S. HRG. 107–183

ELECTRICITY AND GAS RATES

HEARING

BEFORE THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES UNITED STATES SENATE

ONE HUNDRED SEVENTH CONGRESS

FIRST SESSION

ON

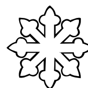
S. 764

TO DIRECT THE FEDERAL ENERGY REGULATORY COMMISSION TO IMPOSE JUST AND REASONABLE LOAD-DIFFERENTIATED DEMAND RATES OR COST-OF-SERVICE BASED RATES ON SALES BY PUBLIC UTILITIES OF ELECTRIC ENERGY AT WHOLESALE IN THE WESTERN ENERGY MARKET, AND FOR OTHER PURPOSES

S. 597

TO PROVIDE FOR A COMPREHENSIVE AND BALANCED NATIONAL ENERGY POLICY

JUNE 19, 2001



Printed for the use of the
Committee on Energy and Natural Resources

U.S. GOVERNMENT PRINTING OFFICE

76–175 PDF WASHINGTON : 2001

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2250 Mail: Stop SSOP, Washington, DC 20402–0001

COMMITTEE ON ENERGY AND NATURAL RESOURCES

JEFF BINGAMAN, New Mexico, *Chairman*

DANIEL K. AKAKA, Hawaii
BYRON L. DORGAN, North Dakota
BOB GRAHAM, Florida
RON WYDEN, Oregon
TIM JOHNSON, South Dakota
MARY L. LANDRIEU, Louisiana
EVAN BAYH, Indiana
BLANCHE L. LINCOLN, Arkansas

FRANK H. MURKOWSKI, Alaska
PETE V. DOMENICI, New Mexico
DON NICKLES, Oklahoma
LARRY E. CRAIG, Idaho
BEN NIGHTHORSE CAMPBELL, Colorado
CRAIG THOMAS, Wyoming
GORDON SMITH, Oregon
JIM BUNNING, Kentucky
PETER G. FITZGERALD, Illinois
CONRAD BURNS, Montana

ROBERT M. SIMON, *Staff Director*
SAM E. FOWLER, *Chief Counsel*
BRIAN P. MALNAK, *Republican Staff Director*
JAMES P. BEIRNE, *Republican Chief Counsel*
LEON LOWERY, *Professional Staff Member*
HOWARD USEEM, *Senior Professional Staff Member*

Note: Senator Bingaman assumed the Chairmanship on June 6, 2001.

CONTENTS

STATEMENTS

	Page
Bingaman, Hon. Jeff, U.S. Senator from New Mexico	1
Boxer, Hon. Barbara, U.S. Senator from California	33
Breathitt, Linda Key, Commissioner, Federal Energy Regulatory Commission	12
Brill, Thomas R., Director of Regulatory Policy and Analysis, Sempra Energy, San Diego, CA	56
Brownell, Nora Mead, Commissioner, Federal Energy Regulatory Commission	15
Fetter, Steven M., Managing Director, Global Power Group, Inc., New York, NY	52
Hébert, Curt, Jr., Chairman, Federal Energy Regulatory Commission	4
Henning, Bruce B., Director, Regulatory and Market Analysis, Energy and Environmental Analysis, Inc., Arlington, VA	59
Massey, William L., Commissioner, Federal Energy Regulatory Commission	14
McMahan, Ronald L., Ph.D., Managing Partner, Enercap Associates, LLC, Boulder, CO	48
Murkowski, Hon. Frank H., U.S. Senator from Alaska	1
Roberts, Geoffrey D., President and CEO, Entergy Wholesale Operations, The Woodlands, TX	43
Wood, Patrick III, Commissioner, Federal Energy Regulatory Commission	16

APPENDIXES

Appendix I

Responses to additional questions ... 71

Appendix II

Additional material submitted for the record ... 73

ELECTRICITY AND GAS RATES

TUESDAY, JUNE 19, 2001

U.S. SENATE,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, DC.

The committee met, pursuant to notice, at 9:07 a.m., in room SD–106, Dirksen Senate Office Building, Hon. Jeff Bingaman, chairman, presiding.

OPENING STATEMENT OF HON. JEFF BINGAMAN, U.S. SENATOR FROM NEW MEXICO

The CHAIRMAN. This morning the Energy Committee has a hearing on the recent FERC order, and it is also a hearing on Senator Feinstein and Senator Smith's bill to impose just and reasonable prices in Western electricity markets.

I have said from the beginning of the process that I believe that the Federal Energy Regulatory Commission is under an obligation under the Federal Power Act to assure just and reasonable rates in California and throughout the West. I have also said that in my view the Commission was slow to act in that regard, and that if action was not taken, Congress needed to step in.

The Commission yesterday issued an order that addresses market issues in the West. We are anxious to hear an explanation of that order, ask questions about how it is expected to work, how the Commissioners themselves believe it will work.

On hearing the testimony this morning and hearing from some other witnesses, I believe we will be better able to determine whether Congress needs to move ahead or await further information.

We look forward to the testimony. I want to thank the Commissioners particularly for being here. I know that this is a very busy morning for them. They have a technical conference on issues at the boundaries of regional transmission groups, as I understand it, and I am told that they really do need to leave here by no later than 10:30. So, we will have a short statement by Senator Murkowski and then go right to the witnesses and hear from them. Their general counsel is able to stay after they leave, I am informed.

Senator Murkowski, go ahead.

STATEMENT OF HON. FRANK H. MURKOWSKI, U.S. SENATOR FROM ALASKA

Senator MURKOWSKI. Thank you, Senator Bingaman. Let me, first of all, congratulate you as chairman, and make my pledge to work with you and your professional staff.

I think between us we leave somewhat of a legacy on the issue of energy. You and I have held 24 hearings. We have had 164 witnesses with specific recommendations on how to address the energy crisis.

As we look at the testimony that we are about to receive from FERC, I hope that it is enlightening relative to the action taken and the question of whether or not this action is sufficient.

You know, California ordered its investor-owned utilities to divest their fossil generation, but exempted the municipal utilities. And California prohibited its investor-owned utilities from using long-term contracts for the power market and forced them to rely entirely on the spot market.

It was not so long ago that we saw headlines that indicated that power deals exceed prices on the spot market. In other words, these long-term contracts that were recently signed in California were at a higher rate than the spot market, which gives you some idea of the volatility of the price of electricity.

Now, that strategy worked for a short time until demand in California grew beyond the availability of out-of-State supply. The reasons included increased demand in other parts of the West, as well as unseen factors such as record droughts on the Western hydro resources. But the reality is that supply did not meet demand, so now we have California's situation of blackouts, brownouts.

The California power shortages have been evident for years. Yet, neither the State of California nor previously the FERC, under the previous administration, did very much about it. They simply hoped the problem would perhaps magically go away or the responsibility would fall on someone else's watch.

In the meantime, California bankrupted its investor-owned utilities and put the taxpayer of California on the hook for some $40 billion. It did not pass on the true cost of power to consumers because of retail price caps. As a consequence, little incentive to conserve. Now some of those costs are passed on but I think it is still in the area of about 50 percent.

I cannot help but be somewhat amused that there seems to be in the minds of some people in California, or at least the media, there is a significant difference between the taxpayer and the ratepayer. I do not see that.

Are price caps the solution to California's problems? Well, I do not think so. Price caps do not build powerplants. Price caps do not encourage conservation. They seem to spin the web of assumed political relief from higher prices, but not real relief. They do not build new powerplants or increase supply. That is the bottom line.

But if price caps are the answer, as some suggest, I ask why has the California government not imposed price caps on the power sold by municipally owned utilities such as the Los Angeles Department of Water and Power.

It is interesting to look at some of these accusations. Private power, of course, must openly report its profit. Public power does not have to report its windfall profits to anyone. It can keep them secret if it wishes. Private power has to report to the Securities and Exchange Commission and is watched like a hawk by investors who own stock. Public power has no investors, no SEC looking over

their shoulder. Private power pays income taxes. Public power pays no taxes.

It should come as no surprise that the State of California and specifically Governor Davis' Department of Water Resources, who has spent billions in purchasing power for California, has been stonewalling a California Senate committee investigation of suspected price gouging and market manipulation, refusing to provide relevant documents. To accuse the private power of profiteering, but to say so little about public power in my opinion is shameful. But for Governor Davis to fail to stop the Los Angeles Department of Water from profiteering is also inexcusable.

I think it is also important, as we look at the issue of protection for those consumers in the West to recognize that both new generation and maintaining existing generation is an important factor that treats both the investor-owned and municipal utilities alike. Without a firm commitment from investors, we are not going to see one shovel turned in the construction of new generation. California has plenty of permits, but how many of those permits is that financing conditional?

I refer to a letter I received by Mr. Wayne Angell, Senior Managing Director and Chief Economist of Bear Stearns. I will introduce the letter in the record in its entirety, but it reads and I quote. "When caps are imposed and prices pushed below the market level, three things happen. One, buyers seek to purchase more, overriding public conservation efforts. Two, sellers supply less by diverting scarce supplies to more rewarding markets. And three, new energy transportation and production facilities would continue to decline as the uncertainties created by the regulations drive investors elsewhere."

Finally, Mr. Chairman, I think it is fair to say that the FERC order is working. Electric rates are declining. I have a chart behind me that shows some idea of the volatility of the rate structure and the fact that there has been a leveling off. The megawatt rate is somewhere in the area of $45 to $46, but you can clearly see the trend.

I think FERC should be commended for their April order. That April order is working, and yesterday we saw FERC issue an order that builds on the April 26 price mitigation order, expanding its price mitigation to apply to all Western States, not just California, and expanding its price mitigation order to apply all of the time, not just when California is in a stage 1, 2, or 3 emergency.

Since January, the current FERC has taken numerous steps to address California's problems. Nearly 30 orders have been issued. Under the Bush administration, FERC has been very aggressive to try and solve the problem.

I would ask that a letter be entered in the record from four Governors today, Jane Dee Hull, State of Arizona; John Hoeven, State of North Dakota; Mike Leavitt, State of Utah; Jim Geringer, State of Wyoming. The body of the letter and the paragraph appropriate says, "We understand FERC has acted unanimously to further address the issue through the existing process. This further underscores the effectiveness of the existing regulatory process and eliminates the need for congressional legislation in this area."

I commend those Governors. I commend the President and Vice President Cheney who have urged that we stay the course on this and that we do not need legislation. That is basically why FERC was established.

I ask what do we need before we are convinced on the issue that what we really need is an increased supply. If there is a milk shortage around here, you run out and get some more cows I guess.

But I am convinced that the time for talk is behind us. Anyway, what we have here is an operational FERC that is doing its job. We need to move forward with the legislation that promotes energy production and that is the energy plan that was presented by President Bush. It extends Price Anderson. It opens up the 1002 area of ANWR. It expedites renewal of TAPS. It increases LIHEAP weatherization. It expands the scope of appliance standards, hydro licensing, comprehensive electricity, eminent domain, pipeline safety, reauthorizes hydrogen futures, and a number of tax items. I think it is important to reflect on this because there are accusations here and there that the administration has not done anything in the sense of coming up with some positive solutions to address the energy crisis.

What I do not think we want to do is go back to 1992 where this committee had extended hearings and did very little. I think what we got out of it covered encouraging renewable fuel development, conservation, and increased LIHEAP. The American will not stand for that. In addition, I think we have got left-hand turns on red lights, and I think we got low-flush toilets that you had to flush twice.

[Laughter.]

Senator MURKOWSKI. We have got to do better this time. Conservation can help, but it cannot do the job alone. If conservation was the answer, California would be swimming in energy because it is the second most energy efficient State in the Nation. Yes, we should conserve, but we must also have adequate supplies and increase our supplies.

So, as a consequence, Mr. Chairman, I look forward to the witnesses this morning. I want to commend them for the action they have taken, and I would encourage my colleagues to recognize that before we wander in and introduce legislation, we should allow this agency, created by the Congress, to do its job.

The CHAIRMAN. Commissioner Hébert, why do you not go ahead and explain to us the action that FERC took yesterday? Then we will call on each of the other Commissioners to give their perspective on it, to the extent they want to add anything. Why don't you go right ahead.

STATEMENT OF CURT HÉBERT, JR., CHAIRMAN, FEDERAL ENERGY REGULATORY COMMISSION

Mr. HÉBERT. Thank you, Mr. Chairman. I certainly have an opening statement that will get into what the Commission has done, has been doing, and actually what we have done as recently as yesterday.

The Commission's experience in regulating electric and natural gas utilities, indeed, the Nation's experience in pricing and allocating vital goods and services, has taught us an important lesson.

Consumers are better off if supply and pricing decisions are based on market mechanisms rather than bureaucratic fiat. Thus, the Commission is committed to helping move this country toward open competitive energy markets.

At the same time, we recognize we must ensure that broken and dysfunctional wholesale markets are fixed. This poses challenges, particularly in California and the West where there is a substantial imbalance of supply and demand.

In response to these challenges, the Commission has been working aggressively to reform market structures and to enhance consumer welfare in California and the West. The Commission has not lost sight of the point that the best way to lower wholesale electricity prices and to keep them low is to promote investment in badly needed supply and delivery infrastructure and to encourage demand reduction. The Commission's task remains to balance these goals to ensure that short-term measures do not undermine long-term principles.

Yesterday, by a unanimous vote of 5-0, the Commission took action that illustrates this balanced approach perfectly. It is the approach that has been working and that will now, I believe, even work better.

The Commission has adopted refinements to a market monitoring and price mitigation plan that was first implemented on May 29 of this year. The plan strikes a balance between bringing market-oriented price relief to the California and the Western electricity markets providing greater price certainty to buyers and sellers of electricity, energy, promoting conservation, and importantly encouraging investment in efficient generation and transmission.

The original plan established price mitigation for the spot markets—in other words, markets in which sales are arranged 24 hours or less before delivery of the power starts—run by the California independent system operator when the ISO declares a reserve deficiency—in other words, when generating reserves are at or below 7 percent.

Price mitigation has been triggered twice since the Commission's plan was first implemented on Wednesday, May 30, and Thursday, May 31, 2001, 2 days of record high temperatures when the ISO announced reserve deficiencies. Prices which had been up around $300 per megawatt hour before the ISO announced a reserve deficiency on May 30 fell to $120 and rose no higher than $135 during the rest of the day. On May 31, prices rose to $130 per megawatt prior to the announcement of a reserve deficiency, but fell to $108 when mitigation began and fell further to $64 a megawatt hour that day.

