers and shareholders are fine. Customers should choose and should be encouraged to choose.

I want to extend this a little bit to the national arena. I think California is just the first and probably not the last of disruptions we are going to see. And a lot of the solutions that we need are the same. We need the Federal Energy Regulatory Commission to finish the job of opening up transmission access on a nondiscriminatory basis so we can get power from where it is to where it's needed.

We need interconnection standards which are clear and straightforward and allow generators to overcome sometimes—not in all cases, but sometimes—utility incumbent foot-dragging when we're trying to get new supply on the ground.

FERC must also require the Nation's transmission on the utilities to join the regional transmission organization so that we can make sure the transmission is provided on an ongoing nondiscriminatory basis.

The problems that we're observing in California and that we're going to observe, I think, with increasing frequency in the rest of the country are not going to be solved overnight. We need policymakers both at the State and Federal level to act quickly so that we can put these solutions in place. Thank you.

[The prepared statement of Steven J. Kean follows:]

PREPARED STATEMENT OF STEVEN J. KEAN, ENRON CORP.

DESCRIPTION OF ENRON

Enron develops and operates networks primarily in energy and communications. We combine physical assets and contracts to make markets in energy and related commodities as well as bandwidth.

Enron is the largest buyer and seller of electric power in North America and participates in power markets throughout the world.

Our perspective on the current issues is a uniquely objective one: we buy and sell power so we are neither a net generator nor a net consumer. We make markets in power to allow us to serve both producers and customers. We sell protection from price volatility to both producers and customers. Consequently, our interest in California's power market (and the rest of the power markets we participate in) is to ensure that markets work effectively. That's what enables us to do business.

Enron believes that it is time to fix the problems in electric markets, not time to fix blame.

My testimony will address the California situation as well as the national situation. California is just the latest problem area in U.S. power markets and, unless policy makers act quickly, it will not be the last.

I will identify what happened, what the problems are, what the solutions are, and finally what state and federal policy makers can do to reduce the barriers to those solutions.

CALIFORNIA

The problems in California this summer (spiking prices and threats to reliability) have straightforward causes. Let's look at the facts:

- A booming economy has increased power demand in California and throughout the West.
- It is very difficult to site new power generation facilities in California, so supply has not kept pace with demand (even though suppliers have proposed to build about twice as much new capacity as needed to meet peak demand growth).

- Hydro capacity from the Northwest has been lower than in recent years, thus sharpening the problem this summer.
- There is still very little demand response to rising prices. In a typical market, price increases will be met with a demand response. Electricity is no different. There are customers, particularly certain larger commercial, institutional and industrial customers, who have flexibility in how much and when they consume. Their flexibility to reduce demand at critical times brings overall market prices down. Inflexible tariff and contract structures prevent much of that demand response from materializing because too many customers with flexibility do not get price signals that trigger conservation.

In summary, growing overall demand, inability to add supply, and an absence of a demand response as prices rise, create price spikes and shortages.

An added fact compounded the California situation: utilities, who still control most of the residential load in the state, were restricted in their ability to hedge. Just as suppliers are begging to site new generation to meet demand, many suppliers offered San Diego Gas & Electric Co. the opportunity to purchase power at fixed, predictable rates for 4-5 years at costs below this summer's prices. Unfortunately, SDG&E's ability to consider those offers is restricted. So, customers in San Diego not only see the effects of higher prices, they are also left exposed to price volatility—the unpredictable rise and fall of prices.[1]

The solutions in California are similarly straightforward:

New power plants must be built and interconnected

Customers must be permitted to "hedge" to eliminate their price risk.

Customers should choose competitive providers (and more are because of this summer's events). Competitive providers do a better job of managing demand as well as supply and protecting customers from price volatility.

The state and federal actions required to let these solutions through include:

California must expedite its siting process.

Federal regulators must expedite the interconnection of these facilities to the grid.

State and federal regulators should remove the restrictions which prevent utilities from purchasing outside of the Power Exchange.

FERC must ensure that all transmission into, out of, and inside the state is available on a nondiscriminatory basis.

Information available to the ISO and Power Exchange must be made available to market participants so that they can search for and implement solutions.

NATIONAL

California is just the latest of several disruptions in U.S. power markets and, unless we act quickly, it will not be the last. Reliability problems and price spikes have occurred with increasing frequency across the country. Some of the underlying causes are the same (e.g. higher demand spurred by economic expansion throughout the country).

To prevent reliability and pricing of power from becoming a problem throughout the nation, policymakers must act now. Power plants are not built in a day.

The solutions which will prevent local emergencies from becoming a national disaster are straightforward:

New generation must be built and interconnected.

The interstate transmission system must be opened to enable power to move from where it is to where it is needed.

Customers need to be free to choose. Choices mean not only lower prices but greater innovation in products and services which can reduce demand at critical times.

Policymakers need to remove the barriers which inhibit these solutions. Federal lawmakers should enact comprehensive legislation to enable all Americans to choose their power provider and to provide them with access to the nation's interstate grid. In the meantime, the Federal Energy Regulatory Commission must act. It must fully unbundle transmission service and provide for nondiscriminatory access to that service. It must ensure open access transmission through the "seams" (the administrative borders separating parts of the grid). It must also expedite the interconnection of new generation with clear rules and deadlines to prevent footdragging by utilities who don't want to connect with competitors' generation. FERC must also require the nation's transmission owning utilities to join Regional Transmission Or-

[1] San Diego customers are exposed to this volatility because rate caps which were part of California's legislation expire once stranded costs are fully recovered. San Diego's stranded costs have been fully recovered, so wholesale market prices were passed through directly to customers.

ganizations which will ensure that this access and interconnection continue to occur on a nondiscriminatory basis.

The problems we are observing in California and other markets will not be solved overnight. Policymakers need to act now so that market participants can begin putting the needed solutions in place.

Mr. BARTON. Thank you, Mr. Kean.

The Chair will now recognize himself for 10 minutes. Before I do that, after my question period, I'm going to leave to go to the airport. I'm going to turn it over to Congressman Bilbray to chair the rest of the hearing this afternoon.

My first question is—I'm going to direct it to the chairman of the FERC, but the other three commissioners, if you want to answer, can also. We've heard quite a bit of talk about hedging and long-term pricing and energy markets. What's the FERC's estimate what the natural gas well head prices are going to be next July? They were between $1 and $2 last year. They're around $4 this year. I want to go on record as what they're going to be next summer when all these peaking demand units are using natural gas to clean burning fuel is.

Mr. HOECKER. Well, this isn't an official commission estimate, but the futures for December this year are already five dollars plus, and I expect that there will not be a price response to increased drilling and supply for several months. So I would imagine the price is still going to be fairly expensive next summer.

Mr. BARTON. The rest of the commissioners—I tend to agree.

Ms. BREATHITT. I agree with the chairman's response.

Mr. BARTON. But no one would want to stake your life savings on specifically estimating what the price is going to be within 10 cents in MCF next summer, would you? Anybody here want to—Mr. Hébert, you're willing to do that?

Mr. HÉBERT. No, sir. Not my life. And it goes to the point—and I know the point you're trying to make is that we have changed really the direction of fuels and what we're doing especially with natural gas, and we've got to have adequate EMP and infrastructure to make sure that we've got opportunities in natural gas.

It's no longer a market that shoulders seasons because we're converting it into electricity. So the shoulder seasons when we inject are no longer with us, so fuel prices, I think, are going to get worse, not better. That's my forecast.

But also, while I've got the moment, I grew up with a Bill Bray, and every time I see Congressman Bilbray, I want to call him Congressman Bray, so I apologize. I caught myself last time I said that.

Mr. BARTON. We thought that's the way Mississippians talked to Californians.

Mr. BILBRAY. That's okay. My father was named Hubert, and he went by Bill just to avoid it, so——

Mr. HÉBERT. There you go.

Mr. BARTON. Well, my first point is, you know, it is obvious it's a good thing to let the market here in California begin to hedge and buy in the foreign market. But that's no guarantee of lower prices next summer, because we don't know where the energy market is going to be. Oil prices right now are about $36 a barrel. Natural gas prices have doubled at the wellhead in the last 6 months. Hopefully, it'll go back down, but they could go higher.

Mr. HÉBERT. But Mr. Chairman, that's only part of the question because the entire question is the difference in the spot market and the forward market itself. And if you look at what the spot market was on the given day that they could have hedged and what they——

Mr. BARTON. I understand that.

Mr. HÉBERT. [continuing] ended up paying, there's a huge difference in the two. So your expertise has to be in the forecasting of those forward markets. And if you guess wrong, which has happened here and has happened in other markets, your rate payor is going to pay for it, and that's what happens. So it is a part of the equation.

Mr. BARTON. It is part of it. And I'm on record in saying I think we ought to allow more hedging and more forward pricing and you know, forward purchasing and all that, because until recently here in California, they weren't allowed to do that. So it's a step in the right direction.

Mr. HÉBERT. Absolutely.

Mr. MASSEY. Mr. Chairman, if I might comment. It seems to me that a power purchaser wants the flexibility to have a balanced portfolio of short-term and long-term supply. And regulatory policies ought to promote that mutual fund type of approach.

Here in California thus far, there's been too much reliance on a volatile market of last resort, the spot market, so all of us want to encourage purchasers to hedge, and yet I think what we're looking for is a more balanced approach of long-term and short-term supply.

Mr. BARTON. Now, I want to ask Commissioner Lynch or Mr. Wood. Your testimony, you talk about an average monthly price of 17 cents a kilowatt hour in June, 12 cents in July, 18 cents in August. Are those retail prices here in San Diego?

Ms. LYNCH. Yes. They're actually prices statewide for energy, just the energy component of that.

Mr. BARTON. Statewide.

Ms. LYNCH. That's right. But the only people who are actually paying it are the San Diego folks, because the rest of the State is under a legislatively mandated rate freeze.

Mr. BARTON. Then let me ask Mr. Guiles.

Mr. GUILES. Yes, sir.

Mr. BARTON. Mr. Guiles. Excuse me. What are the prices that the San Diego homeowner or small businessmen have paid in June, July and August? Do they pay 17 cents a kilowatt hour in June and 12 cents in July and 18 cents in August or do they pay some percentage of that?

Mr. GUILES. Mr. Chairman, they have been seeing bills that passed through the full commodity price for the energy, plus we have a base rate that's slightly declined, but that's a base rate for the distribution facilities. So the rates have been in total much above 20 cents a kilowatt hour.

Mr. BARTON. So they've been higher than that.

Mr. GUILES. Absolutely.

Mr. BARTON. San Diego, since you're at the center of the fire storm, you're not a generating utility, are you?

Mr. GUILES. That's correct, sir.

Mr. BARTON. Do you have any generation at all?

Mr. GUILES. We have some contracts, if you will, that are generation-related contracts, but we no longer own any generation. SDG&E does not.

Mr. BARTON. Okay. So you're a distribution utility.

Mr. GUILES. We are——

Mr. BARTON. You buy through this Power Exchange or the ISO, and then you sell whatever you buy, but you have to pass through the commodity cost.

Mr. GUILES. Right.

Mr. BARTON. Now, I've gotten a different answer to this question. I'm still told today that—some of the folks from the first panel said your utility now has the right to go into the futures market, and you also have the right to enter into bilateral contracts. And I've had somebody else at the staff level say that's not true.

To the best of your knowledge, what can your company do today in terms of bilateral contracting and hedging in the futures markets?

Mr. GUILES. Well, let me real quickly go back. We are not allowed any bilateral contracts. We have asked for the authority to enter into bilateral contracts. So presently today, we buy 100 percent from the California Power Exchange. We have had the ability since last summer to buy forward for about 400 megawatts, which is about 10 percent of our supply on peak in the summer, and then we have had the ability since August 3 to increase that amount up to 1900 megawatts, but that's in the block forward market that's administered by the California Power Exchange.

Mr. BILBRAY. That's what you asked for, though.

Mr. GUILES. Pardon?

Mr. BILBRAY. But that's what you asked for, the authority to do that. Now, why did you——

Mr. GUILES. We've asked——

Mr. BILBRAY. [continuing] only ask for that percentage?

Mr. GUILES. For 1900 megawatts? Well, that's essentially about half of our load on peak. And so we felt that that was a substantial amount. Looking forward, the amount to hedge forward.

Mr. BARTON. But now, this bilateral contracting authority, you have a request to the California PUC; is that correct?

Mr. GUILES. Yes. Yes, sir.

Mr. BARTON. It doesn't have to go to the FERC.

Mr. GUILES. That's correct. We have a request for authority. And perhaps President Lynch would like to comment.

Mr. BARTON. When do you expect to make—I can't ask you what your decision is going to be, but what's your time table for making that decision on this pending request?

Ms. LYNCH. Our time table is as soon as possible, as San Diego Gas & Electric just applied for that authority, unlike the other utilities which applied several months ago.

Mr. BARTON. Okay. So you have a feeling in the next month that you can make a decision, the next week?

Ms. LYNCH. It's my understanding that we'll be taking up this matter at our next meeting on September 21.

Mr. BARTON. Okay. See, that's why it's good to have all you all folks here. We have the feds and the State and the petitioner.

Sometimes we can just kind of expedite things by getting all our friends together here. It's a good thing.

I want to ask Chairman Hoecker, San Diego has basically asked the FERC to come in and take over. Now, I'm putting words in San Diego Gas & Electric's mouth, but that's kind of a layman's interpretation. Do you really think the FERC ought to come in and supersede California law that was passed by the California legislature?

Mr. HOECKER. Well, you raise a very interesting question. I know that SDG&E asked us to impose a cap on bids. We effectively have imposed a cap on the market, but if you go down the list of issues that have been raised this morning about what potential causes are in the market, the Commission's responsibility relates to some of them, the CPUC's responsibility relates to some.

But to make structural changes in the market—for example, the remark that was just made about the PX and the ISO being separate, for us to look at that and make a judgment that the market would be more efficient and more in the public interest to combine those two institutions, I think would require us to preempt AB-1890 and the provisions of the California statute.

There may be instances where we might be willing to do that, and I think we have to follow the trail of facts in our investigation and see what makes the most sense in terms of market structure and to act on that in the interest of California rate payers, but also rate payers in the last——

Mr. BARTON. That's a real long answer. Now, you do think you ought to supersede California law or you don't think you ought to supersede——

Mr. HOECKER. I don't come to the table with that as a position, but I think we need to make the most reasonable decisions, and if we find that the California legislature has structured the market in a way that doesn't work and that those features are FERC jurisdictional, then I think we have——

Mr. BARTON. Let me ask you a straight, point-blank question. Do you think the FERC has the authority under Federal law today to change the way the Power Exchange in California does its bid system?

Mr. HOECKER. Yes.

Mr. BARTON. Okay. Do the other Commissioners agree with that?

Mr. HÉBERT. Absolutely. Yes.

Mr. BARTON. Okay. My time has expired, but I've got two more questions. I want to ask President Lynch to define market power for me. Because in your testimony, you say the problem is market power being exercised by these unknown generators, so define market power for me.

Ms. LYNCH. I'm just going to give you a common definition. The economists and all sorts of other folks have various structural definitions for that. But to me, it's when a generator or a collection of generators can set the price on the margin for energy at any particular time.

And given the way that the PX pricing works, I just want to clarify what some of the speakers this morning said. The last highest bid is paid to all. No matter what those folks bid at, everybody gets the highest bid. So given the way that market structure works——

Mr. BARTON. You can change that. That is set by the California law. That's not set by the generators.

Ms. LYNCH. I appreciate that, but because the California market works in that way, the person who is able to control that last bid gets to control the price for all.

Mr. BARTON. So that one person, some little bitty generator, Barton Generation, who has 100 megawatts has got—I am the market power demon if I'm the last one to bid into that market?

Ms. LYNCH. I don't think necessarily you're the demon, although sometimes it can be a small amount of generation that can control that price. But in general, you've got generators who have several plants, and by determining which of those plants are going to run when and how much they're going to bid in at various prices, they've got the ability to make that price go higher.

Mr. BARTON. Now, let me ask as my final question Mr. Stout and Mr. Kean, according to President Lynch, your group has got this tremendous market power. Now, how often do you all collude with each other to set these extremely high above-market rates so that everybody else in the bid curve gets them? Is that a daily conference call or is that a——

Mr. STOUT. I can't speak for Enron, but Reliant does not participate in that activity.

Mr. BARTON. You don't. Do you——

Mr. KEAN. We didn't even collude on the answer. My answer is never too.

Mr. BARTON. Explain, because obviously President Lynch puts this in writing, so she's fairly serious about that there is market power, even though California went to great lengths, it required divestiture of the incumbent utilities to divest their generation capacity. By your own testimony, most of the independent generators are not selling into the Power Exchange. They're in bilateral contracts. It seems to be a very diverse market, but it also—the way the bid system works, it appears to be very imperfect.

How—as either Mr. Kean or Mr. Stout, whichever—probably Mr. Stout, since you're on the operational side, and I don't think Mr. Kean is in the operational side of Enron. You have a fixed amount of assets. You try to maximize your return on those assets. You want those assets being used rather than unused to maximize returns. So how do you determine generally what to bid into the Power Exchange if you were to do that?

Mr. STOUT. As a general rule, we do bid our marginal cost into the Power Exchange in order to optimize the volume that we placed in the Power Exchange. But in the California market, as is in the case in virtually every market in the country, the bids that go in on the supply side of the equation tend to tail up for the last few hundred megawatts or thousand megawatts. That's the market trying to establish the value of supply in the market.

As was discussed earlier, the intersection point between the demand bid and supply bid sets the price in the market. We expect that the supply, if it does not want to purchase power at those higher prices, will actually bid a lower price curve that intersects at a lower price.

So that's simply a test of the market to see what the value of the energy in the market at that particular point in time is.

Mr. BARTON. But have you ever participated in a dialog or a conference within your company where the decision was made to withhold power from the market intentionally to get a higher price the next hour?

Mr. STOUT. Absolutely not.

Mr. MASSEY. Mr. Chairman, may I comment on this——

Mr. BARTON. Sure.

Mr. MASSEY. [continuing] point?

I think the problem is, in times of scarcity, there is very little risk of nondispatch if the bid is high, because virtually every generator will be dispatched. And I believe that all market participants know that, and I think it affects bidding behavior, and I do believe that this amounts to market power.

Mr. GUILES. Mr. Chairman, may I make a comment on behalf of SDG&E on this?

Mr. BARTON. Sure.

Mr. GUILES. Well, we brought the proceeding to the Federal Energy Regulatory Commission, you know, from our point of view saying that the market, in our judgment, is not workably competitive. And I'd like you to just keep in mind before you leave this graph. This is a scatter diagram that shows over the load range.

I ran plants for about 15 years, and what that chart is telling you, if you look at 1999 prices and you look at 2000 prices, throughout that load range, even with low loads—I'll give you an example. On August 23, 1999, the demand in the State was 41,000 megawatts. The price early morning, midday and evening was in the 2.1 to 4-cent per kilowatt hour range.

This summer on that same day, with a load of 38,000 megawatts, the price in the morning was 10 to 19.5 cents, 22 to 25 cents or 13 to 25 cents in the evening. This is not a rational market. It's not working. It needs to be changed.

Mr. BARTON. Well, unfortunately, I have an airplane to catch. I'm going to turn it over to Congressman Bilbray to chair the rest of the hearing.

I just want to say before I leave, we really are trying to find what the facts are here. We do not want the situation in California that exists in San Diego County to be the norm. I mean, it's obvious that something has happened out here that's different, and it's caused tremendous price fights that flow through the retail consumer, and that's simply not sustainable.

So we want to at least understand what the facts are before we can determine what, if anything, we can do at the legislative level in Washington, DC. And I think the FERC's hearing tomorrow is going to be very important to try to help establish the facts out here.

And I also happen to think that the State PUC—the country is going to be watching what you all do the next couple months out here. So, you know, I intend to be in the Congress next year, I intend to be Chairman of the Energy and Power Subcommittee, and I intend to move Federal legislation at the Federal level for comprehensive restructuring.

So I'm going to be very interested in the California experience. And any of you come to Washington, I'd love to sit down privately

and talk to you. And we'll probably do a public hearing on this as a follow-up in Washington also.

With that, I'm going to turn it over to Congressman Bilbray for the rest of the hearing and recognize Mr. Shadegg.

Mr. HUNTER. Before you go, thank you for coming out here and taking this time. We appreciate it.

Mr. BARTON. This is just a first step.

Mr. FILNER. Thank you for allowing Mr. Hunter and I, who don't serve on this committee, the opportunity to join.

Mr. BARTON. It's important to develop the facts.

Mr. BILBRAY. Mr. Chairman, it was important that you found the time to come out and actually see what—and putting together this panel. And I'm not going to discount the previous panel, but I think that anybody who is listening to this testimony realized the way the hot potato is being—bouncing back and forth, and that the California or San Diego consumer is saying, you know, "We have people in front of us who probably can address this issue in the short—maybe not the long term, but at least in the interim."

And your coming out here from the east and helping us out here was essential, and I appreciate the fact that you've been involved with it.

Mr. BARTON. If you'll come forward and continue the hearing.

Mr. BILBRAY [presiding]. Okay. Let me sort of jump into this, and we'll try to dialog. I guess I'll start off with Mr. Hébert. Hébert. My wife is from Picayune, Mississippi, so I wish she was here so she could translate for me every time you give a presentation.

But you were—I was interested in the—and I apologize to the FERC because this is sort of my chance to be able to plead for the people of San Diego County before you. The fact is is the discussion of Shelby, New York, Mr. Hébert, saying that 6 months the ability to put on line. I don't know. Do you know if that's a nonattainment area, according to the Clean Air Act of the Federal Government?

Mr. HÉBERT. I don't specifically know. My thought is that it—I think it is not, but I'm not certain of that.

Mr. BILBRAY. I mean—and that's—there are whole—as an ex-Air Resources Board member, as Madam President understands, that puts in a whole new bunch of hoops in there. But even if the State wanted to waive it, the Federal Government is on top of it.

And I say this to the FERC commissioners that understand that the Federal Government has an obligation to participate proactively because we do create barriers. It keeps the market from being able to compete. The State does it too and actually creates defenses for the big guy from little guys being able to get on line that Commission Hébert was saying that we need these guys to come on line.

I just hope you're sensitive tomorrow of the fact that this is not an open market and that the Federal Government is part and parcel to creating sanctuaries for certain power generators from legitimate on-line competition. And we hope to tear that down.

And all I've got to say is, Commissioner, if you look at those rates up there, I hope you take a look at that, and under our obligation of the Federal Government to do oversight, because that's one of the big battles that we have on the commerce committee that I may agree or disagree with the subcommittee chairman on,

and that is how much oversight and the safety valve that FERC should create on this. And I guess this will be a real test there. Mr.——

Mr. HÉBERT. A couple of things real quick, Congressman. I think you're absolutely right. And this is where we kind of get lost in just kind of looking at the horizon and not looking at everything else.

It's the big energy picture. It's not just what electricity is costing San Diegans right now. It's what it's costing everyone throughout America. It's what we're doing on hydro-electric situations. It's what we're doing with natural gas. It's what we're doing with electric transmission. It's what we're doing with the siting authority. It's what we're doing with Kyoto. It's the big picture.

And individually, what people love to do is they love to do one thing that is really minuscule when you single it out. And they say, "Well, this doesn't harm the market by itself." But when you throw all these together, Congressman, it is a recipe for disaster, and that is exactly why we are where we are. We've had a failed energy policy. We've got to rethink this, and we've got to move forward.