Even more significant is the fact that spot prices continued to fall in subsequent days, even when system emergencies were not declared and have remained low. Spot prices which had been up over $400 per megawatt hour for much of the month of May, prior to implementation of the Commission's plan, now rest comfortably around $100 per megawatt hour. Put another way, spot prices in California and the rest of the West are lower than at any time in the past year and are coming close to spot prices in the rest of the country.

In addition, the drop in spot electricity prices has been matched by related price drops in other markets. Prices for Western forwards contracts are also down significantly. For example, year 2002 forwards transactions have dropped from $127 per megawatt hour to $68 per megawatt hour. And 2003 forwards transactions have dropped from $60 per megawatt hour to $41 per megawatt hour in this past month.

On top of all this, natural gas prices have similarly plunged and are lower and hopefully leveling off in California and much of the West.

Building on this success, yesterday this Commission, in a unanimous decision, voted to refine its mitigation plan to add price mitigation measures for spot markets during all time periods and for all other States in the Western Systems Coordinating Council. Now wherever there is a reserve deficiency and when there is one in California, a market clearing price will apply not only to the ISO spot markets, but also to all spot markets in the 11-State region covered by the WSCC. The market clearing price will be based on the bid of the highest cost gas-fired unit located in California that is needed to serve the California ISO's load on any day in which a reserve deficiency is announced. The bid will reflect a published gas cost plus, an adder for operating and maintaining expenses, and a credit risk. Sellers other than marketers will have the opportunity to justify individual prices above the market clearing price based on their cost. Therefore, not a cap. Marketers will not be allowed to charge more than the market clearing price. Marketers will be price takers.

When a reserve deficiency period ends, the maximum price that can be charged for spot market sales in California and the rest of the WSCC will be 85 percent of the highest hourly price that was in effect during the most recent stage 1 reserve deficiency period, absent cost justification. For example, if the highest market clearing price during the most recent reserve deficiency called by the California ISO is $100 per megawatt hour, spot prices in all subsequent hours, beginning when the reserve deficiency ends, can as a general matter be no higher than $85 per megawatt hour. This $85 per megawatt hour maximum price will remain in place until the next reserve deficiency is announced and a new market clearing price is set. Again, sellers other than marketers will have the opportunity to justify individual prices above the market clearing price based on their costs.

Yesterday's order also limits the ability of generators to exercise market power by withholding capacity by requiring that all public utilities and non-public utilities that own or control generation in California offer power in the California ISO spot markets. This requirement applies to any non-hydroelectric resource to the extent its output is not committed for use or sale in the hour or necessary to satisfy local reserve or reliability requirements.

The same requirement will apply to sellers throughout the rest of the WSCC, except that they may offer their power in the spot markets of their choosing.

Also, the Commission has made clear that through enhanced monitoring and coordination of generation or generator outages, along with additional tools to act against withholding in other

forms of anti-competitive behavior, it is committed to ferreting out and remedying any form of market manipulation and misbehavior no matter when it occurs, 24 hours a day, 7 days a week.

I am very proud of the Commission's approach toward reforming California and Western electricity markets. The Commission's mitigation plan manages what many said could not be accomplished: restraining prices while encouraging investment. The key is that price mitigation is based on market forces. The market clearing price is designed as a cost of the least efficient unit that is called upon to dispatch energy.

The mitigation price is not a blunt, arbitrary figure that bears no resemblance to market conditions and is subject to political pressures and whims. That is what was tried in California just this past summer. The ISO lowered the price cap last summer from $750 per megawatt hour to $500 and then even lower to $250 per megawatt hour. All this did was cause an increase in the average electricity price and a reduction in the ability of the ISO to procure emergency power.

The point I would like to make there is that there are so many discussions about price spikes, and we certainly understand that. We certainly look for those, as does the industry. But we are concerned with what inevitably gets to the consumer most and that is the average prices, and that is why I believe this plan will work best.

Indeed, last December, the ISO begged the Commission to allow it to remove the cap, explaining that it was impairing the ISO's ability to meet demand and undermining the reliability of the electricity grid.

Also the mitigation price is not based on the cost of individual generators. A return to traditional regulation would entail months and perhaps years of administrative appellate litigation over cost structures and reasonable rates of return. This type of delay and uncertainty is simply unacceptable at this critical juncture. We need to be problem solvers now.

Even more disturbing, regulation based on cost would provide no incentive for suppliers to become efficient and reduce their costs and thereby lower prices for consumers.

Mr. Chairman, I do see the yellow light, but I am trying to explain the entire plan to you. It will probably take me another 2 or 3 minutes.

The CHAIRMAN. Go right ahead.

Mr. HÉBERT. Thank you.

The Commission's plan, on the other hand, provides every incentive for suppliers to reduce their costs and improve their efficiency. Nothing is now guaranteed. A generator or a marketer now makes money by increasing the efficiency of production. Its profit is determined by how much of a differential there is between its own cost of production and the cost of the least efficient last dispatched unit. A generator is now able to recover its fixed costs, but to the extent of its recovery of capital and the size of its profit, it is determined by the efficiency of its operations. In this manner, a generator will find it profitable to retire old, dirty, inefficient units and replace them with new, cleaner burning, more efficient units. It is not only better for consumers for bringing down prices and driving effi-

ciency, it is also better for consumers because we all understand the best way to clean up our environment is to never dirty it in the first place.

Yesterday's order was just the latest of dozens of orders we have issued in recent months addressing California and Western energy markets. On the electric side, the Commission has done everything it can within its jurisdiction to extract every last drop of electricity out of existing resources and to free up additional megawatts from demand reduction initiatives.

To accomplish these results, the Commission has removed various obstacles through waivers and other regulatory enhancements. It has provided various incentives to the development of new supply, including hydroelectric supply and the reduction of existing demand.

Other Commission-led initiatives have reformed well-intended but operationally dysfunctional market structures and have promoted contractual certainty.

On the natural gas side, the Commission has been no less active. First and foremost, the Commission in recent months has significantly expedited its processing of applications to add badly needed pipeline capacity to California. Applications of the type that used to take many months or years for the Commission to process were acted on in a mere 3 to 4 weeks.

On this point, the California Energy Commission recently identified the lack of pipeline capacity, particularly capacity inside California as the principal reason for the recent upward spikes in the price of natural gas. The Commission recently held a technical conference on this subject. We do not control intrastate capacity. It is controlled by the State of California, by their Commission, and by their people.

The Commission has sought comment on whether to reimpose ceiling prices for capacity release transactions on pipelines serving California. And the Commission established an expedited hearing on alleged affiliate market power abuses by major gas pipelines serving southern California.

In conclusion, the Commission has been doing a great deal of work, Mr. Chairman and members of the committee. The Commission's efforts have contributed to the recent decline in Western energy prices. Yesterday's order issued by a unanimous Commission, a Commission sitting as one, improves upon a plan that is good for California, good for the Pacific Northwest, and good for the entire West. It is a plan that respects market forces and that attempts to restrain prices while at the same time offering incentives for investment in supply and delivery. That is the only real solution to the West's immediate energy problems. It represents an effort to provide some relief now while making sure that mitigation is short-lived. The Commission's goals remain to fix dysfunctional markets and to ensure that markets regain their competitive footing as quickly as possible.

Mr. Chairman, just quickly, many of us have understood that too much deference has been given to California in the past. We are acting to do what we can and what we should and what we are bound to under the law to protect the consumers in California and the West. In doing that, I would like to mention something that I

think is important for you to know as we understand we cannot afford to pay too much deference when consumers may be harmed.

It is my belief—and I am not speaking for the Commission here and what the Commission did. This is my personal belief as Chairman of the Commission—that when I speak of forward contracts and I speak of less reliance on the spot market, which we know is what damaged California, it would be my observation and my inclination that anything outside of 5 years of forward contracts is getting purely speculative and potentially harmful to consumers because, as we know, prices will continue to be volatile. I do not mean to, nor will I, endorse 10-, 15-, and 20-year contracts with the volatility that I know is ahead.

I know there are so many questions that come up as to what the Commission should have done a year ago. Again, I will continue to say that I cannot answer what this Commission should have done a year ago. I became Chairman January 22 and I came to many of your offices. I certainly came to Senator Feinstein's office as well about 3 weeks after I had been named Chairman. I assured you and I assured others on this committee that we would act responsibly, we would act expeditiously, and we would correct the markets. I think we have done that.

We have issued over 60 orders for California specifically. We have had a price mitigation for California in reserve periods. We have got the RTO filed with us now, which is important, understanding that it is not only about supply but deliverability of that supply. We have issued orders removing impediments, removing obstacles. We are doing things faster than they have ever been done before to help California and the West. We have got gas prices coming down. We are moving towards transparency with gas prices. We are seeking comments on that. We are seeking comments on the caps themselves, on the capacity release. And now we have price mitigation not only for California but also for the West in reserve and in non-reserve periods.

I will close by saying this, Mr. Chairman and members of the committee. I believe in my heart and I know in my educated mind that we are on the right track and we are doing what should be done for California and the West with the principles that I think are endorsed by all of America.

Thank you, sir.

[The news release of the Federal Energy Regulatory Commission follows:]

COMMISSION EXTENDS CALIFORNIA PRICE MITIGATION PLAN FOR SPOT MARKETS TO ALL HOURS, ALL STATES IN ENTIRE WESTERN REGION

The Federal Energy Regulatory Commission today expanded its price mitigation plan for the California spot market sales to 24 hours a day, seven days a week. The curbs on prices in the spot electric markets were also broadened to cover the entire 11-state western region. Spot markets cover sales that are 24 hours or less and that are entered into the day of, or day prior to, delivery.

Chairman Curt L. Hébert, Jr. said: "The Commission's price mitigation plan works. Today, the Commission adopts additional measures, based on its original mitigation plan and which continue to employ market-oriented principles, that will ensure that the plan works even better."

Today's order retains the use of a single price auction and must-offer and marginal cost bidding requirements when reserves are below 7 percent in the California Independent System Operator (ISO) spot markets, as outlined in the April 26, 2001 price mitigation and monitoring order. The California ISO market clearing price will

also serve to constrain prices in all other spot market sales in the Western Systems Coordinating Council (WSCC) during reserve deficiencies in California. Sellers in other spot markets in WSCC will receive up to the clearing price without further justification. Sellers other than marketers will have the opportunity to justify prices above the market clearing price during reserve deficiency hours.

The California ISO market clearing price for reserve deficiency hours will also be adapted for use in all western spot markets when reserves are above 7 percent. Prices during non-reserve deficiency hours cannot, absent justification, exceed 85 percent of the highest hourly clearing price that was in effect during the most recent Stage 1 reserve deficiency period called by the ISO.

Building on the success of its price mitigation and monitoring plan, the Commission said that the key to bringing down prices in California still lies with signing a portfolio of longer term contracts and relying less on the more volatile spot markets, and attracting additional investment in badly needed supply and delivery infrastructure.

Today's actions will ensure that wholesale rates in spot markets in California and the rest of the WSCC will fall within a zone of reasonableness. In rejecting a return to cost-of-service rates, the Commission said that cost-based ratemaking may penalize more efficient generators and does not provide proper incentives for generators to become more efficient. The Commission, in this order, as it has done in all its previous orders related to the California markets, has put procedures in place to prevent possible abuses that could lead to unjust and unreasonable rates.

The Commission made clear that the abuse of market power will not be tolerated and sellers may lose their market-based rates if they engage in anti-competitive behavior.

In adopting market-based rates for the Western energy markets, the Commission's use of a monitoring program is key to ensuring that rates are just and reasonable. The revisions made in this order are designed to provide a structure that will minimize potential abuses, ensuring reasonable rates for consumers, while also encouraging adequate supply in the market.

Other elements of today's order are:

- all public utilities and non-public utilities selling into the markets run by the California ISO or using Commission-jurisdictional transmission facilities, who own or control generation in California, must offer power in the California ISO's spot markets. This applies to any non-hydroelectric resource to the extent its output is not committed for use (energy or minimum operating reserves) or sale in the hour.
- the same requirement will apply to sellers throughout the rest of the WSCC, except that they may offer their power in the spot market of their choosing.
- power marketers will not be permitted to sell above the mitigated prices.
- generators' bids during reserve deficiencies must reflect the marginal cost to replace gas used for generation, determined by the average of the mid-point of the monthly bid week prices as reported in Gas Daily for all three spot market prices reported for California.
- bidders will be allowed to invoice the California ISO for the costs of complying with NO_X and other emissions standards and for fuel used for start-up. The ISO is required to file a rate mechanism to bill those costs over the entire load on the ISO system.
- the price mitigation will end September 30, 2002.

Chairman Hébert commented: "This is a plan that is good for California, good for the Pacific Northwest, and good for the entire West. It is a balanced plan that respects market forces and that attempts to restrain prices, while at the same time offering incentives for investment in supply and delivery that is the only real solution to the West's immediate energy problems. It represents an effort to provide some relief now, while making sure that mitigation is short-lived. The Commission's goal remains to fix dysfunctional markets and to ensure that markets regain their competitive footing as quickly as possible."

Commissioner Linda K. Breathitt said: "I support the mitigation approach adopted through this order because it contains the market features that I believe are critical to helping remedy the market design flaws while still encouraging new investment in infrastructure and protecting consumers."

Commissioner Nora Mead Brownell commented: "It is my hope that this order lays out a road map which will bring certainty and stability to the citizens in the West and encourage the desperately needed investment in infrastructure."

Commissioner William L. Massey said: "This order provides price protection in the entire Western interconnection 24 hours a day, seven days a week, it absolutely prohibits gaming and so-called megawatt laundering, and will last 2 summers. I have

been advocating this comprehensive approach for quite some time, and am generally pleased with this order."

Commissioner Pat Wood, III commented: "What we do today is about more than California. It is about the future of competition and about our resolve to make it a better world for energy customers in our country."

In a comprehensive December 15, 2000 order addressing problems in the California wholesale markets, the Commission found that the market structure and rules for wholesale sale of electric power in California were flawed and that, in combination with an imbalance of supply and demand, led to unjust and unreasonable rates for short-term energy during certain periods and under certain conditions. The December order provided a number of remedies for the California markets including elimination of the Power Exchange's (PX) mandatory buy-sell requirement price and establishment of penalties for under scheduling load.

Following the December order and a series of related refund and investigation orders issued earlier this year, the Commission announced its prospective price mitigation and monitoring plan for California in an April 26 order. The Commission noted that the plan, which took effect May 29, has already produced results with western power prices dropping in both the spot and long term markets. California's reliance on the spot market has dropped from near 100 percent to about 20 percent during peak hours since the Commission's December order.

The Commission also announced today that it will hold a settlement conference before a FERC administrative law judge later this month. All parties in the California ISO investigation proceeding are directed to participate in the settlement discussions in order to resolve refund issues for past periods and help structure new arrangements for California's energy future.