And one of the things that we can do here, if we're willing to embrace it and take difficult steps, is to look at these market rules and see what we do need to change about them. Look at performance-based rate making. Give some reliance, give some sharing between consumers and the energy company when there are bad situations.

These prices, you can look at them, look at the one—what is it? I can barely see it. Maybe 375. What I would love to know is what that cost a year out if you could have hedged it. What could you have paid for it that day. And that's why the hedging market is important.

So it's the overall scheme of things. We need to look at the big picture, and I think you're doing that.

Mr. BILBRAY. I just ask, as you review this item tomorrow, that you understand that this is not just regulatory reviews, but the State needs to change. The majority of the population of this State is under Federal mandate on air nonattainment areas between San Diego, Los Angeles and Sacramento.

And the fact is is that the largest percentage of the population in the State lives under rules that the rest of the country doesn't live under, and those rules have an impact on the ability to have infrastructure within the State.

And even if New York is nonattainment, you don't have 65 percent of their emissions being mobile sources and a small percentage being stationary sources. That's why the proposal at Otay Mesa is going—is actually going to convert trucks as a way to be able to get the emissions offset. This is the extraordinary effort we're making. I just ask you to be sensitive to that.

I do want to compliment you, Commissioner, on saying that the FERC wants to work with the State. I mean, frankly, I've got to say this, Madam President, the argument of, "Well, we can't do anything. We're going to throw the ball in to the FERCs," I hope that we get a reciprocal agreement here that the PUC is open and available to work with the FERC, and the FERC needs to look at the fact that the State is here to cooperate at doing whatever is possible.

Now, I would ask to go back on the issue to SDG&E. What percentage of your projected power needs are you asking from the State PUC for prospective purchase?

Mr. GUILES. Congressman——

Mr. BILBRAY. I mean bilateral purchase.

Mr. GUILES. Yeah. Looking forward, we have a request before the Commission for up to 1900 megawatts, which would be just about 50 percent of the summer peak demand.

Mr. BILBRAY. And my question to you is, that's what you think you might need. Do you have any projection you might need more than that?

Mr. GUILES. Not at this time, no.

Mr. BILBRAY. See, I'm just saying, if I was going in to ask, I'd be asking at least 10 percent of what I think I need, just in case, so we don't come back and say, "Oh, I just don't have it clear."

Would the Madam President of the PUC, would you comment on that or your perspective on it? Either one of you.

Mr. WOOD. Thank you. Congressman Bilbray, I'd like to make a more general comment about all of the talk about——

Mr. BILBRAY. I'll let you, but it's basically because the chairman didn't let you.

Mr. WOOD. Thank you. Well, it's not going to be a general comment about everything, but about the issue of hedging. I think we need to put that in a little bit of perspective.

The purpose—as the chairman pointed out at the very beginning of his remarks, he said that the purpose behind deregulation was not supposed to be to create higher prices. That wasn't the goal. And certainly, I think we would all agree that that was never the stated goal of anybody. And yet we've come out of it with very significantly higher prices this summer in San Diego.

We've heard testimony here today to the effect that it might have been—or it would have been possible months ago to purchase forward contracts for August at a price of a little over 7 cents a kilowatt hour, 70 cents a megawatt hour. I've heard some other numbers bandied around that were in that range.

Had anyone, at the time that AB-1890 were passed, or even 2 years ago, even a year ago, suggested that it would be appropriate for the Public Utilities Commission to sanction or approve rates for energy of 7 cents a kilowatt hour, we would have been run out of town on a rail.

And the only thing that makes those rates—those prices look in any sense reasonable—because they're significantly larger than the average cost of generation by anyone's measure. The only thing that makes them look reasonable is that we have this out-of-control market in which market power is clearly being exercised to produce prices that are maybe five times what the actual costs of generation are.

Therefore—the point of all of this is that while it may be that we can reduce the volatility of these markets very significantly by the use of forward contracts and other hedging mechanisms, all of the discussion so far has been about producing prices that are significantly higher than those that existed prior to deregulation.

I would refer you back to the testimony that I gave before this subcommittee on June 19, 3 years ago in which I stated that this

particular commodity market theory didn't apply in the same way that it does for other types of commodities.

Mr. BILBRAY. Okay. Let me—I want to ask, did the FERC have any indication when the State of California came to you that there might be this glitch or this problem or this catastrophe on the horizon? Was there any concern by FERC when the State presented their plan to you that there might have been some——

Mr. HOECKER. When they initially adopted the whole restructuring in 1996, nothing like this.

Mr. BILBRAY. Nothing. There was no concern about the—about how the clearinghouse was going to be used or the spot market issue?

Mr. HOECKER. We dealt with setting up these institutions initially and 30 very complicated amendments to their tariffs and their rules. This has been anything but a simple process. It's been very labor-intensive for the Commission and its staff.

Our theory going into this is that we would take AB-1890, and in deference to the legislation in California, work through these issues, try and accommodate the basic plan in that statute and to help the ISO, the PX and the CPUC in its activities, get them into our market.

And in many respects, as I think Terry Winter and other people have said this morning, at certain times it's been very good. The prices have come down. Did we, when we granted market based rate authority, anticipate something like this? No. The FERC's analysis was not predicated on what happens in periods of acute shortages.

And as Commissioner Massey says, transitory market power arises in periods of capacity shortages like this, and prices become irrational.

Mr. BILBRAY. When 1890 was brought to you, did you have any concerns with segments of it, or did you think it was just pretty good—a pretty good package overall with no problems?

Mr. HOECKER. Well, we had concerns with segments of it. There was a very lively debate among economists here and around the Nation as to various features of the legislation. But I have to tell you that back in 1996, the adoption through the legislation especially of a regional market mechanism of this kind was relatively unprecedented.

And what we decided to do, since our view is that this market is moving toward competition, and we need to use our resources to help it become a rational competitive market, we determined to work within the constraints of the legislation.

Mr. BILBRAY. Did you—did you communicate to the State your concerns about that segment of——

Mr. HOECKER. We've spent enormous amounts of time with the CPUC, not only with the current president, who's been very good, but past commissioners for the last 4 or 5 years we've worked very close with.

Mr. BILBRAY. Okay. I'm going to yield to the gentleman from the great State of Arizona, which we like to think of as Eastern San Diego County.

Mr. SHADEGG. Thank you, Mr. Chairman. I also have a time constraint, so I'm going to try to get through a series of my questions, and then I apologize, I'm going to have to leave.

I want to thank all the panelists for being here. It's been a great education for me. One of the things I want to just make as an opening remark is that I have heard here today an effort to boil this down to kind of a simplistic effort to blame a bad guy and to say this is all the result of the greedy exercise of power by people who even it's been alleged are criminally violating the law.

Let me start by asking the commissioners from the FERC, do any of you see anything here that would suggest that this is a result of criminal conduct or do you see something here that is more indicative of the market forces that we have created in the combination of the State law, the California Public Utilities Commission and the scheme, which I think, Commissioner Hoecker, you just described as being relatively unique when it was adopted.

Mr. HOECKER. In my view, Congressman, it's the latter.

Mr. SHADEGG. Does anybody want to comment on that?

Ms. BREATHITT. Well, our investigation is ongoing, but from what I've read and what I know and what I've learned thus far, I don't personally see any evidence of criminal behavior. Certainly, there are market flaws that we've all recognized and need to be fixed. And we're going to do that.

Mr. HÉBERT. Congressman Shadegg, just quickly. I was not on the commission in 1996. I came on in 1997, so obviously some things came before us. But there was also discussion always as to whether or not California was moving in the right direction. I think they made some good hard choices. At the same time, we're looking at some different market situations.

I think it would be premature for us to judge whether or not there's been any criminal or even market discriminatory conduct until we get all of the evidence before us, which would be November 1.

But I will suggest that I have been one, as you know, that is always willing to disagree with the majority or the chair and to give some obvious credibility to the chair and the majority of FERC when they acted.

I think, in the beginning, FERC really wanted to give deference to the State of California and kind of let them see where they could go with it. Obviously, I think there have been some problems. We need to get in there and reassess.

I think part of the answers are, move toward performance-based rate-making, give some incentive to do something, and also look at the opportunity to use profit in a good way. And that would be to move away from the ISO like I suggested and toward an independent transmission company, which would be for profit and have every reason to do the right thing and be penalized when they don't.

Mr. SHADEGG. Mr. Massey.

Mr. MASSEY. As others have commented, our investigation is still underway. Every report that has commented on the California market, however, has outlined the points that many witnesses have made today, so many of these flaws are fairly obvious, I think, in the market.

But basically what I see is market participants attempting to exploit the market rules to their advantage. It seems to me that what we're learning is that market rules, market structure is extraordinarily important in electricity markets.

Mr. SHADEGG. The message for me, at least, is that at the national level, we have to do this right. And I guess secondarily that I would hope FERC can play hero in trying to fix it.

Chairman Hoecker just said a minute ago that FERC does, you believe, have the authority to step in and correct some flaws in the State system, which may be leading to this circumstance, and I think that would be—I would encourage you tomorrow at your hearing to look at that as a possibility because there obviously needs to be immediate relief.

Let me—Mr. Massey, let me talk—let's just walk through some of those problems. For example, the shortage of generation and the shortage of adequate transmission and the interconnection problems that we have been talking about, none of those are the result of the power—are short term. All of those have been built up over time; is that correct?

Mr. MASSEY. Yes. It seems to me not much generation has been added in California for years. I hope that is changing. It sounds to me, from the witnesses that have testified, that it is. Interconnection policy must be streamlined so generators can hook up. We have a responsibility at the Federal level to do that, and the State has a responsibility.

I frankly think that siting of interstate transmission facilities should be done at the Federal level. That may be a controversial position here in California, but we do it for natural gas pipelines, and we've sited thousands and thousands of miles of interstate natural gas pipelines, and I think we have a fairly well functioning natural gas market because of it.

Mr. SHADEGG. As we're emerging from a regulated market to hopefully a deregulated market, which with luck or hopefully will produce lower prices for everybody, those problems at least are not caused by the generators, the lack of capacity at this point. Those are regulatory problems stemming from past practices, aren't they?

Mr. MASSEY. Yes.

Mr. SHADEGG. You made a comment, and I wrote your testimony down. You said the rules here in California, which have led to—I believe you called it market design flaws—those rules have allowed market power, in your opinion, to be exercised here. Those are—those are State rules. That's as a result of the structure which California enacted under its State law in 1996; is that correct?

Mr. MASSEY. Many of them are. The lack of hedging, I think, is primarily a result of a State rule. It sounds to me like State policymakers are changing that rule, and I welcome it. I think hedging can mitigate market power in the real time markets. There's no question about it.

The other issue that I emphasize is the lack of the demand side response. I think that is an issue all over the country. It's not unique to California. I think we are understanding that we really don't know what the value of that last megawatt of generation is in the market because consumers can't choose—don't have the tools necessary to choose not to purchase it at that price. And both Fed-

eral regulators and State regulators need to understand this problem and move forward to correct it.

Mr. SHADEGG. I guess I'm glad you went to no demand side response, because I think that's a key part of it. At least in Arizona, what we've done is we've tried to structure a situation where individual consumers can choose between different utilities and give them some ability to exercise some demand-side response.

With regard to no demand-side response, is a part of the problem the fact that these IOUs are compelled to buy all power through this one PX and it can't go anywhere else? Isn't that actually antithetical to the notion of a deregulation market, and isn't that a key message that policymakers in California or policymakers at FERC have to fix?

Mr. MASSEY. I think it's part of the problem. Both Federal and State regulators need to work to create incentives for customers in real time to choose not to consume at a certain price.