KEY QUESTIONS AND ANSWERS ABOUT THE FEDERAL ENERGY REGULATORY COMMISSION'S JUNE 18, 2001 ORDER ADDRESSING PRICE MITIGATION IN CALIFORNIA AND THE WESTERN UNITED STATES

Question 1. Does the Commission's order put price caps on all California wholesale electricity prices?

Answer. No. The Commission's order does not impose cost-based caps in any markets or on any prices. Rather, it establishes price mitigation, based on market-oriented principles, that will apply to all wholesale sales of energy in spot markets in the United States portion of the Western Systems Coordinating Council (WSCC). Spot market sales are wholesale sales that last no longer than 24 hours and that are entered into the day of, or the day prior to, the power being delivered.

Question 2. What is the "price mitigation" that is being adopted?

Answer. There are two types of price mitigation being put in place for spot market sales, depending upon how low generation operating reserves are at any particular time:

(1) When generation operating reserves fall below 7% in California (called a reserve deficiency), a market clearing price will apply to all spot market sales in California and in the rest of the WSCC. All bidders in the ISO spot markets will receive the market clearing price without further price justification. All sellers in other spot markets in the WSCC will receive up to the clearing price without further price justification. The market clearing price will be based on the bid of the highest cost gas-fired unit located in California that is needed to serve the California Independent System Operator's load on any day in which a reserve deficiency is called. The bid will reflect a published gas cost plus an adder for operating and maintenance expenses. Sellers other than marketers will have the opportunity to individually cost justify prices above the market clearing price. Marketers must be price takers, i.e., they cannot charge more than the market clearing price.

(2) When a reserve deficiency period ends and generation operating reserves rise to 7% (a non-reserve deficiency period), the maximum price that can be charged for spot market sales in California and the rest of the WSCC during the non-reserve deficiency period, absent cost justification, will be 85% of the highest hourly price that was in effect during the most recent Stage 1 reserve deficiency period called by the California ISO. An uplift charge for fuel used for start up of generators will not be included in the market clearing price, but instead, will be recovered through ISO charges to all California load on the ISO's transmission system.

Question 3. How does the above price mitigation differ from that in the Commission's April 26, 2001 order?

Answer. It differs in three major ways:

(1) The market clearing price formula is changed in three ways: it adjusts the gas component to reflect replacement gas prices in the North or South of California, depending upon where the generating unit that sets the market clearing price is lo-

cated; it adjusts the O&M expense from $2 to $6; and it eliminates emission costs from the formula. Emission costs will be recovered separately from the ISO and, ultimately, the ISO's customers.

(2) The prior order did not provide for mitigation of spot sales prices in non-reserve deficiency periods. As described in the answer to Question 2, today's order does provide for such mitigation.

(3) The prior order did not provide for mitigation of spot prices in the WSCC, other than the spot prices in the ISO's centralized markets, but sought comment on whether and what mitigation to adopt outside the ISO markets. Today's order applies price mitigation rules in California and all of the WSCC's spot markets, including to individual bilateral contract spot market sales in California and the remainder of the WSCC.

Question 4. Do the above price mitigation rules apply to all sellers in the West?

Answer. Yes. The same rules that apply to FERC-regulated public utilities (such as traditional investor-owned utilities, individual power generators and power marketers) that make spot market sales in the WSCC also apply to any non-public utility (such as Federal power marketing agencies, municipal utilities and electric power cooperative utilities) that chooses to sell in FERC-regulated power markets or that use FERC-regulated interstate transmission facilities.

Question 5. How does the Commission's order apply to power marketers and potential market power abuse such as "megawatt laundering"?

Answer. "Megawatt laundering" refers to selling from California to other states, and later reselling into California in order to avoid price mitigation that may be in effect. Incentives for this will now be eliminated because uniform price mitigation rules will apply in California and in the remainder of the WSCC for both reserve deficiency periods and non-reserve deficiency periods. Further, power marketers (unlike other suppliers) will not be permitted to justify prices above the prescribed mitigated prices. Finally, all public utility sellers' market-based rate authorizations are conditioned on sellers agreeing to refund overcharges resulting from anti-competitive conduct and to potential revocation of their market rate authority.

Question 6. Does the new mitigation adopted in the order apply retroactively? What about refunds for past periods?

Answer. The mitigation in today's order takes effect the day after issuance of the order. The Commission will address refunds for past periods, if not resolved by settlement, in future orders. The Commission has directed public utility sellers and buyers in the California ISO markets to participate in settlement efforts before a Commission administrative law judge, with such efforts to begin by June 22 and to be completed within 15 days thereafter. Among the many issues presented by these proceedings, the parties may address refund issues during the settlement proceedings.

Question 7. Why hasn't the Commission imposed cost-based caps? Isn't the Commission required by the Federal Power Act to impose cost-based rates if competitive markets aren't working the way they are supposed to?

Answer. The Commission has broad discretion in setting rates, and is not required to use cost-based rates or any other specific method so long as the end result is within a zone of reasonableness. The Commission must balance two statutory goals: protecting customers against unreasonable rates and encouraging adequate supplies to meet those customers' power supply needs. Cost-based rates would squelch development of new supplies in the West and thus perpetuate the problems we are trying to solve. Thus, the price mitigation adopted by the Commission ensures that rates are not unreasonable for customers but also encourages new supplies needed in the West.

The CHAIRMAN. Thank you very much.

Let me just ask each of the other Commissioners to take two or three minutes and add anything they would like or give their perspective on this order. Commissioner Breathitt, why don't you start?

STATEMENT OF LINDA KEY BREATHITT, COMMISSIONER, FEDERAL ENERGY REGULATORY COMMISSION

Ms. BREATHITT. Mr. Chairman, I have a very short statement that complements what we have done yesterday, and I would like to read that and ask that it be entered into record.

The CHAIRMAN. Go right ahead.

Ms. BREATHITT. Mr. Chairman and members of the committee, yesterday the Commission instituted market monitoring and price mitigation procedures for the entire Western United States. These new procedures build on our April 26 order which implemented similar procedures for California and initiated a section 206 investigation of bulk power markets throughout the West.

The plan we announced yesterday is designed to produce prices in all hours that are just and reasonable and to emulate prices that would be present in a competitive market.

The purpose of the plan is to stabilize the market in the short term and permit California and other Western States to repair dysfunctional market mechanisms. The mitigation plan is intended to provide breathing room for the markets to self-correct.

Importantly, the mitigation plan will apply to all sellers, including marketers and non-public utilities across California and the balance of the U.S. portion of the Western States Coordinating Council.

I fully support the premise of the order, which is that all sellers should be treated alike to remove the incentive to sell in one area versus another when an emergency is called by the ISO, so-called megawatt laundering.

While I wholeheartedly encourage conservation and embrace demand reduction mechanisms, we need to acknowledge that the natural gas and electric infrastructure in the West must be expanded and upgraded.

I believe the market-oriented approach we have taken through yesterday's order will provide the price mitigation needed. It is also my hope it will not discourage necessary investment in supply.

I would like to note that I attached a concurrence to the order to express my views about one aspect that I did not fully endorse. The order instructs the ISO to impose a 10 percent credit worthiness surcharge to the market clearing price. The imposition of such a surcharge virtually concedes to the ISO the issue of whether or not the ISO must implement our Commission's credit worthiness standards, an action that I believe may be premature.

Finally, I would like to state my support for a settlement conference that will be established through the order. I am keenly aware of the difficulties that the parties face and that compromises will need to be made to fashion a comprehensive settlement. However, I have long been an advocate of negotiated resolutions and I encourage all the parties involved, including the State of California, to work together at the daunting task of settling past accounts and structuring new arrangements.

In conclusion, I am confident that the Commission has taken the appropriate actions to address the market distortions in California, and I am pleased that our mitigation plan will now be extended to the other States in the WSCC. Our remedies have been designed to help alleviate the high prices borne by California citizens and others in the West, but they have also been designed to ensure that sellers have incentives to sell into those States and build sorely needed new generation and transmission necessary to provide reliable service in the future. Meeting these goals within a market-oriented framework is an approach that I endorse.

The CHAIRMAN. Thank you very much.

Commissioner Massey, why don't you go ahead with any comments you have.

STATEMENT OF WILLIAM L. MASSEY, COMMISSIONER, FEDERAL ENERGY REGULATORY COMMISSION

Mr. MASSEY. Thank you, Mr. Chairman.

Yesterday's order brings substantial price relief to a broken market. I supported the order because it adopts measures that I have been championing for the past 8 months. Price controls are now extended to the entire Western interconnection, thereby eliminating the megawatt laundering problem that has vexed the mitigation programs adopted by the Commission and the ISO. All sellers, both jurisdictional and non-jurisdictional, are covered. Cost-based price controls based upon the production costs of the last increment of generation dispatched are now extended to all hours, not just those of reserve deficiencies. We have long needed 24/7 coverage and we finally have it. Price relief will remain in place for two summers, until September 2002, giving the market 16 months to correct. I endorse these measures.

Given that the Commission has now adopted measures that I have long advocated, I am tempted to declare victory and let it be. But I cannot. I have some concerns.

First of all, why did we not implement this plan 8 months ago? Until yesterday, the Commission had stubbornly refused to implement full-time price constraints, despite rather clear evidence that prices were not just and reasonable. We could have avoided much of the economic carnage out West, the closing of manufacturing facilities, putting people out of work that has occurred over the past year. Of all of this, this committee is very much aware.

No. 2, the 10 percent credit worthiness surcharge. I object to this. I do not see the need for it. The Commission has issued orders in the past few months instructing the ISO to abide by the credit worthiness requirements of its tariff. I am concerned that this 10 percent adder may diminish the ISO's enforcement of those requirements. Moreover, it is my understanding that recently all sales into the ISO's markets have been backed by a credit worthy party.

Instituting this surcharge does have a modest bright side, however. Generators may no longer attempt to justify bids on the basis of credit risk above what is provided in the cost-based clearing price methodology. This was a major flaw in the old, ineffective $150 benchmark in our earlier mitigation program. Eliminating that ground for high prices is perhaps a positive development.

Third, we should have provided guidance, in my judgment, on the issue of refunds. We send all the parties to a settlement conference with absolutely no guidance whatsoever on this question. And it seems to me that it is up to this agency to make a determination of what just and reasonable prices should have been, extending back to last October 2. Instead, we punt that to a settlement. I certainly hope it works. I hope the parties can settle the matter, but I would have preferred some guidance on this question.

Point four, the issue of the least efficient generation unit. Will it, as Chairman Hébert says, encourage the retirement of inefficient generators? Or will it, on the other hand, encourage the con-

tinued use of inefficient generators so that the market clearing price will be high? I do not know the answer to this question.

Point five, whether this is successful depends in substantial part on whether spot gas prices are reasonable. The last increment of generation will often be an inefficient gas-fired generator, and it may very well be that 80 percent of the cost of that generator will be natural gas. If gas prices are high, then the last increment of generation will be high. If gas prices are reasonable, the last increment of generation dispatched may be reasonably priced.

Finally, Mr. Chairman, just one more minute please. Over the next 16 months during this time out, can this broken market be repaired, repaired by substantial new generation, repaired by eliminating over-reliance on the spot markets, repaired by the implementation of a robust demand response program implemented through demand bidding that can take a bite out of the crisis, repaired by dealing appropriately with transmission constraints?

We must work with the State of California. We must reach out a helping hand and approach them in a spirit of good will to solve these problems. We now have 16 months.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much.

Commissioner Brownell, why don't you go ahead.

STATEMENT OF NORA MEAD BROWNELL, COMMISSIONER, FEDERAL ENERGY REGULATORY COMMISSION

Ms. BROWNELL. Mr. Chairman, thank you. Senators, I am pleased to be here today to talk about an order that I think represents an enormous step forward.

I would like to share with you, since I have been here last, what I found when I came to the Commission, particularly working on this order. I found a shared sense of urgency, both in my colleagues and by the staff. I found enormous flexibility as we worked through the complex issues that are outlined in this order. I found honest and open communication, and I believe those are the elements that will allow us to effectively respond and continue to open markets. I think you could fairly say that this order represents the fact that everybody gave at the office, and I think that is why it works.

What else does it represent? I think what we have done is to provide a comprehensive road map, a plan to get through the next two summers, a road map that will create stability and certainty and allow all of us to address market monitoring, structure, and policy issues to create a fully functional market.

It is important to note also that this order responds affirmatively to the significant and helpful input from all of the affected parties. The stakeholders' interests are well represented.

My colleagues have, I think, articulated the main issues that have been handled in this order, and of course, I know you have a lot of questions, so I am going to be brief. But I want to talk about a couple of elements that I think are critical.

We have, in fact, established a call to action for all of the parties to join in joint settlement discussions to bring to closure some outstanding issues. And Commissioner Massey is correct. Perhaps we need to give more guidance. But in Pennsylvania, we found the settlement talks to be successful because we believe business people

can manage their own business more effectively than we can. I urge the parties and I urge you to urge the parties to be serious and to be quick about addressing these issues. We will certainly do it for them and we will certainly do it quickly. But we hope to give them the opportunity to respond in ways that are most appropriate.

We have also begun the process to ensure that the opportunities created by new technologies for demand response mechanisms are fully examined and brought to the market in a rapid fashion. Customers are smarter than we give them credit for. Customers will use tools to manage their buying habits if we give them those tools. We need to find more effective ways than shutting down businesses to manage demand response. I believe the technologies are there. I think with encouragement from policy leaders like you and us we can bring them to market.

I think the most critical piece of this order is that it represents a real opportunity for the State and the Federal Government policies and the stakeholders to work together. No one of us can solve this problem. I wish it were that simple. I believe we have made an effort at outreach and we will continue to do so because I think together we can provide the leadership that is required and, indeed, demanded and owed to the consumers of the West and, frankly, the consumers of this country.

I thank you and I look forward to your questions.

The CHAIRMAN. Thank you very much.

Commissioner Wood, why don't you go right ahead.

STATEMENT OF PATRICK WOOD III, COMMISSIONER, FEDERAL ENERGY REGULATORY COMMISSION

Mr. WOOD. Coming last, there is a cleanup job. There is not much to clean up after this. We did a lot yesterday.

One of the things that we did not do that I think is relevant to the discussions that I know were scheduled for the committee today is move to a cost-of-service rate regulation regime. We have contemplated it. I am just personally not allergic to that sort of remedy, but I wanted to look to the facts and have had the staff at the Commission, who I have found to be very capable and helpful on this issue, research for me some of the relevant facts here so I could share those with you all today. So, if I could just step over for my 2 minutes to this chart.

The CHAIRMAN. Go right ahead.