It has been suggested that these regional transmission organizations should actually operate demand-side markets that are integrated into supply side markets where consumers that are willing not to consume actually bid negawatts into the market. A negawatt would be as valuable as a megawatt. So I think all our options are on the table. We should explore all of these ideas.

Mr. SHADEGG. And you also made a reference to there being too much reliance on the spot market. It seems to me—I got to thinking about that and trying to understand how the average layman would understand it. When I looked at buying a ticket to come over here today, I had a choice of buying that ticket 2 weeks out or buying that ticket yesterday morning as I got to the airport.

Obviously, I could have gotten a much better price by buying that ticket 2 weeks out to fly over here. And yet, as I understand the structure of the California law, it discouraged that advanced purchasing for—it prohibited it to some degree and discouraged other utilities from engaging in it. Is that——

Mr. MASSEY. The working assumption in California was that the spot market would produce the lowest prices. And I think we now have evidence that that has not occurred. Purchasers should have the flexibility to have a well-balanced portfolio of spot market prices, of medium-term prices and long-term hedging agreements. That is what I think ought to be the goal in a well-functioning market.

Mr. SHADEGG. Just to make sure I understand it, though, the spot market is like the situation when I got to America West or Southwest and want to buy a ticket, if I buy that ticket 3 weeks out or a month out, they have a chance to know how full that plane is going to be ahead of time, and they'll want to sell that for a lower price at that point in time.

If I wait until the day before, I'm going to pay the highest price possible. And you're telling me that the structure here was the assumption that the spot market, the last price would be the lowest price?

Mr. MASSEY. Well, I don't want to speak for Californians, but I think that was the working assumption. Now, spot market prices have been fairly reasonable up until this summer. So the spot market doesn't always produce high prices. If spot market prices had

remained low, then those who had purchased hedging contracts at a high price would be criticized for that.

I don't want to be a broken record, but what purchasers need is the flexibility to engage in a well-balanced portfolio of short-term and long-term supply.

Mr. SHADEGG. Let me ask a different question that nobody has asked today. Clearly, they've had excessively high prices in the summer, and there's been a lot of discussion about that being keyed off of demand and some length of that demand giving generators the ability to exercise market power.

Is there some reason to believe that current structure is going to lead to below-market prices this winter when demand drops?

Mr. MASSEY. The prices in the winter are usually substantially lower than in the summer, but frankly, under this market structure, we do not know what will happen this winter in California markets.

Mr. SHADEGG. I'm sure the gentleman who owned the restaurant chain who was here earlier would like to see his prices go to 900 percent below market.

I have other questions, Mr. Chairman, but——

Mr. BILBRAY. Well, editorial note. Projections are from the Energy Department that the electricity rates will drop marginally, but then the gas rates will skyrocket. So the poor consumer has to get ready for another major hit.

Mr. SHADEGG. If I could ask your indulgence, Mr. Chairman, I'd like to ask one last question.

Mr. BILBRAY. Go ahead.

Mr. SHADEGG. Both Reliant and Enron here, Mr. Stout and Mr. Kean. As I understand it, Reliant at least has made a put offer on the table at—would you say 5.6 cents? Mr. Guiles or Guiles, are you now legally able to accept that? And if so, how long ago were you given that authority?

Mr. GUILES. Not yet, Congressman, but we will be working with the California Public Utilities Commission so that we can be taking a look at that, and once we've got bilateral contract authority approval.

But while I've got the mic, could I comment on a comment you made earlier about the current market structure? And just to set the record straight, when we lifted the rate cap—the current structure, customers can acquire a commodity through energy service providers. Any customer can do that today. We have about 20 percent of our customer load that is currently acquiring commodity outside of SDG&E.

Mr. SHADEGG. Retail homeowner customers?

Mr. GUILES. Sure they can. SDG&E, however, is the default provider, so that if a customer chooses not to switch, then we would provide that commodity to them. So I just wanted to make that clarification.

Mr. SHADEGG. Thank you.

Mr. BILBRAY. Thank you. Yield to the gentleman from——

Mr. SHADEGG. I think Mr. Kean had a response to my question.

Mr. KEAN. I'm sorry. I just wanted to point out real quickly, in other parts of the country, in fact, the default supplier obligation has been competitively sourced. And by that I mean utility compa-

nies have gone out and had the authority in advance to go procure their commodity competitively and get a fixed price for that commodity and insulate their customers from energy price swings. In fact, our customers, including a customer in Connecticut, did exactly that.

So there are options in the marketplace separate and apart from just the kind of deficit spending I think that we're ending up with in the San Diego context. And I know that we, for one company, look forward to San Diego getting the flexibility to procure outside of that context.

Mr. SHADEGG. I guess I'd like to just conclude by saying, you know, I think everybody here is, in fact, playing by the rules. I don't think we have—we in Government have set the rules correctly. I think the people of San Diego are suffering. I think we ought to reject any simplistic notion that there is one person to blame. There's lots of blame to go around. What we have to do is find the solution. And I thank you, Mr. Chairman, for the opportunity to participate.

Mr. BILBRAY. The gentleman yields to Mr. Filner.

Mr. FILNER. Mr. Shadegg, if you are correct that no one is to blame, they just figured out how to play the—use the rules for their own advantage——

Mr. SHADEGG. Well, the State legislature set the rules, Mr. Filner.

Mr. FILNER. I understand. I understand. But what happens to the folks who were victims of all this?

Mr. SHADEGG. Well, I think we're trying to fix it for those victims to all of this.

Mr. FILNER. No. I mean, my constituents for the last 3 months who have paid out $350 million more this year than last year. What do we do about that? I mean, that's——

Mr. SHADEGG. Well, I think we're talking about the Federal—FERC being here. I mean, if you're going to engage me in a dialog, I'd be happy to get in that dialog. I'd like to ask FERC if, in fact, they had the ability to go back and deal with those rates in the past because——

Mr. FILNER. That was my first question because I——

Mr. SHADEGG. I don't—I'm not certain that your reading of the law is correct that they can't deal with it in the past.

Mr. FILNER. I got it from Mr. Hoecker, so maybe Mr. Hoecker could respond.

Mr. SHADEGG. But I also think it would be useful to see the Federal Government come in and solve a problem that appears to have been created by the State government. Often we at the Federal Government——

Mr. FILNER. Apparently, we're the only ones who can do it.

Mr. BILBRAY. The Chair is——

Mr. FILNER. Mr. Hoecker, do you have the authority to retroactively roll back prices?

Mr. HOECKER. We do not under the Federal Power Act.

Mr. FILNER. You do not. Do you have any advice for how we deal with the situation of the over—everybody has said the prices of the last 3 months were not just and reasonable. How do we make sure

the people who are victims do not have to pay the price for those unreasonable prices? I mean, do you have any advice for me?

Mr. HOECKER. Advice for you? Well, my advice, first off, for people who have been overcharged this summer is that we need to look at all our legal options under State as well as Federal law. The State has acted to reduce utility rates in the San Diego area, it's my understanding. I do know——

Mr. FILNER. They have—they have deferred the rates. They have not—they have put a cap, but have set up what is called a balancing account for future payment. And I could—I don't know what SDG&E is going to do. Mr. Guiles might want to respond.

But I will bet that the average person or business will get a bill that says, "Here's what we should have charged you under our pass-through. Here's what the State says its cap is. Here's what you owe me this month, and then here's what the total amount for the"—and people are going to look at that, what they owe as the real thing, and Mr. Tyler and others are going to say, "Hey, I can't stay in business." How do we fix that? Who's going to pay off that balancing account? Mr. Wood or Ms.—I mean, who's going to pay that balancing account?

Mr. HOECKER. In truth, the rate payers in San Diego pay off that balancing account unless that amount is renegotiated.

Mr. FILNER. After these just and unreasonable prices have been exerted for 3 months. I don't think that's who should pay it off. But who—under your thinking so far—how are we going to solve this, Commissioner Wood or Madam Chair?

Mr. WOOD. This is a real deep hole to try to step into without benefit of counsel, but I'll throw out some ideas. One is that I'm not personally convinced, based on my legal advice, that FERC does not have this authority, first of all.

Because the Federal Power Act is so explicitly clear that it is required that wholesale prices be found just and reasonable, they have in this case deferred to a market. It's a market that is clearly broken. I can't imagine any stretch of the English language that would cause one to believe that, not the spiked prices, but the protracted average monthly wholesale market prices in California, which have been many times multiples, literally multiples of the cost of service, which has historically been——

Mr. FILNER. And they have nothing—it has nothing to do with supply and demand, as I hear key people who are logically sort of fixed on that notion because——

Mr. WOOD. It also has nothing to do with real underlying costs.

Mr. FILNER. Exactly. It has nothing to do with the cost. It doesn't matter—the peak loads I'm told this year were less than they were last year. The temperatures were less. We didn't have a heat storm, somebody said earlier. And yet all the prices went up.

It looks to me, if they didn't do anything illegal—and whatever they did, I would define as illegal—at least they learned how to game the system. It took them a year to learn how to game the system, which produced these incredible results.

So I mean, I have to ask, I guess, Mr. Stout or—Mr. WOOD. May I finish the answer?

Mr. FILNER. No, because I'll lose my time. Go ahead. Go ahead.

Mr. WOOD. Then I'll try to be a little more quick. So one is I think that FERC may have this authority. Second, I do not rule out the possibility that the State may, in fact, have the authority to make a determination about just and reasonable rates in this case. If FERC is waiving this——

Mr. BILBRAY. Now we're getting somewhere. Okay. Keep going.

Mr. FILNER. So in a retroactive sense.

Mr. WOOD. That is a possibility. Again, I'm not an attorney, and I haven't studied this issue legally at this point.

The other is that I do not accept automatically that there has been no misconduct, legal misconduct in this market. In fact, I am conducting an investigation at the present time in which I'm charged to look into this question. I don't want to prejudge anything there, and I won't. But that has not been ruled out.

I would also note that——

Mr. BILBRAY. That's up to Bob to do. You're not supposed to——

Mr. WOOD. There are other measures of illegal exercise of market power, of price fixing, in other words, then collusion. And I think that those need to be looked into, and if indeed we find—or if the State Attorney General finds or if the Justice Department finds that there has been some illegal exercise of monopoly market power, then it ought to be possible to recapture some of—or maybe all of what has been overpaid by San Diego consumers.

That all being said, I think we're up against very considerable obstacles in trying to achieve some sort of reduction.

Mr. FILNER. No question. I don't have real confidence in either watching the votes on either the State or the Federal commissions that that thinking is going to be—the thinking I just propounded would be accepted, so I'm trying to do legislative action and sort of force that.

I'd be interested from Mr. Stout if he could tell me how much—what are the profits from the Reliant Energy of San Diego for the last 3 months.

Mr. STOUT. I don't have specific numbers associated with San Diego. The profits that our corporation makes are public knowledge. They were published for the second quarter. Reliant Energy had an operating margin of $184 million out of a $3 billion investment plant.

Mr. FILNER. I'm sorry. What? Out of what?

Mr. STOUT. $184 million for a $3 billion investment.

Mr. FILNER. How did that compare with the year before?

Mr. STOUT. The year before was a rather bad year in terms of profit.

Mr. FILNER. I'm glad we were able to save you.

Mr. STOUT. We only had $9 million for the same period of time. In addition——

Mr. FILNER. I'm glad——

Mr. STOUT. In addition——

Mr. FILNER. When I hear that, sir——

Mr. STOUT. [continuing] during this year, we doubled the size of our portfolio. We went from 4,000 megawatts to 8,000 megawatts, and that had a lot to do with the increase.

Mr. FILNER. Certainly the prices in San Diego have something to do with it, right?

Mr. STOUT. They have had something to do with it, yes.

Mr. FILNER. I mean, you have something like—the PUC says you have almost 20 percent of the market here in California.

Mr. STOUT. I have no idea where they come up with those calculations.