Mr. WOOD. The spot market in California encompasses the last 20 percent of the total market. Due to the efforts of the California government to get into longer-term contracts since last December, a lot of the generation has been taken off of the spot market and moved, as we think appropriate and support certainly from the Commission's point of view, into longer-term contracts that are not dealt with by yesterday's order.

Yesterday's order deals with in predominant part—and this is what the facts show—with the older units that have what we call the higher heat rates, the less efficient units. I know, Senator Feinstein, you have been concerned about the use of the least efficient units, but quite frankly what is in the leftover part of the spot mar-

ket are very many inefficient units. So, one is not markedly more inefficient than the other. There is some spread.

And this curve is representative—I will get some additional facts as we work the ISO to get those. The curve largely is a relatively flat curve that drops a little lower as you have some of the newer more efficient units participating in the spot market, and then the very old units that are dispatched at the very, very end and very high units which we could see this summer certainly setting the price.

Unlike cost-of-service ratemaking, the Commission's market mitigation order does not add a profit. We do add this credit worthiness that we have talked about, but we do not add a normal profit that we would add to the cost-of-service. If we were to take the prices of these units and add some sort of cost-of-service, I know even the Governor of California has said perhaps even a 50 percent return would be better, but in general regulation is a 12 percent return after tax, or the 16 percent once you factor in the taxes. If you were to add that on to the curve right here, you would set up a rate here (gestering). So, that is kind of what cost-of-service would do, taking these costs and add a profit like that.

What the Commission's order yesterday does is on a normal first contingency emergency, which is when you have got less than 7 percent excess capacity available in the market, we would set the price at that level. Yes, that is the least efficient unit in that time frame, but this (gestering) is what you call the producer surplus. These producers have costs at that lower level. They receive a price at that higher level. If you have got a more extreme day, you would have the clearing price being set at a higher level, and again we will see that this summer undoubtedly.

But I think it is important to compare just under cost-of-service there is still some money out there that might be more. So, I think it is a close call as to which one is more money out of California ratepayers' pockets, but I just want to assure the committee that I was cognizant of that. We certainly looked at that, at the Commission's point of view as to which is better, and I do not think there is a dramatically different outcome as far as the bottom line, how many dollars are going out of customers' pockets under cost-of-service versus the Commission's order.

So, I hope that is helpful, and we will continue to work on the refining that kind of data because I think it is important for you as policy makers to understand the difference between the impact of the Commission's order yesterday and how it treats the spot market and how those spot market prices would work were it to be a cost-of-service based regime, which quite frankly we have been good at for 80 years and we are trying to move away from. But we can still do it.

The CHAIRMAN. Thank you very much.

Since the Commission has indicated they need to leave by about 10:30, I am going to limit everyone to 5 minutes and try to get all Senators to have a chance to ask questions. Let me start.

Commissioner Hébert, let me ask you what your thought is. You stated, in very eloquent terms, the pride you have in the order that you have entered and the fact that you believe that now this order is the right thing to be doing. There is a long period here of many

months during which Commissioner Massey and others have thought that something similar to this should have been in place. For that period of time, is it your thought that the parties themselves should negotiate what they believe would have been just and reasonable rates had this order been in effect and settle out at that basis? Is that what your intent is at this point, rather than having the Commission act on that back period?

Mr. HÉBERT. I really get two questions out of what you are asking me. One is why has this not been done sooner, and the second would be the settlement and how do we do the settlement.

As far as why this has not been done sooner, I have said many times, Mr. Chairman, I cannot answer that. We can blame the previous chairman. We can blame the Governor. We can blame the previous administration.

The CHAIRMAN. I am not trying to get into that blame game. I am just trying to figure out where do they go now. Should they try to figure out, had this been in effect from the day that the high prices started, what would be owed in refund? Is that what you are directing them to do in the settlement conference?

Mr. HÉBERT. What we have done is the Commission has acted. As you know, we acted to issue refunds, close to $130 million worth of refunds. We also had a refund separate of that for about $8 million. The Commission has taken action and has moved forward on that. We have got those subject to rehearing at this point, and that is from the time periods of January actually through April. And the May numbers have just come in. We were delayed in getting the numbers from October to December because we did not have the filing requirement in at that point. So, we got the new information.

It is certainly my belief, Mr. Chairman, that if we can throw all of that into one settlement conference, we can get the State of California to the table, we can get the generators to the table, the utilities to the table, we can all come up with some type of agreement.

Now, as to the direction of the agreement, there are always those that would second guess what you do in a settlement. As an attorney, my experience is that there are only two things that settle settlements, and that is deadlines—and we have a deadline here, and the deadline is the administrative law judge, our chief judge, has 15 days. They have 15 days to settle this case. And if they do not settle these issues, then the ALJ, the chief judge, will make a recommendation to us within 7 days. Now, that is fast, but our belief is that the issues are known, the numbers are known, and they need to come to some type of agreement.

Now, the other thing that makes a settlement come to a close is uncertainty. If you define the parameters of the settlement, then you cut off some opportunity to settle other matters. It is my belief that we should not do that.

Due to the uncertainty, due to the deadline, I believe this will be settled, and at the end of the day, if it is not done so in 22 days, this Commission will see it again and we can make that call then. It will be much quicker than going through these rehearings.

The CHAIRMAN. Well, I am not disagreeing with your decision to try to get the companies to settle. It strikes me, though, that in some cases uncertainty detracts from the pressure to settle because

each side may have a very different idea about what the Commission's action might be if they fail to settle.

Can you give this committee or anyone involved some indication of what the Commission is willing to do by way of orders for these back periods if settlement is not agreed to?

Mr. HÉBERT. Well, I think this Commission—and I am speaking about the Commission I have been involved in as chairman—has been the only Commission that has acted in the form of refunds, has been the only Commission that has acted in the form of mitigation of prices twice and now to the West, as well as California. So, I think the record is clear that if this Commission does see those issues again, that it will make a call that I think in the end justice will be served looking after, for the most part, the consumers of California.

The CHAIRMAN. Does anybody else have a comment?

Ms. BREATHITT. Yes. Mr. Chairman, we still have an obligation, upon rehearing, to resolve on rehearing the refund orders that we issued for January, February, March, April, and May, and we have got to do October, November, and December of 2000. So, this almost omnibus settlement conference would seek to resolve those matters in that context. If it does not, I am presuming that we would, on rehearing, resolve those dollar amounts.

The CHAIRMAN. Since we are short on time, I will just stop with that and defer to Senator Murkowski for his 5 minutes.

Senator MURKOWSKI. Thank you very much, Senator.

We hear so much about price gouging, who is to blame, and so forth. But I am looking at some figures, relative to allegations on specific organizations that appear to have been able to take advantage of the shortage in California and the excess capacity that they had, particularly British Columbia Power Exchange. I am referring to a reference that indicates that in recent studies, it shows that the Canadian trading of BC Hydro reaped about $176 million in alleged excess profits, several times the amount collected by all but one of the private generators. BC Hydro officials acknowledged they did anticipate periods of severe power shortage and planned for them by letting the reservoirs rise overnight and then operating them to create hydroelectricity which could be produced inexpensively but sold at a premium, and BC Hydro had stashed hundreds of millions of dollars in so-called rainy day accounts to ensure that it had among the lowest rates in North America.

Now, it would seem to me that if we are dependent by about one-third of the total estimated costs by the California independent systems operator, which was estimated at $5.5 million in excess profits, and BC Hydro was a third of that and you folks have no control over BC Hydro, they simply have excess power and they can sell it to the highest bidder. But that is a significant factor in the allegations associated with pricing, and whatever they could get is whatever those that had to have the power were willing to pay.

Since you have no control over them, I assume this is just out there and you would like to not have to depend upon that source. But if they have excess energy and are willing to sell it, you have to pay the price regardless of your regulatory authority.

Mr. Hébert.

Mr. HÉBERT. Well, as to the past, that may be true, but as to the future, because of what we have done through the price mitigation measure here, it would extend to them, and in the sense that they would be mitigated, it would apply to them as well.

Senator MURKOWSKI. Their alternative is simply not to sell into you now. Is that correct?

Mr. HÉBERT. Well, if they have got anything available, if there is anything available trading through the ISO or trading on our tariffs throughout transmission systems that we have jurisdiction over, within that 24-hour period, the real-time spot market, they have to make it available. They cannot withhold.

Senator MURKOWSKI. Within that 24-hour period.

Mr. HÉBERT. Correct.

Senator MURKOWSKI. Yes, but if they do not want to basically participate in this agreement, they are not bound, as others are where you have some control, because BC Hydro is a significant developer of power and they could simply contract in if it is outside the 24-hour limitation.

The point I am getting at here—and I hope that members pick up on it—is it is a supply and demand problem. We do not have the supply. We are dependent on outsiders. As far as BC Hydro is concerned, they are a significant contributor particularly to the Pacific Northwest and ultimately California. You have to have it. And they are going to charge whatever they can get beyond the 24-hour period. Right?

Mr. HÉBERT. Right. BC Hydro itself is——

Senator MURKOWSKI. And until you develop more power in this country, you are going to have to depend on those sources which are going to keep the rates high.

Mr. HÉBERT. Right, and BC itself is non-jurisdictional. We do have jurisdiction over some of its affiliates, but you are correct.

Senator MURKOWSKI. And BC Hydro has clearly made some extraordinary returns on its operation of the Columbia River.

Mr. Massey.

Mr. MASSEY. May I make a point please?

Senator MURKOWSKI. Sure.

Mr. MASSEY. If they want to sell in the Western interconnection, they have got to sell under this program that is set out in this order. They will receive the price of the least efficient generator that is dispatched in the California ISO, probably a gas-fired unit, which would have costs well in excess of their costs. They will still make a handsome profit.

Senator MURKOWSKI. Right. Thank you.

The other point I want to ask is, Mr. Wood, you talk about cost-of-service. To me that is cost plus a profit. Tell me how that concept encourages efficiency in the utility industry. It seems to me it gives them assurance of a rate of return, but no assurance that they are necessarily going to be as efficient as they could be otherwise.

Mr. WOOD. I would agree with that, and I think that is why I think as a general philosophical matter, on really all ends of the spectrum, there has been a move away from that across the Nation.

Senator MURKOWSKI. My last question, since we are running short of time, is to all of you, and you can answer it yes or no. It is simply, should Congress legislate wholesale price caps?

Mr. Hébert.

Mr. HÉBERT. No, sir.

Ms. BROWNELL. No, sir.

Mr. MASSEY. I would let this plan work.

Senator MURKOWSKI. That means yes or no?

Mr. MASSEY. That means no.

Ms. BREATHITT. No.

Mr. WOOD. No.

Senator MURKOWSKI. Well, we have somewhat of a consensus based on the fact that all five voted for what they believed was a workable plan. Thank you, ladies and gentlemen.

The CHAIRMAN. Senator Wyden.

Senator WYDEN. Thank you, Mr. Chairman.

Mr. Hébert, to follow up on Chairman Bingaman's question about a settlement agreement, how do you get a settlement agreement when one key party, California's largest utility, PG&E, is shielded from having to pay its creditors by bankruptcy protection? As I look at it, PG&E basically has got a one-way street going. They are going to get refunds from those who overcharged them, but do not have to pay back those who charged a fair price. So, I am curious about how you are going to go about getting a settlement agreement.

Mr. HÉBERT. Senator Wyden, the issue is not so much that, I do not think. I think the issue is does it position PG&E differently than they would otherwise be positioned. In other words, is there anything that changes through the settlement process that would not apply to the Commission, FERC, itself. They are in bankruptcy whether FERC is handling it through a settlement process with its chief judge or whether we are handling it.

But I think the proof will be in the pudding. It is my hope within 22 days of Monday, because Monday is when the settlement conference will start, that we will have a settlement if I hold true to the course that I have been trying to move in. If not, this Commission will move expeditiously on it.

Senator WYDEN. I hope you are right, but I am skeptical. It looks to me like they have got a very, very advantageous position going into this settlement discussion. That is why I have been concerned about it for many months.

Let me ask all of you why you chose 15 months for the order. From the seat of my pants, maybe this is too long, maybe it is too short.

But I guess the question illustrates why we cannot come up with a third path between the two we have got now. We have sort of got this one path that says caps are the answer and another path that says caps are going to be a disaster. I guess the question is why can we not come up with an approach that creates some marketplace incentives as part of this.

So, my question for all of you is, why not look at caps, even in this emergency period, only until a certain number of megawatts come on line that are needed to meet demand? That way you could send a message to all concerned that we want to get generation out

there as quickly as possible, and the sooner the new generation becomes available, the sooner everybody wins. Would that not be something that you could do now to modify your order and actually create some incentives that would be consistent with an approach that would allow for caps?

You are shaking your head yes, Mr. Massey, and I probably ought to quit while I am ahead.

Mr. MASSEY. Senator, I think that is a very good idea to create a generation reserve benchmark and keep these price controls in effect until that benchmark is met. That would certainly be another way to skin this cat.

I think the 15 months is intended to be a proxy for that, but it is a blunt proxy because we have no assurance that there will be sufficient generation 15 months from now. We have a hope and a prayer, and we need to work with the State of California to ensure that that is done.

Senator WYDEN. Mr. Wood.

Mr. WOOD. That 15 months—and in the order we referenced that that was based upon what the State of California has indicated were new plants that were expected to be on line and by which dates. The Commission has put in a quarterly reporting requirement to ensure that we are meeting that benchmark. So, the 15 months, as Bill pointed out, was a blunt tool, but it was built upon just the data you are suggesting ought to be the trigger and with which I agree.

Senator WYDEN. I hope you will look at this again because it seems to me that there is a better way to go about doing this. I see my colleague, Senator Smith, is here, and I am going to discuss this with him as well. I am concerned about the gaming prospects of caps, always have been. Suffice it to say, I do think that there is a way, even during this emergency period, to say that we are going to structure these caps so that they stay in effect only until we have got those megawatts on line that are needed to meet demand and create incentives for powerplant developers to go out and do it as quickly as possible. So, I hope that you will look at it. I see Senator Smith is here and I am going to discuss this with him further.

I thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much.

Senator Domenici.

Senator DOMENICI. Mr. Chairman, I wonder if I could let Senator Smith go and I will wait another turn.

The CHAIRMAN. Well, yes, I guess that is according to our rules here. Go ahead.

Senator DOMENICI. I do not want to do it if it is violating—are you concerned about it?

The CHAIRMAN. Well, we just have other people in line after you.

Senator DOMENICI. So, I will just do mine.

The CHAIRMAN. Why do you not go ahead?

Senator DOMENICI. Thank you very much.

Let me say to Mr. Massey, you just answered a while ago that we should not pass a new Federal law, that we should let this order of yesterday take hold and see if it works. Thereafter, in

some responses to Senator Wyden, you seemed to indicate that you were not sure it would work.

Mr. MASSEY. I am not sure it will work.

Senator DOMENICI. Nonetheless, you say we should do it.

Mr. MASSEY. I am not sure it will work. I have hope that it will work. I think it is dependent on, frankly, whether gas prices stay reasonable.

Senator DOMENICI. So we will all know that you are the Commissioners that would be getting some help if we thought we knew how to give you help through some Federal law and you were suggesting, this particular day versus yesterday's order, that you do not think it is the time to pass additional Federal law on the subject.

Mr. MASSEY. I think it is always better for the regulators who have the responsibility to ensure just and reasonable prices to use that authority effectively. It is my hope that yesterday's order is an effective 24-hour-a-day/7-day response. My advice is to give it some time to see if it works.

Senator DOMENICI. Could I ask the Chairman and any of you to, in a simple way, tell this Senator what is your goal with reference to the activities you are pursuing with reference to California prices and of the West. What do you hope your legacy will be in the next 18 months to 2 years?

Mr. HÉBERT. I would hope that we improve upon a dysfunctional market in California and bring it to its feet, deliver reasonable prices to consumers, while at the same time making certain that we are attracting necessary supply, because we understand that there is an imbalance between supply and demand, but at the same time, it is not only about supply. That is why I think if you ask me about the legacy, it would be my thought that the legacy should be to straighten out California and the West—and I think this plan will do that—at the same time, understand delivery and deliverability of supply is essential to the Regional Transmission Organizations Order No. 2000. Let us move forward with those processes so we can not only be concerned with California and the West in the next 18 months, but we can be concerned with California, the West, and the rest of America for the next years and decades.

Senator DOMENICI. Mr. Wood, what do you think your goal is?

Mr. WOOD. Similar to what Curt just said, Senator. I think we have got to put a cooling off period there while California gets its infrastructure to sufficient levels, while the market rules that were inadequate to stimulate long-term investment and customer benefits in the California market get revised and get implemented. Once that is done, then competition can come back, but they are not done yet. So, the cooling off period is necessary.

Ms. BROWNELL. Senator, I would simply like to add that whatever actions we take need to communicate to the consumer that they can have confidence that the public policy makers are working together to ensure that the answers will be there and that investment will be there. And if we do nothing else in the next couple of weeks, I think that is a critical message.

Mr. MASSEY. Senator, I think there is a fair degree of consensus about the long-term strategy, a Western interconnection-wide RTO,

because this is one big machine in the Western interconnection, and it ought to have a single RTO operating it.

The debate has really been about what to do in the short term, and I hope that we have a plan in effect that will protect consumers in the short term while we move to the long-term implementation of RTO rules, demand side responses to a high price, effective congestion management, and so forth.

Senator DOMENICI. Commissioner?

Ms. BREATHITT. Senator, I would add that my goal is to stabilize the market in the short term and permit California and other Western States to repair dysfunctional market mechanisms. In other words, the mitigation plan is intended to provide breathing room for the markets to self-correct, while protecting consumers.

Senator DOMENICI. Could I just ask the Chairman or anyone to tell me what these four words mean? I have read your order and I thought I would take the opportunity to ask you what some of these mean. I would have to take an awful lot of time to understand your order.

What is requiring all sellers to bid into the spot market? What does that mean?

Mr. HÉBERT. Well, that means, Senator, that if they have available capacity—there was a huge question about withholding energy, letting prices run up, and then releasing the electricity to get the high prices. If they have anything available in that spot market 24 hours, they have to release it, put it into the market so buyers can buy.

Senator DOMENICI. What about proxy price? What does that mean?

Mr. HÉBERT. Proxy price is a price at which we establish what a market that is functional would otherwise deliver to the market during a dysfunctional period.

Senator DOMENICI. Do you all agree with that?

Mr. MASSEY. It is a cost-based price based upon the inputs of fuel, O&M, and other production costs.

Senator DOMENICI. What does a single price auction mean?

Mr. WOOD. To use that chart that I had, Senator Domenici, it would be the point at which demand upon the X axis crosses with the price on the Y axis, and then that price—say it is $100—is paid to everybody whose generators dispatch. So, everybody who is to the left of that point on my little curve there gets paid that single price.

Mr. HÉBERT. Senator, that is the issue that drives the efficiency that we were talking about, the single price auction.

Mr. MASSEY. It is intended, Senator, if it works well, to incentivize generators generally to bid their costs. It frankly has not worked that way because there is very little risk of non-dispatch in the market, but that is what it is supposed to do.

Senator DOMENICI. My last observation has to do with powerplants and the construction of powerplants in the State of California. I assume you have no jurisdiction over the State and the State's effort to license and/or permit and cause to be constructed new powerplants.

Mr. HÉBERT. No, sir, we do not.

Senator DOMENICI. Do you have some way of finding out what the State of California officially says they are going to be doing in the next 2 or 3 years?

Mr. HÉBERT. We have actually got that in our order. It was released, I believe, by the Governor's office, and we are going to revisit that after, I think, the next quarter of next year. That may or may not be right as far as the specific date, but it is important that we keep them on track, that they do have less reliance on the spot market, and at the same time, that they add the supply they say they are going to add. It is one thing to talk about it; it is another thing to bring it on line.

Senator DOMENICI. Mr. Chairman, I raise that issue and, in a way, give it back to you for further understanding before this committee, maybe tomorrow with the Governor.

But many of us have heard California's story in terms of when and how they were going to produce new powerplants. For the most part, over the past decade to 15 years, 20, all of which time I must admit I have been a Senator, so I was not out there in the market understanding this, but it seems to me that clearly California has historically over-promised what they were going to build and they end up with powerplants that cannot be built because of intervention, because of lawsuits, because of regulations. I think it is really important we find out. If we are going to be players and go along with the Commission, it seems to me we ought to really know whether California is going to build these powerplants or are there going to be further delays as there have been in the past.

I thank you for giving me the time and I yield.

The CHAIRMAN. Senator Feinstein.

Senator FEINSTEIN. Thanks very much, Mr. Chairman.

I just want to say that I view this action by FERC as a giant step forward, and I am very grateful to you. I also view the fact that Senator Smith and I have worked hard on this bill and perhaps has been helpful in urging you along, but I will not draw that conclusion. I just say perhaps.

Mr. Chairman, I believe Senator Smith and I are prepared to ask you to withhold the markup for the time being. Let us watch and wait and see how this order works.

I share the concerns of Mr. Massey.

And I thank you, Mr. Woods, for the diagram on how this least efficient megawatt works. However, it still remains to be seen, I think, whether it can be manipulated or not. I think we should wait and see what happens.

I think the fact, though, that you have expanded your April order to 7 days a week/24 hours a day and to the 11 Western States until September 2002 is extraordinarily important and just really a giant step forward. Whether you call this mitigation or cost control, as they say, a rose is a rose by any other name. I will leave that up to you. I am very hopeful. I will be very frank with you. I want to see it work because I think the problems there are extraordinary.

I want to comment on one thing. The order seems to change the accounting standards for nitrous oxides, so that instead of allowing generators to count these as variable costs, generators will have to

submit invoices from the ISO so that the costs will no longer vary and should be lower. Is that correct, Mr. Hébert?

Mr. HÉBERT. That is correct, Senator, and let me tell you why. We found difficulty, when we used it in our April 26 order, because they would administratively change it all the time, so we could never completely calculate how it would work. So, we figured it was better just to have an uplift charge, let them invoice it. That way there would be no playing around with it. It will be their actual cost and it will be placed in there.

Senator FEINSTEIN. Thank you. We will watch that very, very carefully.

I wanted to make a comment and then ask a question on this 15-day settlement conference. I am very concerned because, to the best of my knowledge, very little if any money has actually changed hands as a result of prior settlement conferences. I am concerned because the costs out there to be discussed could be up to $15 billion. I am concerned that there are no rules or no protocol for this settlement conference. I would like to ask that you watch it very carefully. From what Commissioner Breathitt just said—and I want to corroborate this—if the settlement conference is not successful in resolving these issues, the FERC is willing to step in and make that resolution. Is that correct?

Mr. HÉBERT. Absolutely.

Senator FEINSTEIN. Well, I am really going to hold you to it——

Mr. HÉBERT. You do not have to.

Senator FEINSTEIN [continuing]. Because with a successful settlement, you could have a real settlement that could move the utilities out of bankruptcy as well and certainly be of massive help to the consumers. So, I think these next 15 days and then the 7-day recommendation period for you are extraordinarily important.

I would like to ask this question. Why do you believe, because of the size of the Western grid, that it is really necessary to put this 10 percent gratuity, so to speak, on any sale into California?

Mr. HÉBERT. The problem with California right now, when you look at it from a business perspective, is several fold. Senator Wyden pointed out part of it earlier. Bad business environment. You have got a bankruptcy right there. Energy companies that are thinking about doing business and building new plants and moving forward certainly are skeptical. We had a lot of issues in the past in looking at the credit issue. This credit issue moves forward. It says we believe that there is a difficulty when it comes to business transactions, when it comes to energy needs in California. We are so concerned with that that, quite frankly, what we are going to do is we are going to put a 10 percent adder.

But here is the other magic. Here is the thing that has not been talked about yet that I really think you will appreciate. When it comes to justification, we do not have a cap in place. We do have the proxy. We would rather them bring the energy in than set a price at which we are not going to allow energy to be delivered.

But you have some that have had conversations and made comments and filed comments, that when they try to cost justify, they may, in fact, even suggest that their risk factor on credit is 10, 15, maybe even 100 percent because they have not been paid. This takes that justification away from them. They have an adder. Jus-

tification is not there. They cannot use it. So, it is really good for the consumers.

Let met add one thing to it, something you said in the very beginning that I think is important.

Senator FEINSTEIN. Fast because I want to ask one more question.

Mr. HÉBERT. You mentioned about the piece of legislation and the influence. There is always conversation about what is the political influence on an independent agency like FERC.

Senator FEINSTEIN. I know. You are not impacted by any of this.

Mr. HÉBERT. No, no, but I think it is important to point this out. Whereas I will be fair and accurate with you, it does take this Commission time and it is somewhat tedious to come and testify before the Senate, testify before the House, deal with legislation. I do not know about the influence, but I will tell you what it does influence and that is good, open debate that brings issues out that allows us to make good decisions.

Senator FEINSTEIN. Thanks, Mr. Hébert.

As I understand it, the price of natural gas at various delivery points in the West sets an average cost that gets plugged into the heat rate formula for the least efficient megawatt needed at any given time. It seems as though you have changed the natural gas delivery points that are used. Could you quickly explain the FERC's plan here for natural gas and why you decided not to do anything about the transportation cost?

Mr. HÉBERT. Commissioner Wood wants to do it. Let me say one thing before he does that, and I will be glad to talk further with you about it later. It is almost identical to what the ISO itself asked for.

Commissioner Wood.

Mr. WOOD. In fact, yes, ma'am. We built our recommendation off of what the California ISO recommended. Rather than using the daily spot price, which can be, as we know, pretty volatile, they suggested using a monthly price which is done the last week of the prior month. The last week of May, everybody bids for their June deliveries. It is a monthly price. It's a widely published benchmark used for financial purposes. It is used for many contracts. It also reflects more of a balanced portfolio. So, we agreed with them and used that as part of the proxy.

We averaged, I believe, three delivery points. One is northern California exclusive, one is southern California, and one comes into both. That gives a weighted north/south average. By using an average, it might be a little higher than what the north experiences. It might be a little lower than what the south experiences since that seems to be the disparity.

Anybody that does not feel like they got their costs compensated may be allowed to come in and justify a higher price, but we are going to look at their total portfolio of gas purchases. I personally think that was very important to me in this order to make sure that there is a dampening effect on relying heavily on the gas spot market, just as we had a problem in the last 8 months of people relying very heavily on the electric spot market. So, pushing people back to portfolios is kind of a recurring theme here.

Mr. MASSEY. Senator, if I may comment very quickly on that. I think your question implies what I believe to be true, which is the transportation differential issue, high transportation differentials into California and high spot market prices, and high gray market prices. If those continue, this plan will not work well to dampen prices. So, I think my agency still has a lot of work to do with respect to the natural gas market in California.

Senator FEINSTEIN. Thanks very much, Mr. Chairman. Thank you, FERC.

The CHAIRMAN. It is 10:30. We have two additional Senators who would like to ask questions, if you can stay and take those. Then we have your general counsel who has agreed to be available to answer any additional questions people have on this.

Senator Smith, go ahead with yours.

Senator SMITH. Thank you, Mr. Chairman.

I join my colleague, Senator Feinstein, in saying I believe this order goes a long way, and I congratulate you for it. I think it renders substantially moot the legislative effort that she and I were pursuing. I do believe that that effort would have won large majorities in the Senate and the House. So, I think what you are doing is reflecting the will of the elected representatives of the American people.

I know, because as a Republican who believes in markets, that you will now be subject to the criticisms that have come my way which are that you are interfering in the market. That critique of your efforts, I tell you, I think you are safe to defend for two obvious reasons.

No. 1, this market is not free. It is badly broken, and your intervention has been needed for some time.

No. 2, the commodity of power is different than the commodity of peas or widgets or anything else. People expect power. They have a right to believe it is going to be there at a cost that they can afford, and frankly, it is a matter of public safety and a reasonable expectation of the American people, which is a reason why this has been so highly regulated an industry for so long.

We are in a process of deregulation. Senator Murkowski cited the instance of BC Hydro. I suspect there are a lot of BC Hydros out there on this side of the border. I think BC Hydro needs our market just like we need their power. My hope is that they will not be gaming the system any longer and that any American generators are not gaming the system any longer. And they cannot now because of what you have done. So, for that reason, I thank you.

I hope the American people understand that what you have done addresses the short-term problem of price gougers, but long term the problem is supply and demand and bringing those in balance. You cannot fix that, but ultimately investments which still have plenty incentive will fix that and conservation on the part of consumers will bring that also into better balance.

I do have a couple of concerns, and they are this. Right now your order goes 15 months. That gives California two summers to get through this. That gives the Northwest one winter. We are opposite from them, as you know, in terms of our peaking load. I hope you be willing to look at this again if mother nature does not turn the

rain on and we are in a situation where we just simply do not have the power.

Mr. HÉBERT. If I may comment on that briefly. Your comment and question is indicative of the evolution that this Commission is going through right now. We certainly do not know it all. I have had conversations with all the Senators in this room, and what I have shared with you is that we are not done yet. We are continuing to learn. We are not done with the Northwest yet. There is more to do. We are seeking comments on that. We do not totally understand the northwestern market. It is very different than California. So, we are seeking comment on that, and there will perhaps be more work to do. We do not know that yet.