Mr. FILNER. Well, it says PUC, I have—it says you have 17 percent of the California market. And I assume that means that you have 17 percent of the $350 million that was extra, so that would tell me how many—how much money that you all made from that.

Now, you will claim that you played by the rules, or at least you figured out what the rule were. When you hear somebody like Mr. Tyler or us politicians say our consumers are suffering, we have people making life-and-death decisions about temperature versus food, small business people going out of business and you're reporting these incredibly higher profits, is there any relationship—is there any responsibility that you have for that situation?

Do you feel that you have anything to say about it or is that, "Oh, that's the way capitalism works. That's the market." I mean, what's your response to when—you heard Mr. Tyler earlier, I assume.

Mr. STOUT. Well, you have proposed that there be some sort of return of the profits that we've made this year to the residents of San Diego. Actually, I would hope that we have the opportunity to do so, but I would propose that we have the opportunity to do so through investment and new generating facilities to help serve the load here in San Diego.

Mr. FILNER. Well, how are you going to save Mr. Tyler from going out of business, then?

Mr. STOUT. That's something that policymakers will have to address.

Mr. FILNER. You have no responsibility for the fact that the games that you play produce $60 million or whatever extra million dollars, and we have hundreds of people going out of business. There may be even deaths involved in all of this. You have no responsibility for that whatsoever?

Mr. STOUT. I respectfully disagree with your calculations in the amount of profit that we have made in San Diego. I have no idea of the basis for those.

Mr. FILNER. Well, give me—you told me you had no answer, so I'm going to make it up. I mean, I'm using the 20 percent of the 350, so that's what? That's $70 million. You said you had no exact figure. Somehow when it comes to profits, you guys have no answers, but you go to the nth degree to tell me what environmental regulations we haven't done and how many megawatts we need from this plant. Tell me a better figure. If you don't like the $70 million, tell me what the figure is.

Mr. STOUT. Well, as I said earlier——

Mr. FILNER. That was in 3 months, by the way.

Mr. STOUT. As I said earlier, the number that I gave you, the public number of $184 million, is the best I can give you in terms of the profit that our company has made during the second quarter of this year. I simply don't have a breakdown for San Diego.

The perception that we have made 20 percent of the $350 million is fatally flawed. We don't own that much of a generation share.

Mr. FILNER. All right. To mark—I want you to give me the amount of money you made in San Diego this year over last year. Just—you could—I'm sure you have those statistics. Why don't you just give them to us, and then I can decide whether I'm being reasonable in saying you ought to return part of your profits to the people who have gone out of business or who cannot afford to pay their electric bill.

Mr. STOUT. The simple fact is, the power that I sell to the ISO and the Power Exchange simply goes to the ISO and the Power Exchange.

Mr. FILNER. You have no responsibility for what's going on here?

Mr. STOUT. I have no way of calculating exactly what portion of that was paid by San Diego customers.

Mr. FILNER. You have to agree that a big part of your profit came from the San Diego price—California pricing situation.

Mr. STOUT. I would agree with that.

Mr. FILNER. What?

Mr. STOUT. I would agree with that.

Mr. FILNER. All right. So you have no responsibility to try—for us to deal with it except you're going to invest in more power plants?

Mr. STOUT. I'm offering a solution that——

Mr. FILNER. That's not a solution for people who have gone out of business. That's not a solution for people who can't pay their bills. Commissioner Hébert talked about the granny—it's granny we've got to tell the truth to. What if Mr. Hunter, who used this thing about the heart medicine, came back, it was $10, went to 1,000, and you couldn't afford it. "Granny, you're going to die." Do you have any responsibility for that?

We have people who can't afford to pay your prices. They're dying. I think you have some responsibility, and we're going to have to fix it legislatively if you won't take it.

Mr. BILBRAY. I'd like to, on that note, make sure I remind the Federal Regulatory Commission, as we're looking at responsibility in this gouging, that 10 percent of the power gouging right now is being projected as coming out of Bonneville, which is the Federal Government participating in what my colleague here calls the gouging of the power generators.

And I'll tell you, as a representative of the Federal Government, I don't know how I can justify that our participation—as Bob was saying, how do you justify this—will turn over the fact that it's one thing for private people saying, "Well, you made the rules, and we're playing by the rules," but those of us in the Federal Government to be part and parcel in the process.

Now, I don't know from the PUC if there's any way for the Federal Government not to participate in the gouging, but I definitely think that physician heal thyselves. We should set an example so that we can tell—actually have justified pointing fingers at the private sector gouging that we're not participating in it too.

And I think that that's a major issue that I'd ask the FERC to take a look at. Is the Federal Government actually participating in this gouging. And when the president talks about it, does he really care, and when Congress talks about outrage, what are we doing to make sure we're not participating in the process.

Now, Mr. Hunter wants to have us start producing it at 6 cents, even though there's a competitor over here already ready to undercut you.

Mr. HUNTER. Three and a half.

Mr. BILBRAY. Pardon?

Mr. HUNTER. Three and a half.

Mr. BILBRAY. Three and a half. Okay. Go ahead, Mr. Hunter.

Mr. HUNTER. Three and a half is what Sacramento says they're producing with their new generation capability.

But you know, I think nothing so deserves real free enterprise as what I would call phony free enterprise. And the idea that what we've engaged in is free enterprise is absolutely wrong. It's wrong for a number of reasons.

No. 1, the essence—the quintessential element of free enterprise is a noncaptive consumer. That's the consumer who can walk across the street and buy the load of bread cheaper at the other market.

Our consumers, as this testimony came out today from Mr. Tyler and the people who have been put together by Terry Saverson, who is the East County Chamber of Commerce director who got these bills, as the testimony has developed, these people are total captives.

Second, another element of free enterprise is that the person who does the purchasing has to have an economic interest in the outcome. It's established that SDG&E is the pass-through, if you will, for this energy. SDG&E doesn't partake in the economic hardship of the 9,000 percent increase during peak hours. So you've violated the second rule of real free enterprise.

Third, you have a desperation market where there is total flexibility on the part of the seller—that is, they can sell or not sell—and total inflexibility on the part of the buyer, which always creates—in the history of man, has always created higher prices.

The idea that somehow the desperation market is going to create lower prices for the consumer who has no flexibility of purchasing is again totally unsupported by any historic evidence. So you don't have a free enterprise situation, Mr. Hébert.

And let me tell you, my take—and Mr. Hoecker, we had a good discussion about 3 weeks ago, but I became somewhat disenchanted with FERC because I read your charter under Federal law, and the more I read it and read it over, the more I came to the conclusion that you do have a duty here, that you are—one hat that you wear is the emergency response team.

And let me quote the Federal legislation that gives you the power to do something, I think. Title XVI, Chapter 2, Subchapter 11, Section 842(d), Just and Reasonable Rates.

"All rates and charges made, demanded or received by any public utility for or in connection with the transmission or sale of electric energy subject to the jurisdiction of the Commission, and all rules and regulations affecting or pertaining to such rates or charges shall be just and reasonable."

The words you've heard during this entire hearing.

"And any such rate or charge that is not just and reasonable is hereby declared to be unlawful."

Now, Mr. Sladoje, who is the CEO of the California Power Exchange, has acknowledged that at certain times during the purchasing period, the price for energy totally passed through by SDG&E to the consumer in San Diego has at times gone up to 9,000 percent what it was a few hours earlier.

Now, Mr. Hébert, you, saying we shouldn't regulate, we shouldn't believe in price fixing, related a story about the price of gas in the Midwest, when it approached $2 an hour, people started to get upset. If you relate that 9,000 percent increase to the price of gas, that's 180-gallon—$180-per-gallon gallon of gas that you have to buy as a totally captive consumer. That's a gallon of milk at $200.

I just cited this statute that would seem to empower you to take action. And instead of taking action, what we've had is philosophy about the importance of providing more electricity, which I agree with.

And so to some degree, you're like the emergency action team, the trauma unit that is called to go out and save somebody who is dying. And Mr. Hébert, as you answer the phone, you say, you know, "What I want to do is talk about the necessity—because you guys are having a fire. Your place is burning down. I think we need to start drafting some legislation that produces in the future some more fire-resistant buildings." Which we may totally agree with.

But nonetheless, this statute was written to empower somebody—and I think it's FERC—to be the emergency response team that when a price—and presumably 9,000 percent increases in 2 hours represent an unreasonable price—to take action and to prevent that. Since it says it is hereby declared to be unlawful, you should then have the power to do something about that price. And I would presume to declare it to be unlawful and roll it back.

So Mr. Hoecker, why don't you respond to that, and then Mr. Hébert, tell me why you're not interested in responding to the fire, and instead you want to philosophize about the importance of fire-resistant buildings.

Mr. Hoecker, go ahead.

Mr. HOECKER. Can I explain? You're absolutely right in most respects about how demanding and inelastic this market is and what a terrible situation the rate payers are in in San Diego. And the Commission is empowered to do things and obligated to do things to protect those consumers.

But the way our statute works—since we had granted generators market-based rates, and based on an analysis of their possible market dominance in generation, the way the statute works is if we want to change that rate, if we want to bring it down, if we want to find that a different rate is just and reasonable, we are required to have an investigation and create a record, and we are only permitted to impose that new rate prospectively.

Mr. HUNTER. Well, question for you. We went through this, and I went through this with several of your staff folks on this thing. You need an investigation to determine that it's an unreasonable rate. If you had a bill that shows that milk has gone to $200 a gallon, which is what you had, in part, from these past-throughs of these enormous increases, $200 a gallon, and it's a legitimate bill, it's one where SDG&E has the right to take court action, to seize your assets if you don't pay the $200 a gallon for a gallon of milk,

that's not evidence that supply—that suffices or supplies the fact-finding that is required? You need to do more investigation to determine that $200 a gallon is too high for a gallon of milk?

Mr. HOECKER. Well, there are two issues there. No. 1 is, my gut reaction would be of course it's unjust and unreasonable. It's probably an outrage. We would want to change that rate because it would be prima facie unlawful. The statute requires us to do an investigation and to change that rate.

Mr. HUNTER. But isn't that an—don't you have everything you need for the investigation where you have a record of $200—the equivalent of $200 per gallon of milk being charged or $180 for a gallon of gasoline? That's what the $9 per kilowatt hour represents.

Mr. HOECKER. Fortunately, not all the situations we deal with are that extreme.

Mr. HUNTER. Well, that's—well, let me tell you, that's what the president of the Exchange acknowledged. That was one of the prices that was charged which was passed through directly to Mr. Tyler and others like him.

And the reason I say that is—and the reason I was the author of a letter that Mr. Bilbray and I have sent to you gentlemen and lady saying, "If you don't want to do this job as the emergency task force or the emergency rescue team, we think you should leave and let somebody else do it."

Because we have small businesses like the metal business in east county, which had an increase of in excess of $60,000 for their electrical rate for 1 month. They don't have the ability to even withstand 2 or 3 months of investigation. They're going to go out of business.

And ironically, the hard core pro-free enterprise, "Just let me fight it out my own way" guys like Roy Tyler, who are more pro-free enterprise than Mr. Hébert, who are total captives in the system, as we've established, are the ones who are going to be destroyed by this. The free enterprise guys are going out of business.

So why can't you take action based on the record—on the record of the price itself? Because that's all you need to establish it is—it's not reasonable.

Mr. HOECKER. And we could declare it to be unreasonable. We'd have to develop a new rate. And what would that be? Based on a record, we would determine what a just and reasonable rate is.

Mr. HUNTER. Okay. So there is a—so you are undertaking this investigation, and your position is that the investigation may culminate in a cap on these rates.

Mr. HOECKER. The investigation could culminate in a variety of measures, that being conceivably one of them.

Mr. HUNTER. I thought that you said that you didn't think you had the power to cap the——

Mr. HOECKER. We don't have the power to go back retroactively and order refunds of the moneys that were collected by some.

Mr. HUNTER. One question on that. The statute says if you determine that it is unreasonable, that the rate are unreasonable, that they are then declared illegal and unlawful. If an unlawful rate was charged in July, why don't you have the right to receive the reimbursement that's a delta between what you charged and what

was reasonable? If it's declared—if it's deemed to be illegal by Federal statute.

Mr. HOECKER. I think that's a terrific question, but our reading of the statute and precedent going back 60 years doesn't support our reaching back and retroactively correcting that situation.

Mr. HUNTER. I never—I mean, you know, I guess we're all lawyers here, but something is gained——

Mr. BILBRAY. Excuse me. Bob and I don't want to be included in that line.

Mr. HUNTER. If something is deemed to be unlawful, it's unlawful at the time that the action is taken that accrues that status. And so if you're going to charge 9,000 percent increases in electricity in July, that 9,000 percent increase is unlawful at that time. So why wouldn't the extra cost be something that could be recovered?

If you get—if property is stolen in July—and I'm not using this to imply that this is a criminal act, but if property is stolen in July, it's stolen property as of that time, not at the point that the trial is convened.

Mr. BILBRAY. If the gentleman would yield, I'd like to yield to the commissioners so they can answer your question.

Mr. HUNTER. Okay. And I want to let Mr. Hébert have a shot.

Mr. HÉBERT. You want me——

Mr. BILBRAY. That is why—there is two commissioners here who want to respond. And seeing that you're meeting tomorrow and have so much authority over this issue, we're going to make a special effort for you to leave here happy and contented so that you help us tomorrow.

Mr. HÉBERT. I want to make sure, Mr. Chairman, an answer, but I would like to yield to the young lady from Kentucky, if I may, and I'll come back and answer.

Ms. BREATHITT. I am not an attorney, but I wanted to just expound a little bit more on the—our legal rights to remedy a situation going forward. But even when I was regulating at the State level, a regulatory principle in most State commissions across the country and, I found, at FERC applies the filed rate doctrine, which prohibits us from retroactive rate-making and retroactive cost recovery.

Mr. HUNTER. Is that a law?

Ms. BREATHITT. So it has to be done on a prospective basis.

Mr. HUNTER. Is that a Federal statute? Because what I quoted was Federal statute.

Ms. BREATHITT. The filed rate doctrine applies, as I understand it, to our Federal statute. It also applied to State statutes when I regulated at the State level. I'm just giving you that as further support that——

Mr. HUNTER. If you folks—and I don't mean to interrupt, but if you folks have a legal opinion—obviously, you've got lots of counsel. I'd like to see the legal opinion on that because it looks like that flies totally in the face of the statute.

Mr. HOECKER. Congressman, I'll ask my lawyers to sharpen their pencils on that. I think you're asking a good question.

Mr. HUNTER. Okay.

Ms. BREATHITT. It doesn't prohibit us from doing the investigation and correcting wrongs going forward in terms of price adjustments.

The only other point that I was going to make is in response to your belief that we have a record now to make this finding. I wanted to point out that because the Commission speaks through its orders, and those orders are appealable, that we have to make sure that our record has been gathered under our due process standards and that it's—our record is gathered in an open, transparent manner for all parties to comment on because they're appealable. They have to be able to be fact-supported and supported by legal precedent and the law.

Mr. MASSEY. Can I just make a 15-second comment? Whatever legal authority we have, we should utilize to remedy these problems, period. No. 2, we only have the authority Congress has given us, whatever that is. And No. 3, it seems to me it's an argument for us to proceed with a sense of urgency in case it is true that all of our remedies have to be prospective.

Mr. BILBRAY. Commissioner, you wanted to——

Mr. HUNTER. Let Mr. Hébert have a shot here.

Mr. HÉBERT. Thank you. As the only Republican, I'm accustomed to going last, so it works out all right.

Let me clear up a couple of things. I want to make sure that you understand where I'm coming from, Congressman Hunter. I'm a former legislator, and I'm a former State commissioner, and I'm presently a Federal regulator. I understand constituent needs and concerns, and I do not want you to think or anyone to think here that I am unsympathetic to that because, quite frankly, I'm not.

But what I've learned to do is to no longer just worry about Mississippians, but to worry about people in California and New York and New England. And that is why, when I talk about price spikes—and I do want to clear something up—evidently I've miscommunicated it to you. We don't have anything to do with gasoline, and I was not talking about the price spikes on gasoline. I was talking about the 1998 price spikes where megawatts went to $10,000 a megawatt hour and the fact that this Commission did not invoke price caps.

And if you look at the evidence—and all I'm suggesting you do, Congressmen and everyone else here, all I'm suggesting that they do is look at the evidence. What happened when we didn't do that? What happened when we let the market—you want to talk about markets. What happened when we let the market respond? They built generation. They got new supply.

And that is why I dissented on price caps in New England. I thought it was important for them to get a market. I dissented on price caps in New York. I have dissented on every price cap that's come forward since the beginning.

And the reason is this. The evidence is even beginning to show that you're seeing higher average prices since you've reduced the price cap from 750 to 250. Now, that's no accident. Economists can predict this. Look at the great economists who understand how to do this. Yes, I am a lawyer, but listen to the economists, Alfred Cahn, Daniel Yurgin. They will tell you——

Mr. HUNTER. You're talking to the fire because I agree with your philosophy, but I don't agree with your not reacting to the emergency of the minute——

Mr. HÉBERT. No.

Mr. HUNTER. [continuing] which will sink these people long before our philosophy can take place.

Mr. HÉBERT. I want you to understand that I am. Look, you want to talk about emergencies, this is September 30, 1999. I issue a copy of every one of my dissents to the Committee. And this is a copy of my dissent. I identified early on, almost a year ago today:

"Prominent advocates claim that electricity will become more of a financial and less of a physical market. Hedging will only increase. Textbooks and introductory economics in our own experience in the Midwest and elsewhere spell out benefits of allowing the market to produce high prices and the harm of imposing ceilings, artificial by definition. When we give the ISO the crutch of price caps, we encourage the organization to avoid necessary reforms. Price caps give the ISO no incentive to improve."

Those are the type of things that I have been saying. That's not changed. And these are the things that are occurring. And I have said early on that we need to reassess this and we need to try to move toward the market.

Now, you can't have it both ways. People want to tell you things that sound good to the ear. But they may sound good to the ear, but they're not going to help the people of San Diego. When you say price caps have worked when, in fact, the evidence is suggesting they haven't——

Mr. HUNTER. Price caps——

Mr. HÉBERT. And then you say demand-side management will work. You can't mix those price signals.

Mr. HUNTER. But price caps will work—but my point is, you have a chart where prices are unfair and unreasonable. Your charter, according to what I read, is to declare those unlawful.

Now, if your philosophy, your personal philosophy is that's a nonstarter, we shouldn't be on the trauma care unit. If you think that the way to meet this is deep philosophical discussions about the long-term problems and fixing things in the long term, which I agree with you on—I mean, you start trying to site a plant right now, it will take you longer than it took to win World War II to site the plant.

The people—the free enterprise guys who are having the 9,000 percent increases will be gone in 2 or 3 months. So if you don't want to serve on the trauma care unit and you want to be in the philosophy unit, I think that's great, but I don't think you should be on the unit. If you don't agree with enforcing the law—if this is the law that I'm reading, the statute that says if it's an unreasonable price—and I think you would agree a 9,000 percent increase is unreasonable by most people's standards. If you're not interested in enforcing what you think is a bad law, you shouldn't be on this board doing it.

Mr. HÉBERT. Well, I'll let you make——

Mr. BILBRAY. Enforcing the law, the Chair is going to invoke on this. Mr. Hébert, I understand your frustration with what's going——

Mr. HUNTER. Remember, Bilbray, you borrowed my car a few days ago.

Mr. BILBRAY. Yeah. And you owe me for that.

Mr. HÉBERT. The Congressman knows——

Mr. FILNER. Nine thousand percent more than you paid for it.

Mr. BILBRAY. I should get danger pay out of that.

Mr. HÉBERT. As the entire panel knows, upon invitation, I'll be glad to come and sit down with you in your office and talk with you. And I'm not a policy wonk. I've been fighting this fight. But you're listening to people who are changing their tune, people who are even suggesting that pipelines are in good order, when I've been working for almost 3 years to get a pipeline to the northeast to give those people a choice. We've got to get things done.

Mr. BILBRAY. Okay. Let me echo that. In the long run, we've got to confront those who always oppose the creation of infrastructure. That if we took the same attitude with our roads and with housing, we would have a much bigger crisis on our highways and in our housing than what we see if we took the same attitude as we do with power generation.

Those of us in government have taken an attitude about power generation as it's somebody else's problem. And the fact is, politically, it's expedient to oppose the infrastructure development because there's always some organized group to oppose the infrastructure expansion.

But there's never anyone out there pushing for the general public and the consumer to protect them from a deficiency in infrastructure except those of us who serve in government. And too often, we sell out and run the other way.

Now, we've got a crisis with electricity in San Diego today. Anyone with a brain in their head and eyes in their head knows that natural gas is the next big crisis, which is the environmentally preferred option for power generation in this country right now. Like it or not, no matter what one side or the other side says.

But we haven't built the pipelines, and we're not building the pipelines, so it's not the great success. It's the fact that we're behind schedule, we're going to have a crisis this time. We've got the same crisis when it comes up with other infrastructure issues.

And I've worked on this from everything from clean water to clean air to being able to bury garbage. It's always fine for us to run away from the infrastructure.

That aside, I would ask the commissioners, both State and Federal, to recognize that it's those of us who are legislatures have to get back to the business of creating something that we can conserve rather than always asking the consumer to slice it thinner.

Please recognize to the FERC members that it says that all rates fall under that category. It doesn't say proactive. I understand that you have a supreme court ruling that raises major concerns, but I would ask you to consider the fact that the statute does not say that the rates have to be illegal before they are unfair. It says if they're unfair, they are illegal, ill-gotten gains.

And I would have to agree with my colleague about the issue that when it reaches a point to where there has been basically gouging going on, it's not just immoral, as my colleague from San

Diego might point out, it, by definition, looks like the statute says it's illegal.

And the question that my colleague from the east part of the county pointed out, if it is illegal, is it their property, is it their profit, or is it confiscated gains, illegally confiscated gains which need to be repossessed?

And I understand that issue of the taking. We've got an issue there. I've been around since 1976 in government. I have seen these issues. We've got the issue of will this constitute a taking if we roll back. All I've got to say is that there are drug dealers and there are illegal activities out there that every day we've given the authority to go back and confiscate ill-gotten gains that fall under the category of unlawful.

I would ask you to at least take that. And I ask both commissioners. And I want to say this sincerely. The people of San Diego County are looking to you to come into this community and respond to this crisis and this disaster just as they would expect the Federal Government and the State government to come in in a natural disaster.

We've witnessed this month that there were major disaster and fires in the west, and we didn't see the State say, "It's not our department. Let the Federal Government do it." And we didn't see the Federal Government say, "Soldiers are not trained to go fight fires." You saw the President found ways to be able to send soldiers in to do something, not because they usually do it, but because it needed to be done.

I just ask both of you to rise to the occasion like those men and women did and do the job that needs to be done, even if you haven't gotten used to doing it in the past.

I think you for being here today.

Mr. HUNTER. Brian.

Mr. BILBRAY. We look forward to taking care of it.

Mr. HUNTER. Mr. Chairman.

Mr. BILBRAY. Go ahead.

Mr. HUNTER. Let me ask just one—I just had two questions for the record for Mr. Guiles.

Mr. GUILES. Yes, sir.

Mr. HUNTER. We're looking at this—we're looking at this proposed plant at Miramar, and I would just ask that you would continue to engage—your people have been engaging with whether we can hook into the grid at that point.