Senator SMITH. I appreciate that very much because, again, I would say to any of the public watching this, it is one thing to describe to people why the cost of their milk is at a certain price. It is something very different to go to a nursing home and say to seniors on fixed incomes or to an aluminum plant that has laid off all of their workers why their prices have gone up so exorbitantly. You cannot say, well, it has because there are some really smart people out there manipulating the market. That is not something this Government should tolerate, and I am grateful that you all have stepped up to the plate like this.

Lastly, does the settlement process for refunds that you announced yesterday only apply to sales within California? The reason I ask that is because of my concern about the status of the rehearing on the Puget Sound energy complaint that was denied on December 15. Does this just apply to California or does it cover all the States in the West?

Mr. HÉBERT. At this point we are applying it only to California.

Senator SMITH. I would ask you to at least think of that one more time because I think there may be cases outside of California that need your review.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much.

Senator Cantwell.

Senator CANTWELL. Thank you, Mr. Chairman.

I do want to thank the Commission for their hard work on this order issued yesterday. But I do have some concerns about how we are going to proceed and particularly the answer to that last question, but I will get to that in a second.

I just want to remind my colleagues that even though this will, I think, provide some guidance in the future, the Northwest has already seen a 50 percent rate increase in some of its pricing at the home residential and industrial level. And because we have already had to buy very expensive power through BPA, some of those costs are going to continue to be passed on. So, I am not sure if we are saying to the people in the State of Washington whether this is going to be much relief, given the fact that some of those increases are already going to take place again this summer and later this fall. So, I would encourage my colleagues to continue to look at, as we move through the legislative process, conservation and curtailment efforts that might help in reducing some of that.

It seems to me that there might be a couple of "I gotchas" here in the way that both under the deficiency of reserves and in non-

deficiency times how this mechanism would work. So, I wonder if maybe one of the Commissioners, maybe Commissioner Wood, could address this. But it seems to me that when operating reserves fall below 7 percent and the bid must reflect a published gas cost plus an adder, that there is a basic mechanism where people can come back and justify a cost higher than that. And the same when a deficiency period ends, the same absent justification language.

So, first I am curious when we are going to see the exact details of the order. I do not think that the full order has been made available, or at least made available to the public or via the web. At least we checked. When will we see the details in the language?

And exactly how will this justification issue be resolved to make sure that we have a solemn guarantee here that we are going to be looking at a basic cost and knowing what that is during this period?

Mr. WOOD. The order should be issued today, which will make it effective at midnight tonight and all day tomorrow, going forward.

Senator CANTWELL. So, the public will be able to get a copy of the full order, the details.

Mr. WOOD. Yes, ma'am.

Senator CANTWELL. Which I am assuming is at least many pages.

Mr. WOOD. About 60.

The answer on the justification, the difference between a hard price cap is you got no justification; soft price cap, you do. That is the general thought.

Justification was important for us in the supply constraint scenario to make sure we get every megawatt on the grid that we possibly can. If there are extenuating circumstances that the mitigation scheme cannot apply to fairly, we still want their megawatt and are willing to pay them. We are just not going to let them set that market clearing price that everybody else gets paid.

There might be somebody that has a high gas cost. We have put forward in that section that we will not only look at the cost you paid for that Mcf of gas, but we will look at all the gas prices, all the portfolio that you hold of gas to make sure that you are not just sending the highest price cost to this mechanism and keeping all the low priced gas that you have acquired under longer-term contracts for the rest of your other contracts.

We have taken off NO_X, the emissions credits that are more predominant in California I believe than they are in the Northwest. We have taken that out of the mechanism so that will not be dealt with. We have taken startup costs out of the mechanism. So, they will not be dealt with either.

Senator CANTWELL. These are detailed in your order.

Mr. WOOD. Yes, ma'am. Those things tend to inflate the market clearing price. We have taken those out, said you get reimbursed for them, but we are not going to let that inflate the price for the whole mitigation scheme.

Mr. MASSEY. Senator, if I might. I think the key point to make here is the justification, if a generator comes in, has to be based on costs. He cannot come in with some inflated notion because we

have taken a lot of that flexibility out. The gas proxy formula is intended to replicate costs. For the emissions allowances that are in an uplift charge, they have to submit an invoice detailing their actual costs for those and so forth.

So, the formula is intended to be very tight. If they cannot recover all their costs under the formula, they have got to come in and show us what their costs were that they could not recover. So, it is a cost-based control.

Mr. HÉBERT. Let me clear up two things that you may draw into question. One is——

Senator CANTWELL. Well, let me just point out since we have not seen the details of all of this, I think that's what my concern is. Obviously, there are numerous times when Federal agencies come out with a new ruling and then you see the actual details of that ruling and find that there are ways in which people can maneuver around it. So, I want to make sure that we have understanding from the Commissioner.

Mr. HÉBERT. Right, but there are two things. One, the credit, because that is a California issue, does not apply to the West. So, the 10 percent surcharge credit does not apply to the West. The other thing that does not apply to the West is the uplift on the NO_X. So, those are two things that would not apply in the West and are exceptions.

Let me volunteer to the committee our staff to come over and brief the committee staff, as well as anyone from the Senators' offices that would like to be included. If we could do that all at one time, Mr. Chairman, that would be helpful. But I would certainly love to do that. I think it would be good for you and it would certainly be good for us.

Senator CANTWELL. One critical question left, please, if several of the Commissioners could address this, and that is the issue of the settlement agreement as it relates to the Northwest. Commissioner Massey, you have been excellent on your review of the previous order and section 206 that was not broad enough in its investigation. So, where are we leaving Northwest energy consumers in this payback scheme, whether we are going to be at the table or not be at the table, whether we are going to be able to see any refunds from this or not?

Mr. MASSEY. That is an excellent point, Senator. I think we could have done better than just sending it to a vague settlement conference. I think it leaves too much uncertainty and I think it leaves uncertainty about what residents in the Northwest are going to get back, if anything.

Now, there are matters on rehearing that I do not believe the Commission has dealt with that could provide relief, and I appreciate that point.

Senator CANTWELL. You still have your final decision on that to be issued. Is that correct? On the review, on the 206?

Mr. MASSEY. I believe we do.

Senator CANTWELL. The Commission has not issued your final discovery on that?

Mr. HÉBERT. The July 2 refund effective date is out there and the settlement process, as I have said, is applying to California

only at this point. That is what was discussed. Actually we have not discussed anything outside of that realm.

Senator CANTWELL. But we have, in your previous appearance at this committee, talked about the fact that the West needed some relief, including the Northwest on this, and you brought up your section 206 investigation. At that point in time, I brought up the fact that I thought it was late in coming, and you said we are going to make a decision about the West.

Mr. HÉBERT. Well, the comments that we received from that are one of the reasons that we moved forward to improve upon our mitigation plan.

Senator CANTWELL. I am not clear on that answer whether the Northwest will be at the table, and you are saying they are not. But yet, you are saying——

Mr. HÉBERT. They are not in the settlement conference, but they are certainly a part of our price mitigation at this point in the reserve and non-reserve hours. But we are, as I said earlier, continuing to seek comment on what to do with the Northwest. So, we invite those comments.

Senator CANTWELL. I asked this question before and you were gracious enough to answer. Have you found that the Northwest prices are just and reasonable?

Mr. HÉBERT. You and I bantered about a bit, and we have certainly had conversations in your office. I will tell you that prices are high. There has been no judgment on the reasonableness and justness of prices for the Northwest.

Senator CANTWELL. I am still unclear about your final FERC action on that.

Mr. HÉBERT. We have not done anything final on it.

Senator CANTWELL. And when is that date?

Mr. HÉBERT. I do not have a date.

Senator CANTWELL. Is it not a time span of like 60 days or something?

Mr. MASSEY. The refund effective date set in the order for the Northwest would be July 2 of this year. So, if the implication of your question is that refunds could not go back before July 2 of this year, you may be right, and perhaps that is an issue for rehearing.

Senator CANTWELL. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much, and I want to thank the Commissioners. I know that you have taken a great deal of valuable time here describing this order. We congratulate you on the action you have taken. We will be watching very closely to see how it is implemented, as I am sure you will be.

Senator Boxer is here and would like to address the committee. I will call her forward as a witness at this point to give us her testimony on this issue. Then following that, Mr. Kevin Madden, who is the General Counsel, will be available to answer some additional questions that any of us on the committee have, and I will call on him next.

Senator Boxer, welcome to the Energy Committee. We are anxious to hear your views on the action FERC has taken or action you believe they should take.

STATEMENT OF HON. BARBARA BOXER, U.S. SENATOR FROM CALIFORNIA

Senator BOXER. Thank you so much, Mr. Chairman. Thank you, Senator Murkowski. I know what a hectic schedule you have, and I am going to try to complete my remarks in 5 to 6 minutes. I think I have some definite opinions and I hope you will consider them.

First, I want to say that the committee has been very helpful. There are those who say there was some pressure put on FERC to act. I think a nicer way to say it is we have encouraged FERC to act. Senators Feinstein and Smith had a good bill on the cost-plus pricing. Congressman Bob Filner and I had a similar bill, but it included refunds. I think frankly without help from outside California, we would not be at this day. I think it is a very important day today. I cannot tell you the feeling I have and the relief that I feel that we are moving in the right direction.

I still believe we have more to do and I am going to comment on that today.

The first point I want to make, Mr. Chairman, is really to set the record straight. Many have said that FERC had nothing to do with this crisis in California; that in fact, it came from California. There have been jabs at our Governor, although I think it is intriguing because the fact of the matter is that this whole deregulation occurred before. He had nothing to do with it. He is one of the few who had nothing to do with it. It was bipartisan. It was Governor Wilson who recommended it and a Democratic legislature and Republicans in the legislature who embraced it. So, to blame this Governor is absolutely wrong.

I have had the opportunity to talk to Vice President Cheney, and I appreciated the meeting that he took with the California delegation. I wanted to correct the record because Vice President Cheney has said, when we said we need help in California, “Go back and talk to whoever it is that blocked the development of additional supplies in the past because they are the ones who are responsible for the high prices.”

Well, I want to correct the record. Mr. Chairman, FERC does bear some of the responsibility for stopping the supply, and I want to make the case this was under a Democratic President. This is not a partisan jab in any way.

In the early 1990’s, the California Public Utilities Commission ordered our utilities to build more powerplants. Now, what did the utilities do? They appealed the order to a State administrative law judge who ruled against the utilities and said, you must build these 1,400 megawatts.

So, what did the utility companies do? They appealed to FERC. Now, what was interesting was FERC sided with the utilities in 1995. They said, you are right. You do not have to build these 1,400 megawatts. Therefore, we do not have those 1,400 megawatts. And you can really say that those megawatts may have well saved us from the rolling blackouts.

So, let me just say I was very pleased with yesterday’s about-face by FERC. I believe that they have a new tone. I believe that they finally recognize that we needed action throughout the entire Western region.

But I do have two unanswered questions, and the reason I raise them is I think your committee could play a central role in just following these issues.

One, will FERC enforce the cap or will they allow companies to use loopholes to escape it? I think that is key and I hope that your committee and Senator Lieberman's committee and my Environment and Public Works Committee will take a look at this.

Two, will the cap be set too high since it is pegged to the least efficient producer rather than to the actual cost of each company? I think we need to keep monitoring that.

Now, my big disappointment with the order, Mr. Chairman, is along this line. I believe the Commission should be issuing refunds to those who have been paying these outrageous prices. I really do. I think maybe we will watch a settlement conference. But I do believe it is FERC's responsibility. It is in fact in their charter to protect against unjust and unreasonable prices. I think that if they do not do it and if the settlement conferences do not work, I believe Congress should do it, and I am going to be introducing legislation that would do just that.

Let me show you why this is so important, Mr. Chairman. I think when you see this—you may already know this, but it will reinforce my point. The chart on the generator profits that we have seen. Mr. Chairman, profits increased on average by 508 percent between 1999 and 2000. I want to make a point here. Demand increased only 4 to 5 percent, and profits increased an average of 508 percent.

Now, you might say maybe the whole energy sector enjoyed those kind of profits, but if you look at it, the energy sector got a 16 percent increase in profits in the electric and gas industry. 16 percent average profits compared to 508. One company, Reliant Energy, saw its profits increase 1,600 percent.

Could I have that ad from the *Roll Call*? There is an ad in the *Roll Call*, plus there are ads in all the newspapers, I would say, except in California for obvious reasons, that show Reliant as saying, "Helping California keep the lights on." Yes, they did at 1,000 percent profit, at gouging prices. And that is the problem that we are facing. I think the headlines should say, "Keep the lights on while gouging California consumers." So, again, 1,000 percent increase in profits; 4 percent increase in demand.

Now, I used to be a stock broker and I know that profits are crucial for every business. But there is a difference between responsible corporate behavior and irresponsible gouging.

I want to show you one other chart, Mr. Chairman and Senator Murkowski, you may not have seen, which is the maintenance schedule for these companies. In the blue, you see last year the energy that was taken on line for maintenance. Here in the yellow, Mr. Chairman, you see the current year. Look at how many plants closed for maintenance. Now, it is hard to believe that this is a coincidence if you look at last year compared to this year. So, when you pull power off line, Mr. Chairman, it puts the squeeze on, and I think we have seen that occur. And all of this has happened at the consumers' expense.

If the price of a gallon of milk had increased at the same rate as California's electricity prices, milk that now cost $3 a gallon

would cost $190 per gallon. Mr. Chairman, imagine where all of us would be if our consumers walked into the supermarket and had to pay $190 a gallon. It is no different as to what is happening to them.

Let me tell you what is beginning to happen. We are beginning to get letters from small businesses, from individual consumers. I will read you just a teeny part of a letter I received from a constituent. The letter is from John Odermatt of San Marcos, California. He wrote to President Bush and sent me a copy. This is what he says and I quote. "I'm a father and a husband in a single income family. My wife and I very carefully planned our family economics in order to give our daughter the benefits of having a full-time parent at home. We're currently spending money on electricity bills that should be going into family investments for college and/or our retirement planning."

Mr. Chairman, I know you care deeply about those who need help paying their bills. To help the 2.1 million low income Californians who qualify for LIHEAP, we need additional funds for this program, or only 10 percent of our people who need it will receive assistance. Imagine 90 percent would not get assistance. This summer, without air conditioning in certain parts of California, people will perish. I want to make that point. I worry so much about the elderly who are on fixed incomes withholding air conditioning. People will perish. Emergency funds for LIHEAP are needed, and I know you are working on that.