Mr. GUILES. Absolutely.

Mr. HUNTER. If you could look at that.

And Ms. Lynch, one thing that's come through a lot of our employers. You know, we have ship building, we have aerospace, lots of manufacturing here with fixed contracts where people are just losing their shirts.

And I've noticed that—at least it's been stated by our business community, for the large employers, and even a lot of the small business employers who qualify as small business, there is not rate relief. Is that something that's being looked at? Because losing your job and your paycheck is just as bad as being priced out of your house.

Ms. LYNCH. It is something we began to look at. My colleague, Carl Wood, opened an investigation into looking at that, and then the legislation overtook it, which vastly expanded rate relief to most businesses. But the largest businesses who already can directly contract for power, have an ability to contract on annual contract basis to get certainty. That number at 6.5 cents is still a pretty high number, but they can get certainty.

Mr. BILBRAY. Okay.

Mr. HUNTER. Okay. Thank you, Mr. Chairman. Great job, Brian.

Mr. BILBRAY. I would thank my colleague for coming in with—just as Duncan Hunter always does, he wants to build something to address the problem. He's always—in his 20 years in Congress, I've always been inspired with how much he's willing to get in there and get the dirt pushed.

I want to thank my colleague for introducing a bill that may specifically try to address this issue of what is the authority of the FERC on this issue. Frankly, some of us think that the legislation isn't needed, and I think—we hope it's not needed. Let's just say that. But I think that we need to make sure it's there to move in the next month if we have to.

I would just ask that we also look at—I've asked that bill about the issue of making sure that if there's gouging going on, that the Federal Government isn't participating in it by the sale of our power through the power exchange.

And we'll try to do our part to get the infrastructure side down. We really ask you in the next week or 2 to try to address the other side as to the short term, and only you can do that.

The Chair will adjourn this meeting after making sure—declaring that the record will remain open for testimony and correction, and I will now adjourn this meeting at this time. Thank you.

[Whereupon, at 2:08 p.m., the subcommittee was adjourned.]

[Additional material submitted for the record follows:]

Ken Blalack *9395 Fortune Lane, La Mesa Ca. 91941*

September 6, 2000

Honorable Joe Barton
Chairman
House Subcommittee on Energy and Power
2125 Rayburn House Office Building
Washington, D.C. 20515-6120

- and -

Mr. James J. Hoecker
Chairman
Federal Energy Regulatory Commission
888 First Street
Washington, D.C. 20426

Dear Gentlemen:

I was pleased to read in this morning's paper that you will be holding hearings regarding the power crisis in San Diego County. Since I will be out of town during your local hearings, I'm forwarding this information to you directly.

As I've watched my utility bill spiral out of sight, I've also become determined to understand the root cause of this debacle. After much research, I believe that there are at least two major causes for our current predicament:

- *Insufficient Supply* - I've attached an article from the *San Diego Union-Tribune* on April 23, 1997. Tom Page, the retiring Chairman of San Diego Gas and Electric, boasted that his first decree as CEO in 1981 was to "become the first major utility not to build more power plants". He went on to say "That was my decision and no else's.... Some people thought I was nuts. But it was the right decision, and it did as much to change the course of this company as anything else we have done through the years.... Our decision eliminated the power-plant option, and it made us focus on one path. We needed power, and we just had to find it at the best rate possible". Even after power shortfalls were forecast in 1988, Mr. Page and SDG&E pursued this policy.

  Mr. Page may want to rethink that decision especially since he is now running for reelection as a trustee on the Grossmont Union High School District board. School district utility bills have sky-rocketed as well.

- *Deregulated Monopoly* - When "For-Profit" monopolies are deregulated, it should be no surprise when they act in their own self-interest. Their loyalties are to shareholders and not the public-at-large. Consequently, since utility companies provide a "life and death" service, they should always be municipalities.

  Once again, it appears that Tom Page was at the leading edge of the utility deregulation movement. Another SDUT article (included) on February 2, 1997 touts SDG&E and Mr. Page as the architects of the deregulation legislation that has caused our current upheaval. The article stated, ".... SDG&E under the direction of Thomas Page, now chairman of the board, invented the model ultimately adopted by the legislature. SDG&E felt that all customers – large and small – should benefit so it pushed the concept of a mandated universal rate cut".

I wish that I had a viable alternative to SDG&E. If I did, I would have already switched. I look forward to support from our elected and governmental officials in this matter. You can be sure that we will be voting our pocketbooks in this election. Thank you in advance.

Yours truly,

Ken Blalack

Ken Blalack
619-463-6970

Copy:
Press:
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Mr. Tony Perry, Los Angeles Times, San Diego Bureau
Mr. Lee Zion, San Diego Business Journal
Mr. Joe Guerin, San Diego Daily Transcript
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The San Diego Union-Tribune
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For SDG&E's tower of power, the goodbyes begin

Michael Kinsman
STAFF WRITER

23-Apr-1997 Wednesday

Thomas Page

This is Thomas Page's long goodbye.

It started in December 1995 when he announced plans to resign as chief executive of Enova Corp. and will end this December when he leaves the company after 19 years.

Yesterday, the shareholders of the company, the parent of **SDG&E**, saluted Page as he presided over his last annual meeting. He was honored in a video tribute and received a sculpture from company executives.

They were applauding a man who has guided San Diego Gas & Electric since 1978.

"It won't be the same company when he's gone," said Dolores Williams, a shareholder from Escondido. "No matter what was happening to the company, we always knew it would be OK because he was there. Now he won't be there anymore."

In an interview this week, Page admitted he hasn't always been everyone's favorite, but said he isn't bothered by that.

His flip-flop from strident opponent of a takeover bid by Southern California Edison in 1988 to a seemingly willing merger partner irritated the mayor of San Diego and other community leaders. Page, however, said he was fulfilling his fiduciary responsibility by trying to cut the best possible deal for **SDG&E**'s shareholders and employees.

"Would I like to be loved by everybody in the community?" he asked. "Yeah, sure. But that's not the way it is. Some people like you and some don't, and you just try to stack them up and hope that you come ahead in the balance."

In his view, he has done just that.

"I could never play the game if I didn't win," he said. "But when you have

so many constituencies, you'll have conflicts. You have to understand that in this job and define your own version of success."

Page joined **SDG&E** as executive vice president and chief operating officer and was the handpicked successor to then-CEO Robert Morris. By 1981 Page took over as president and chief executive of the utility.

One of his first decrees as CEO lingers in his mind: Shortly after taking charge, Page vowed that **SDG&E** would become the first major utility not to build more power plants.

"That was my decision and no one else's," Page said. "Some people thought I was nuts. But it was the right decision, and it did as much to change the course of this company as anything else we have done through the years."

In 1981, **SDG&E** had determined there was a glut of both natural gas reserves and electricity generators. Yet, the Middle East oil embargo and energy shortages remained in the public's mind, and in some quarters, Page was regarded as an industry fool.

"We were right, though," he said.

"It was a good decision because our company, like other utilities, was just sort of going along thinking about building power plants one day and thinking about buying power the next.

"Our decision eliminated the power-plant option, and it made us focus on one path. We needed power, and we just had to find it at the best rate possible."

Page directed the establishment of the utility's so-called Mission Control monitoring facility in Mission Valley. Its design looked like the command center for a trip to the moon.

"I believe that architecture can be very important," Page said. "I wanted you to know you were in a special place -- an important place -- when you stepped into that facility. I think we accomplished that."

Page said he believes the no-new-power-plant decree brought out **SDG&E**'s intellectual capital.

"We took away an option and knew we had to go one way," he said. "You could just see how people started thinking differently. There was nothing to fall back on. They had to make things work. And they did."

Page points with pride to the fact that **SDG&E** reduced its electricity rates from the highest in the state in 1985 to the lowest in following years.

Tom Stickel, a current Enova board member, said he is impressed by Page's vision.

"He has the ability to . . . see the future in a way that traditional utility executives don't," Stickel said.

"He understands where his industry is headed and tries to shape the future rather than react to it. It's the vision you want in a chief executive. You know that consolidation is coming in the utility business, but Tom Page has

been talking about that for years. He saw it coming."

Over the past decade, Page has been involved in some of those proposed mergers. **SDG&E** negotiated a merger with Tucson Electric Power Co. in 1988 as a means to expand **SDG&E**'s power transmission network and diversify its power generation system.

Only weeks after that announcement, Southern California Edison mounted a hostile takeover bid for **SDG&E**.

Page said the Tucson merger would not have been completed once **SDG&E** completed a review of that company's books. He said a merger with Edison probably would have led to higher utility rates in San Diego.

He admittedly was surprised by the public outcry against Edison and understood then that the community would not accept an outsider taking over **SDG&E**.

When the company entered negotiations with Los Angeles-based Pacific Enterprises, his first demand was that the corporate headquarters remain in San Diego.

The merger agreement would never have progressed "if they didn't agree to that."

"I had first grip on the bat," he said, "and I told them that was essential. There was no argument. Pacific Enterprises didn't live in a vacuum. They had seen what had happened with Edison."

As Page prepares to leave the company, shareholders such as Norma Barbani are expressing their disappointment.

"I'll hate to see him go," said Barbani, who traveled from Northridge for yesterday's annual meeting. "He's obviously well-educated and a good leader. He's been a wonderful leader for this company."

When Page steps down as chairman in December, the separation will be complete. The 64-year-old chairman has said he will not continue as a director of Enova or the new company to be created through the merger with Pacific Enterprises.

"When you're gone, you should be gone," he said. "I plan to be."

o o o

Enova yesterday reported net income of $48.9 million, or 42 cents per share, for the first quarter ended March 31, a 26 percent decline from a year ago when the company earned $66.1 million, or 57 cents per share. An accounting-rule change for the utility industry contributed to the decline in earnings, the company said.

Revenues for the quarter were $2.03 billion, compared with $1.86 billion for the comparable period last year.

The company's shares closed at $21.88, down 13 cents.

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The San Diego Union-Tribune
(Page G-4)

Plugging in competition

A freer market for electricity would lower energy costs | Psst. Want a deal on electricity after midnight?

Don Sevrens
SEVRENS is news editor of the Insight section.

Clarification | An article in Insight last Sunday stated that San Diego Gas & Electric Co. "pushed the concept of a mandated universal rate cut" as part of deregulation legislation in the California Legislature. SDG&E officials say the utility endorsed the rate cut written into the law by legislators but did not originally advocate or propose it. (970209, G-4)

02-Feb-1997 Sunday

Remember when Ma Bell lost her monopoly on Jan. 1, 1984? It was a sea change for long-distance telephony yet consumers didn't see significant differences for several years. And the ripple effects of competition are just now spreading to local telephone markets.

The sequel is coming to California on Jan. 1, 1998 as the electricity market is deregulated under a model actually crafted by San Diego Gas & Electric Co.

Local electric utilities will continue to be responsible for their own networks of poles and power lines, their own meter reading, and the bulk of their own billing. But on Jan. 1 the power produced by **SDG&E**, other firms and Johnny-come-lately start-ups will be sold to a power exchange--a high-voltage stock market.

Each day utilities and other large purchasers of electricity will bid for power to be delivered in half-hour increments during the next day. Do I hear 8 cents a kilowatt-hour for 3:30 to 4 p.m. tomorrow?

Utility customers will enjoy a 10 percent rate cut for electricity from day one. That's $4.30 a month for **SDG&E**'s average residential customer, or $500 million in savings for **SDG&E** customers over 10 years, the utility calculates.

"Initially, residential customers will see very little change," explained Margot Kyd, vice president of marketing and customer service for **SDG&E**. "They will have lower rates and that's the key. They will have more

choices, but they will probably unfold over time."

Large purchasers of electricity -- particularly ones who want it during off-peak hours and have state-of-the-art metering equipment -- will be able to lower their costs the most. Just as making a phone call after 5 p.m. is cheaper, electrical rates are expected to vary by time of day.