Mr. Chairman, I support your position of $3.4 billion in the budget for LIHEAP. Again, I know this is important to you. You are our leader on this issue, and I stand ready to help you in any way I can.

Now, there are those who say that LIHEAP does nothing to hold down prices. As a matter of fact, they say, well, wait a minute. If you make it possible for people to pay these high prices, they will stay high. But, Mr. Chairman, this is an emergency. We have to do all that we can.

I have one quick suggestion and then I will sum up on the LIHEAP program. I think we ought to look at a special stream of money for LIHEAP. There are those who have recommended the off-shore oil revenues. If an electric generating company makes significantly higher than average profits as compared to the industry as a whole, I do not think it would be a bad thing for that company to make a contribution into the LIHEAP fund to help those consumers who are being hurt by the high prices they are charging. I hope we can work together on this seed of an idea that I have here.

In summary, the FERC's order was a step forward. My colleague called it a giant step forward. I think she is right on that.

Let me reiterate, just the major points I have made.

One, we need to monitor FERC's actions. If it is not working, we need to move to cost-based pricing.

Two, we must see that refunds are provided to those who have paid excessive profits. That is the role of FERC, to protect against unjust and unreasonable prices. We need those refunds for the victims of price gouging.

Three, increases in the funding of LIHEAP are in order and consider that those companies that have reaped an unfair windfall should pay into that program.

Thank you so much to you and Senator Murkowski. This is really a much better day for us in California and we are most appreciative.

The CHAIRMAN. Thank you very much, Senator Boxer. Thank you for your strong effort on this Senate issue as it affects your State.

We now have the General Counsel of FERC.

Senator MURKOWSKI. I have one question.

The CHAIRMAN. Oh, go ahead, Senator Murkowski.

Senator MURKOWSKI. I am glad to hear things are better in California today.

Senator BOXER. Well, we feel better.

Senator MURKOWSKI. I think we all agree that the FERC action, if it is what it says and works as they hope, will give you some relief. Of course, I believe in the theory that if milk costs too much, we ought to get some more cows. If you get more cows, why, the price goes down unless the milk sours. Now, clearly we have had a souring within the energy market, but I think the point is to produce more energy.

My only question to you—and I know of your interest relative to consumer affairs and the idea that we should have clear and full disclosure. But I wonder if you think that the Governor of California should order the Los Angeles Department of Water and Power to refund any of their windfall profits specifically.

Would you recommend that the contracts between the State Department of Resources and the sellers of power to the State be open for public view?

Senator BOXER. Absolutely. I think anyone who has gouged—I think that is against the law. If they are municipal, if they are private owned, whatever, I really do believe in that.

By the way, Mr. Chairman, I agree we need more supply. We will have about 1,200 megawatts on line this summer. We need to do more there. The Governor projects there will be 13,000 megawatts on line in a couple of years. I think we are going to be okay. I think we can do the supply. I think we can do it right.

But it is a balanced program that I support. Energy efficiency is key. Conservation is key. A responsible expansion of the supply is key. I think if we do those things and if the FERC order works, I think we are going to see the light at the end of the tunnel and everyone can stand proud of that.

Senator MURKOWSKI. I draw your attention to the report that suggests that the top 10 in profiteering from California total about $505 million, and as I have indicated, Los Angeles Department of Water and Power is $17.8 million. And you would recommend a refund from the Los Angeles Department of Water as well.

Senator BOXER. I say that any entity, private, public, that has gouged consumers and that FERC has made a judgment that that there is gouging, that is the law, and they must, in fact, make those refunds. Yes.

Senator MURKOWSKI. The British Columbia Power Exchange, which is BC Hydro, is about a third of the alleged price gouging. Of course, we do not have much authority in British Columbia, in

a foreign nation. We are left simply to the exposure of them having the power and we having the addiction to the power. So, we have been paying the price.

Thank you, Mr. Chairman, and thank you, Senator Boxer.

Senator BOXER. Thank you so much.

Again, that is why energy efficiency is so important.

Thank you again.

The CHAIRMAN. Thank you.

Mr. Madden, why do you not come forward? Unless you had some statement you wished to make, we would just go right into questions, just to supplement what we had already asked to the Commission itself. Is that agreeable with you?

Mr. MADDEN. That is agreeable, Mr. Chairman. I do not have an opening statement other than to say the Commission and its staff has worked extremely hard to get this order out, and we did it in lightening speed. The order was issued on April 26. We got the comments within the 30 days and we acted just yesterday. Thank you.

The CHAIRMAN. Thank you.

There are some States that are affected by your order which have not seen high prices for wholesale power, my State being one of them, New Mexico. Are you confident that nothing in your order, which takes the entire West and, in effect, puts in place a limit on what can be charged based on the highest price being charged out in California, is going to result in increased prices for wholesale power in these other States where they have not had the exorbitant prices for wholesale power?

Mr. MADDEN. A couple points, Mr. Chairman. One, our order only deals with 24 hours or less. Most sales outside California are bilateral sales, more than 24 hours. So, in terms of your particular State—and I do not have the numbers—I would assume a great deal of the wholesale sales that occur are bilateral sales which are not even covered by our program.

To the extent that it is, we have this price mitigation which mimics what the market is supposed to look like, and any agreements or any deals that want to occur below that price or even up to the price should not affect prices outside California in terms of how the market works.

Another point to make is that the order will go out for comment and seek what other market-type approaches we should look at outside of California, recognizing there are 11 States in the WSCC. We are providing 60 days for comment to look at whether or not those ramifications to our price mitigation that is going to be in effect, if we issued the order today, 24 hours after that. We are asking comment from everyone in the West whether or not there is a better approach outside of California.

The CHAIRMAN. Are you confident that the order will not in any way deter the entering into long-term firm sales contracts for the future? One of the agreed-upon purposes or directions that California has been trying to move into is to get more long-term contracts in place in recent months. Do you believe that that incentive to do that will continue to be there even though this order is in place?

Mr. MADDEN. In our December 15 order, we recognized the importance of California getting out of the spot market, and they

were essentially 100 percent in the spot market. We recognized that they should really have only 5 percent in the spot market. They have been successful to date in moving a great deal of their portfolio outside the spot market.

I believe our mitigation program that is in place now and our order, as of yesterday, will have no effect in terms of California negotiating longer-term contracts. In fact, that is the premise of our order. We want them to continue to enter into longer-term contracts and get out of the spot market.

The CHAIRMAN. How does the monitoring and reporting system work for the rest of this WSCC? As I understand it, the ISO has gathered the cost information and reported prices in California. Who is going to do that in the rest of the West, as you see it?

Mr. MADDEN. In our order, we propose that the WSCC serve as a clearinghouse, among others, for the prices. But I believe that outside of California, the entities, the sellers, will know the prices the ISO establishes for the particular hours of the day.

The CHAIRMAN. Let me go ahead and defer to Senator Murkowski for any questions he has.

Senator MURKOWSKI. Thank you. I have no questions other than to indicate to you, Mr. Madden, that I want to compliment you and your professional associates for the manner in which you have been responsive. I think it was a very thorough effort. We will look forward to receiving the formal order very soon.

The CHAIRMAN. Very good.

Senator Cantwell.

Senator CANTWELL. Thank you, Mr. Chairman.

Mr. Madden, I am trying to understand if we do not have a major flaw in this order. I am trying to understand the order as it relates to the section 206 investigation and whether the Northwest or, for that matter, all the other Western States are entitled to have overcharging investigated and be eligible for refunds. So, if you could clarify how this order applies to the rest of Western States and whether we, in fact, will be entitled to that or whether the Commission, just in haste, limited maybe unnecessarily this refund issue just to California.

Mr. MADDEN. Senator, I think you have to go back to the April 26 order where we, as a companion to that order, initiated a 206 investigation outside California for the entire West. Under the law, under section 206 of the Federal Power Act, we cannot have refunds occurring earlier than 60 days after we have it published in the Federal Register. So, the refund effective date for the West, other than California, with respect to the rates is July 2, 2001. So, in terms of refunds occurring prior to that period, we have no statutory authority for that from a refunds standpoint.

We can look at, however, whether or not there have been tariff violations. We can use our equitable remedies to see whether or not public utility sellers have, indeed, violated the tariff.

Our mitigation plan for the West, despite the July 2 refund effective date, will be effective 24 hours after we issue the order.

Senator CANTWELL. What you are saying—and further explain, if you would like, why California will be able to be included in refund and possible investigation as this settlement process prior to that, but the Northwest or other Western States will not.

Mr. MADDEN. Senator, last August 2000, we issued a 206 investigation for California, not for the West. And we set the refund effective date to October 2, 2000. That order only applied to California. It did not apply to States outside of California. So, with respect to the issue of refunds, why is the West not entitled to the refund back to October 2, the answer is that the order that we issued back in August only applied to California and it established the refund effective date, October 2 forward, for California. We are on two separate tracks, California and the West, for refund periods.

Senator CANTWELL. Which I think I brought up. I do not know if you were at the last hearing with the FERC Commissioners. But we brought up this issue and the fact that this investigation of the Western States was, in fact, late. We can see now that we will be penalized in this order for that unless the Commission decides to take action otherwise in being able to recoup some of those costs and overcharging that has happened in the Northwest, unless the Commission does believe that the rates have been reasonable and just in the Northwest.

Mr. MADDEN. Well, in our earlier order of April, we stated that the rates may be unjust and unreasonable in the West, and that is why we established the 206 investigation. And that is why we established the earliest possible date under the Federal Power Act, and that is July 2, 2001.

Senator CANTWELL. If the Commission did want to take action otherwise, how would they resolve this?

Mr. MADDEN. If the Commission wanted to have refunds occurring prior to July 2, 2001 for outside the West? Is that the question?

Senator CANTWELL. Yes.

Mr. MADDEN. We have no statutory authority to require refunds prior to July 2, 2001.

Senator CANTWELL. So, the Commission could not take action solely on its own.

Mr. MADDEN. We have no statutory authority to do so.

Senator CANTWELL. Thank you, Mr. Chairman. This is something I think the committee should investigate because, obviously, we have seen this was a West-wide crisis in Western States, not just in California. The impact for consumers, as far as industrial users and residential users, has been real. We have not had a retail cap in the State of Washington. We have not had consumers who have been shielded from that, unless their utilities have gotten creative with their own financing and spreading that out over a longer period of time. So, we have seen a real impact.

So, in this order, Mr. Chairman, to be left out without that recourse, given that again we have already seen a 50 percent increase, we are likely to see another 70 percent increase, even given this order and its forward actions, because of the amount of power that has already had to be purchased through this process. So, Mr. Chairman, I think it is something that the committee should address. Thank you.

The CHAIRMAN. Yes. Thank you very much.

Senator Schumer.

Senator SCHUMER. Thank you, Mr. Chairman. I want to thank you all for holding this hearing and thank you, Mr. Madden, for being here.

First, I want to say that I thought the actions of FERC made a great deal of sense. You can call it what you will, price cap, price control, proxy price, price mitigation. The bottom line is that the market was broken and needed fixing.

I have generally opposed price caps in general. One of the issues in my campaign was whether there should be credit card interest rate caps. Senator D'Amato was for them; I was against them. But there are occasions when the market is not working, when it is broken, when there is, in a sense, a monopoly which is what happened here. And then you have to act.

I think some of my colleagues confuse and many people in the country confuse being pro business and being pro market. They often coincide. Sometimes they do not. When you do not have a market, it does not mean that you just help the company do whatever it wants. That is what was happening here.

So, I am delighted that FERC did this action for the 10 Western States and salute you for doing it.

As we move on the road to deregulation, until you get a lot of suppliers and a lot of buyers, you are not going to have real competition, and that is what all of us have to be very careful about. I believe in deregulation. I put in a major deregulation bill with Phil Gramm, but again, it just does not happen at the snap of a finger.

So, what I would like to ask you about is not the California market, but its implications elsewhere. I come from New York which, if you believe the pundits, what happened in California could happen in New York. My question is as follows.

One, in general, what are the differences in the structures of the New York market and the California market? I know we have more long-term contracts in New York, but even there we do not have all long-term contracts. So, we could have the same kind of squeeze that California faced, should there be a lot of warm days.

But second, why should what FERC did not become national policy? Why, if the same thing happens in New York and there is one supplier or two suppliers who are sort of doing price leadership, should the same types of—again, call them caps, call them controls, call them mitigation, call them what you will. Why should they not apply?

So, my general question is how is New York different? Should these caps—should this policy—let us not jaundice it by calling it one thing or the other—be a national policy as opposed to just a Western policy, and if not, what could deal with a similar problem that might occur this summer in New York?

Mr. MADDEN. Those are very good questions, Senator. Let me see if I can respond to them.

The first question, how is New York different than California? Let me give you my particular thoughts. California, when it went through unbundling, told essentially the IOUs that they should get rid of their portfolios but for essentially hydro and nuclear, and that they sold those particular plants to producers, to the Reliants, to the Mirants of the world. And they did not have the IOUs enter

into long-term contracts. They essentially said that they should buy through the spot market. As a result, they did not have either generation there to support their load or they did not have the buy-back provisions of a contract.

Now, if you look at New York, for example, New York did not require all spot. It had a lot of the IOUs have longer-term contracts. They, in fact, had their generation. More importantly, New York is in the PJM region, and the reserves in the PJM area, which covers this region of the country, New York, Maryland, et cetera—they have reserves, 15, 20 percent of reserves for the supply in the most part. It is a better working situation here than it is in California.

Even as an example, when there was concern earlier this year with New York being short on supply, there was an immediate response by the State of New York to add a substantial amount of generation to cover it. You also have the New York ISO, in terms of how they operate the rules and the market rules there.

What we have seen in New York and, for the most part, the rest of the country is that the market really is working. The prices are $30 to $50 a megawatt hour in the most part. There are spikes, yes, but the volatility is nothing like it was or is in California.

Now, why would you want to overlay, for example, a price mitigation scheme that we implemented to take care of the concerns, the dysfunctions of California and the West, when for the most part, what we are seeing is a well functioning, competitive market? Yes, there still have to be concerns, but my personal view is that you should not overlay with additional rules a situation where the market is operating very well.

Now, we at the FERC are very concerned about New York, and a lot may happen to New York and other areas of the country. We just last week started asking for outage data. So, we will monitor that market, as we will the other markets in the country.

Senator SCHUMER. Let me just follow up, if I have your okay, Mr. Chairman. It is true the New York market is not as bad off as California. First, the supply/demand equation is not as out of sync in New York, as you say. Second, we do have long-term contracts. And third, you are right, the PJM market is better than the Western market. But let me just make two points here.