It won't be cost-effective for the typical homeowner to yank out the old electric meter. But, in time, a variable-rate meter may become as much a new home status symbol as a built-in microwave or a programmable thermostat.

And as the marketplace adapts to deregulation, even residential users will be able to buy power from out-of-town firms or locally based competitors to **SDG&E**.

SDG&E has long been a proponent of deregulation, said Kyd. Indeed, **SDG&E** under the direction of Thomas A. Page, now chairman of the board, invented the model ultimately adopted by the Legislature. **SDG&E** felt that all customers --large and small -- should benefit so it pushed the concept of a mandated universal rate cut.

Should stockholders in **SDG&E**'s parent company, Enova Corp., be worried by a shift from monopoly status to the throes of competition?

Hardly, said Kyd. More than a decade ago Page shifted **SDG&E**'s strategy from building power plants to purchasing power from other companies. Today, 60 percent of the electricity **SDG&E** provides is purchased from other companies.

A phase-in provision protects owners of inefficient, expensive or outmoded plants -- stranded costs, in utility-speak. And Enova has in place six non-regulated subsidiaries to reap competition's benefits.

SDG&E isn't your grandmother's utility any more. It now has sisters that lease computer equipment, perform energy audits and deal in housing and commercial real estate.

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Testimony of

George Fraser

General Manager
Northern California Power Agency

Before the

House Commerce Committee
Subcommittee on Energy and Power

Hearing on California Price Spikes

September 11, 2000

Mr. Chairman, members of the Subcommittee, thank you for this opportunity to testify. I am George Fraser, general manager of the Northern California Power Agency (NCPA) - NCPA is a nonprofit California joint-powers agency established in 1968 as a supplemental power supplier to its *fourteen members*: the cities of Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Redding, Roseville, Santa Clara, Ukiah, the Port of Oakland, the Truckee Donner Public Utility District, and the Turlock Irrigation District, and *six associate members*: Association of Bay Area Governments, Bay Area Rapid Transit District; Lassen Municipal Utility District, Placer County Water Agency, Plumas-Sierra Rural Electric Cooperative, the cities of Davis, and Santa Barbara, serving nearly 700,000 electric consumers in central and northern California. NCPA has built significant generation resources to meet our customers needs – geothermal, hydroelectric and gas-fired power plants. In addition, we are the scheduling agent for several alternative power suppliers.

As an active participant in the wholesale power market in California, NCPA has first-hand experiences with the price spikes of the past three summers. In addition, NCPA was an active participant in the development of AB 1890 and a frequent intervener in virtually every filing of the California Independent System Operator (Cal-ISO) before the Federal Energy Regulatory Commission (FERC). Based on these combined experiences, we have gained considerable insights into the causes of the current market volatility and have formed recommendations on how best to move beyond these failings to an effectively competitive wholesale market. Rather than arguing against action on federal electricity restructuring legislation, the California experience underscores the need for congressional action to promote a properly functioning wholesale electricity market. NCPA endorses, and encourages prompt subcommittee action on, the legislative framework outlined in the Electricity Restructuring Stakeholders' principles.[1]

[1] See Attachment.

Under AB 1890, California's restructuring law, municipal utilities are not required to unbundle their retail sales, purchase all of their power supply needs through the Power Exchange (PX), or join the Cal-ISO. While we have made purchases from (and sales to) the PX and Cal-ISO, we continue to meet the majority of our retail consumers' needs with our own power supply. Our investments and planning have shielded our customers from the severe price increases borne by San Diego consumers. We are, however, connected to the Cal-ISO controlled grid, and have been voluntarily shed load when other parts of the state have inadequate resource to meet their loads.

Causes of Price Spikes and Market Volatility

Mr. Chairman, you will observe considerable finger-pointing today as parties seek to divine the cause of, and assign blame for, the current price volatility. What you will learn is that there is no single cause – and consequently no silver bullet.

I'd like to review for you some of the most pressing causes:

- **Supply and Demand.** The simple economic law of supply and demand tells us that prices will rise during periods of high demand when supply is constrained. There is no doubt that California has inadequate generation resources to meet peak electricity demand. A variety of factors have contributed to this capacity shortage, including a regulatory environment unfavorable to new plant construction and a rapidly escalating growth in demand. ***However, the laws of supply and demand alone cannot explain the price spikes, which occur more frequently than simply during extreme demand peaks.***

- **Market Design.** California deregulated wholesale power supply, but not the market. AB 1890 requires the state's investor-owned utilities to sell all of their power into,

and purchase all of their energy out of, the PX. Bilateral contracts, hedges through long-term forward contracts, and use of competing exchanges are all mechanisms that could moderate price volatility – but most of these options are either, limited unavailable, or have not been taken advantage of. ***California is a textbook example of why you can't deregulate halfway.***

- **Market Gaming.** California chose a complex market structure with significant product segmentation and bifurcated markets between the PX "forward market" and the Cal-ISO "real time" market. ***This complexity has further "tightened" already constrained markets and created myriad opportunities for power suppliers to game the system through strategic bidding, withholding generation, under forecasting load, and inflating prices.***

- **Transmission Congestion.** California suffers from serious transmission congestion. This problem is most acute in the San Diego and San Francisco areas. Because of these transmission constraints, these load centers become islands to which surplus energy from elsewhere cannot come in. ***Yet despite this severe and apparent transmission congestion, the Cal-ISO lacks adequate mechanisms for getting transmission additions built as soon as possible.***

- **Market Power.** While market power is traditionally considered to exist when there are less than five equally situated suppliers (e.g., each owning 20 percent), the recent experience in the California market shows that a party with limited resources can be a "price setter." For example, if the "margin" between supply and demand at a certain point in time is three percent – for instance during peak hours – than any party owning three percent of the available generation can exercise *transient market power*. In addition, while a party may own less than 20 percent of the generation in the State, it may own the majority of generation within a constrained load pocket (such as San

Diego) and, consequently, be able to exercise *locational market power*. ***The California market is not workably competitive, with transient and locational market power commonplace.***

- **ISO Governance.** NCPA – like virtually every other player in California – is unhappy with a variety of decisions made by the Cal-ISO. But more troubling than any single decision is the manner in which decisions are made. Each member of the stakeholder board is reluctant to take actions antithetical to the interests of the "constituency" they represent. Moreover, as recently exemplified, the Cal-ISO is subject to the whims of the state political process, as was demonstrated by a series of votes to lower the price cap this summer. ***The Cal-ISO lacks true independence.***

- **FERC Blind Approval.** AB 1890 established an aggressive timeline for the start-up of the PX and Cal-ISO. Put simply, these institutions were not ready for primetime. Yet FERC – anxious to approve any entity approximating its heralded independent transmission operator model and wanting to demonstrate deference to state decisions – failed to adequately scrutinize the numerous filings and impose the conditions necessary to create an effective market structure. ***FERC failed to exercise effective oversight of the interstate, wholesale market.***

Fixing the Market

The electricity market in California is clearly dysfunctional and in need of repair. The California Legislature, California PUC and FERC built this monster, and they will have to work together to fix it.

Let me first focus on the steps that should be taken by FERC, which must approve the market structure:

- **Interim Price Caps.** A blanket cap on bids to supply power for all markets is a bad idea. Clearly, California needs additional generation. Given the costs to construct and operate a peaking power plant, the instinctive imposition of caps deters new plant construction. ***Yet, the market is not workably competitive, and some interim cap is needed to protect consumers from price gouging and market power abuse.***

- **Rational Market Design.** FERC must closely review and redesign the California market to provide greater liquidity, price transparency and competition. NCPA urges FERC to hold a technical workshop in California to learn more about the flaws in the market and steps that can be taken to advance effective and efficient competition. While more generation is needed to level-out the market clearing price, ***fixing market flaws will reduce the frequency, duration and intensity of the price spikes.***

- **Effective Mitigation of Market Power.** Static reviews of numeric concentration levels are ill-suited for today's competitive market. In California, the Cal-ISO Market Surveillance Committee is the first line of defense. But there needs to be a FERC backstop with the ability to get timely access to market information and to take timely action to correct market imperfections. ***Transient and locational market power require effective real-time market monitoring and market response. Congress must provide FERC with clear guidance and authority to accomplish this task.***

- **Effective Transmission Management and Expansion.** Properly sized and structured Regional Transmission Organizations (RTOs) can facilitate effective markets and relieve transmission constraints. The Cal-ISO is too small of a market, it lacks independence and the motivation and ability to build transmission. FERC

"settled" in accepting the Cal-ISO filing. ***FERC must stick to the tough standards outlined in Order 2000 and promote effective RTOs, and Congress must affirm FERC's authorities outlined in Order 2000 to avoid any legal uncertainty.***

Additional steps needed to improve the workings of the market are within the control of the California Legislature and PUC. NCPA would urge the following state actions:

- **Efficient Transmission and Generation Siting.** We need more infrastructure, both generation and transmission. Siting new facilities either in California is extremely difficult. NCPA has relied exclusively on renewable and other "low-impact" resources, demonstrating that we can build new facilities and still respect our environmental standards.
- **Implement temporary regulatory** "exceptions" that allow power pants to run at their highest possible capacity rating until an emergency is over – to help improve reliability and reduce the number of brownouts and blackouts.
- **Encourage customers to cut back on unnecessary usage by**: turning-off or turning-down high-demand appliances, such as washers-and dryers, air conditioners, and swimming pool and hot-tub filters, during really hot days when electric supplies are stretched to the limit.
- **Reward customers and utilities** that help protect system reliability through their participation in significant voluntary energy conservation efforts during power emergencies.

Eliminating Preference Is Not A Solution

Representative Bilbray has authored legislation to eliminate the current first-purchase right – or "preference" – afforded non-profit, consumer-owned municipal and cooperative utilities in the

marketing of power generated at federal multi-purpose projects. This legislation would do nothing to mitigate current market volatility or lower rates to San Diego consumers. Rather, it would force additional California consumers to pay higher rates. Taking away federal power would prevent long-term planning needed to expand infrastructure.

I urge the subcommittee to consider the following and reject the legislation.

- Eliminating preference would not create any price reduction for San Diego consumers. First, there is no requirement that the power would flow to San Diego – or even stay within California. More likely, the power would be diluted through sales throughout the region. Second, under California law, the power would no longer be sold under cost-based rates, but rather sold at the market clearing price of the PX and ISO. Finally, by increasing demand for purchases from the California market, as municipal utilities seek replacement power, the proposal would actually push prices even higher. ***San Diegans deserve real solutions.***

- The proposal is discriminatory, taking low-cost resources from only select California utilities. Southern California Edison and Pacific Gas & Electric own considerable hydroelectric resources with costs similar to the Western Area Power Administration (WAPA) (thereby refuting the allegation that federal power is "subsidized"). The Bilbray legislation does not impact these resources, affecting only the federal power marketed to municipal utilities. ***Discriminatory proposals merely distract parties from addressing the real causes of the extreme market volatility.***

I urge you address the real issues in this dysfunctional market. The result of your failure to address the real issues is to cause greater harm to consumers in San Diego and ultimately throughout California.

Conclusion

The flaws in the California market are extreme and complex. There is no silver bullet. The state must address the need for infrastructure and a demand-side response. FERC must be an active and engaged partner in monitoring the market and promoting an effective market structure. And Congress must take steps to provide the necessary direction, guidance and authorities. NCPA is a member of the Electricity Restructuring Stakeholders and urges the Subcommittee to enact federal restructuring legislation that parallels the Stakeholder principles.

The price spikes and market volatility experienced in California need not be repeated elsewhere. I urge you to learn from these lessons. Markets do not happen by legislative fiat. They must be carefully facilitated. I urge you to take the actions necessary to create effective wholesale competition for the benefit of all consumers, in California, and throughout the country.

Attachments