One, not all of our contracts are long-term. By the way, this tends to be at least immediately for the next summer or two a down-state rather than an upstate problem. But Con Edison, which I think supplies a third of New York power and is the main supplier overwhelmingly in New York City and in Westchester and in LIPA, Keyspan in Long Island—neither of them are totally covered by long-term contracts. So, you still have the problem at the margin you are similar to California.

Second, as I understand it, while, yes, there are excesses of power in PJM and in New England, for that matter, in large part you cannot get the power from here to there, that the transmission lines are so overloaded and old that you just cannot get from here to there. So, even if you have an excess in those areas, they may not do the job.

So, my question is, yes, the markets are different, but this policy is not designed to deal with the market in general. It is designed to deal with it at those peak times when ludicrous prices, way

above what is needed to incentivize companies to build new plants, are asked and paid for. Why should we not have a policy that deals with that? I do not want to bring you back here in September and you said, well, gee, everything was fine except for 3 days in August, but now New York is in a position where we are $2 billion out because we are paying some wildly absurd sum. Could you answer that? Because I did not find your first answer totally dispositive.

Mr. MADDEN. Well, Senator, unlike California, I think that the neighboring States have provided a substantial amount of supply to New York where it has been needed. I think New York needs to build more infrastructure, clearly transmission lines in New York City. There has to be the development of an infrastructure.

Senator SCHUMER. Agreed, but that is 2, 3, 4 years away.

Mr. MADDEN. If we have the right incentives, it could be a lot shorter. If we have the right incentives, we can have a streamlined permitting. I just do not think at this stage, based on what I know—by the way, there are pleadings before the Commission asking for a similar result, Senator, in terms of why not apply somewhat of a similar mitigation plan——

Senator SCHUMER. If I just might interrupt you, sir, I have here the *Energy Daily* of June 19, today as it turns out. Con Ed says that FERC is leaving New York City residents exposed to unfair and unreasonable rates this summer by refusing to consider special market power mitigation measures proposed by the utility. So, it is not just me talking about this; it is the main distribution agency in New York.

And your answer—we could be the quickest State in the country. We are not going to get power lines ready for not even—forget this summer—it is impossible—but for next summer. I supported the building of those ten little plants. I was one of the few elected officials who did, but that is not sufficient.

Mr. MADDEN. Senator, we have the pleading by Con Ed and others before the Commission right now, which raises the same questions that you have asked me. We will be addressing that pleading in the near future. I cannot talk more about the specific merits of it because I am precluded, but I am well aware of the pleading.

Senator SCHUMER. I would simply ask you to consider our problem, and I do not think saying either most of the contracts are long-term, surrounding markets do have some excessive power, or that we can build more transmission lines over the next few years, which I agree with—we have to—are sufficient answers if, God forbid, we have a lot of hot days this summer.

Mr. MADDEN. I am not saying they are sufficient, but at the same time, I have to recognize we have to deal with a particular pleading by Con Ed. And we may have the relief you are requesting.

Senator SCHUMER. I hope you will consider that. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much.

Mr. Madden, thank you very much. Let me just say that I know you and the Commission itself are very proud of the order you have entered. We hope very much that it does all that you intend. Based on the consensus view here on the committee, which I am sure you heard, we will suspend any effort to legislate in this area, at least

in this committee, and watch and hope to continue to stay in close touch with you to determine whether you think your order is, in fact, handling the situation.

Congratulations to you on the action you have taken, and we appreciate very much your staying behind and answering some additional questions.

Mr. MADDEN. Thank you, Mr. Chairman, and thank you, Senator Murkowski.

The CHAIRMAN. Let us get all of our additional witnesses up here. Our third panel is Mr. Geoffrey Roberts, who is president and CEO of Entergy Wholesale Operations; Mr. Steven Fetter, who is the managing director of Global Power Group; Dr. Ronald McMahan, who is the managing partner of Enercap; and Mr. Thomas Brill, director of regulatory policy and analysis for Sempra; and Mr. Bruce Henning, who is the director of energy and environmental analysis in Arlington, Virginia. If each of them would come up, we would appreciate it.

Why don't we go ahead and hear from each of you? If you could summarize your comments, we will be glad to put your entire statement in the record. But why don't we start on the left-hand side, my left? Mr. Roberts, why don't you start out, and we will just go right across the table and hear your point of view of any of these issues. Mr. Roberts, thank you for being here.

STATEMENT OF GEOFFREY D. ROBERTS, PRESIDENT AND CEO, ENTERGY WHOLESALE OPERATIONS, THE WOODLANDS, TX

Mr. ROBERTS. Thank you, Mr. Chairman, Senators. Thank you for allowing me to appear before you today.

Entergy Wholesale Operations is the unregulated wholesale power arm of Entergy Corp. We have powerplants operating or under advanced stages of construction or development through the Gulf South, Midwest, and east coast of the United States, as well as in England, Spain, Italy, and Bulgaria. We currently have no projects operating or in advanced development in California or other parts of the Western States.

I have been president and CEO of EWO for nearly 3 years, but I have been working in various parts of the energy industry for the last 18 years. My most recent experience has been trading and marketing electricity and natural gas and building the infrastructure necessary to serve these important markets in North America, Europe, South America, Australia, and Asia.

Since joining Entergy, our focus has been two-fold. The first part has been putting together the development teams, all the necessary work that you need to get customers, land, water, permits, all the requirements necessary to build a powerplant.

But it is not enough to put a powerplant in the ground and operate it well. There is a lot of risk, and it is not as easy as it might seem. All aspects of the business are fraught with risk. It is in understanding and evaluating these risks that places this all together. The choice between the potential powerplant project where we may choose to invest here or in another location is going to be entirely dependent upon how we assess those risks and the associated rewards.

To put this in perspective, we currently have three different projects competing for each of the sets of turbines that we have. Our choice of one location or another is entirely dependent upon how we assess those risks.

We have no special insights in to how to solve what is currently the enormous problem that is facing California today. Since the addition of new generation to California has to be part of the long-term solution, I hope to provide some insight as to how we approach the market and how we make decisions about where to invest. Perhaps that will help those who are confronting this problem in helping them to make decisions.

Powerplant investment decisions come down to really two simple questions. First, does the potential return on investment justify taking the risks associated with the investment? Second, are there other projects available that provide either a greater return for the same risk or the same return for less risk?

It is useful at this point to note some differential definitions between risk and uncertainty. Risk in the powerplant business comes from anything that makes earnings streams uncertain and is amenable to both measurement and management. Uncertainty refers to those hazards which are amenable to neither quantification nor management. Obviously, as a developer of power projects, we seek to measure and manage those projects and those risks.

Uncertainties in particular projects, however, cause us to rethink our investment plans fundamentally, for we are in the business of taking calculated risk for the benefit of our investors. By definition, uncertainty is an exposure that cannot be calculated, where carefully developed skills may be of no benefit, an environment in which investment loss may be caused by arbitrary forces over which the investor has no control.

There are two primary risks that we look at. One is obviously the capital, the impact on the cost side of the risk. Those were mentioned earlier today. Operating costs, ability to construct on time and on budget, environmental costs, et cetera. There are also risks affecting the revenue side: customer default, prices for power and related ancillary services, market supply and demand fundamentals, changes in market rules, and changes in regulatory structure. We spend a great deal of time trying to measure and quantify and manage the risks associated with these revenue and cost streams, and we keep a watchful eye on these uncertainties.

All these factors go into the development of what we call forward curves or price forecasts. These take into account anything that we think might be significantly impacting the price of generation or our ability to operate. These forecasts with appropriate sensitivities provide the basis for developing the financial forecasts used to determine where and how we invest. We make decisions about investment, acquisitions, and divestment based upon these proprietary price curves. We believe, through our philosophy, experience, and actions, that price signals work. Price signals change behavior.

As I discussed before, when economically feasible, we actively mitigate these risks. However, let us talk about some of those specific uncertainties.

Significant uncertainties that cannot be anticipated in our forward curves or mitigated through various market tools, present

very special challenges to any business, especially one that is as capital intensive as ours. Risks that are visible can be evaluated relative to expected returns and to other projects.

Significant uncertainties that are unclear or unmanageable lead us to make decisions not to invest in projects affected by such uncertainties. One uncertainty that fits this description is the risk of adverse governmental laws or actions. In general, we choose to invest in markets where the regulator has made a commitment to develop rules that are transparent, stable, and fair. The rules do not have to be exactly what we want, so long as we can operate within their framework. During the past 3 years, we have exited from a number of international markets specifically because of regulatory and governmental uncertainties that would deny us the opportunity to apply our competencies effectively in pursuit of an adequate return for our investors.

As you carefully consider the steps to address California's difficult power situation, it is important to consider not only how your decisions may affect generators and customers today, but also for years to come. The steps taken today will affect whether generators decide to build in California, or whether they perhaps choose to invest in other markets, or perhaps only invest at a higher return, or perhaps not at all. If steps taken today result in a perception by investors that the California market is not merely a market with normal risks, but one with uncertainties and market rules, taxes, and the general investment climate are seen to be unmanageable, they will either increase the required return on their capital that is higher or build elsewhere. Moreover, if the actions taken today reflect a trend for the broader generation market, it could negatively impact powerplant development decisions across the Nation.

As I stated before, the market rules do not have to work perfectly. Electricity has the most complex physics of delivery of any major commodity, and the market rules governing the business of electricity tend to be complex as well. So, market rules tend to be a compromise between the requirements of the physical laws and the simplicity for market operation between the needs of the generators, the investors, the end users, and other market participants. As a market participant, we understand the give and take inherent in any system of market rules.

Regulatory volatility, however, is an uncertainty we cannot tolerate. I will always choose a market with stable rules over one without, and I will guide my investment program accordingly. If I do build, it will require a much higher hurdle rate to ensure that investors' interests are reasonably protected. It is no different than how the capital markets work. If the particular market is more risky, the costs of that capital are higher to compensate investors for the increased risk.

We are concerned with the energy situation in California. We are empathetic with the hardships being faced by its citizens. We hope this testimony helps those with responsibility for public policy so that California's situation does not become long term or affect the markets in other parts of the country.

Thank you.

[The prepared statement of Mr. Roberts follows:]

PREPARED STATEMENT OF GEOFFREY D. ROBERTS, PRESIDENT AND CEO, ENTERGY WHOLESALE OPERATIONS, THE WOODLANDS, TX

Mr. Chairman, Senators: Thank you for allowing me to appear before you today. Entergy Wholesale Operations (EWO) is the unregulated wholesale power arm of Entergy Corp. We have power plants operating or under advanced stages of construction or development in the gulf South, Midwest, and East Coast of the United States, as well as in the England and Bulgaria. We have no projects operating or underway in California or other parts of the Western United States.

I have been President and CEO of EWO for nearly three years. I have been working in various parts of the energy industry for over 18 years, with most of my recent experience being related to trading and marketing electricity and natural gas, and building the infrastructure necessary to serve these important markets in North America, Europe, South America, Australia and Asia. Since joining Entergy, our focus at EWO has been two-fold. One part was to build up our development, marketing, construction and operating teams. These are the teams that actively seek out, construct and operate the projects—seeking out customers, land, water, permits—all the requirements necessary to put a power plant into the ground, then to construct and operate it efficiently.

It is not enough, however, to put a plant in the ground and operate it well. To be worthy of our investors money, we must be sure a project has a reasonable opportunity to provide at least a minimum return. This is not as easy as it might seem. All aspects of our business are fraught with risk. It is in understanding and evaluating these risks that management makes the choice between potential power plant project investments. To place this in perspective, we currently have over 3 different projects internally compete for each set of the gas turbines that we have purchased. Some of these sites we will develop to become generating plants;others we might permit and then either retain for future development or sell to another developer. Yet others we will shy away from, either because the economics are not there relative to the risks or simply because there are better alternatives. Ultimately, we want to choose those projects that provide the optimal risk/reward profile. The second part of our focus at EWO has been in developing the analytics and processes necessary to identify, evaluate and manage the risks of our investments.

It is this second aspect of our business I would like to discuss today. I have no special insights into how to solve what is currently an enormous, but we hope, short-term problem in California. Since the addition of new generation into California has to be part of the long-term solution, I hope it will be helpful to provide insight into how generation companies make their decisions about where to invest. Perhaps this will help those who must confront this problem make decisions—and keep what is currently a short-term problem from becoming long-term.

Power plant investment decisions come down to two questions. First, does the potential return on investment justify taking the risks associated with the investment? Second, are there other projects available that provide either a greater return for the same risk, or the same return for less risk. It all comes down to relative risk and return.

It is useful, at this point, to note some definitional differences between "risk" and "uncertainty". Risk in the power plant business comes from anything that makes the earnings stream uncertain, but is amenable to both measurement and management. "Uncertainty" refers to those hazards which are amenable to neither quantification nor management. As a merchant developer, we seek to measure and manage our exposure to risk, but certainly not to avoid it entirely, for investment in a competitive marketplace inherently brings with it a measure of risk. Uncertainties in particular projects, however, cause us to rethink our investment plans fundamentally, for we're in the business of taking calculated risk for the benefit of our investors. By definition, uncertainty is an exposure that cannot be calculated, where carefully developed skills may be of no benefit, an environment in which investment loss may be caused by arbitrary and capricious forces over which the investor has no control. Risks and Uncertainties come from a myriad of sources, affecting both the costs of the project and the revenue stream. I'll start with the capital, or cost side risks, since as an industry, our capital costs are major factors in making decisions. Examples of some cost-related risks include:

- Operating and maintenance costs
- Fuel supply reliability and cost
- Ability to construct on time and on budget
- Environmental mitigation and regulatory changes
- Changes in transmission pricing and availability
- Changes in taxes
- Changes in financing costs

- Natural disasters

Similar risks affect the revenue stream, including:

- Customer default
- Prices for power and related ancillary services
- Over- or under-development of the market (supply) relative to demand
- Changes in demand, perhaps resulting from technology, behavioral changes or other causes
- Changes in market rules
- Changes in regulatory structure

EWO spends considerable time and resources to identify, value and manage the risks in these revenue and cost streams, and we keep a watchful eye on the uncertainties. We track generation development and customer load growth, regulatory and legislative changes,fuel supply logistics, transmission construction and constraints, to name a few, all to provide us the best possible view of the market and our projects. All these factors go into the development of what we call "forward curves" or price forecasts. These take into account anything we can think of that might significantly affect the price of generation or our ability to operate. These forecasts, with appropriate sensitivities, provide the basis for developing the financial forecasts used to determine whether or not a power plant project would be a prudent investment. A fundamental assumption of these curves is that the market in which we compete is competitive and that economic forces drive rational decision-making. We make decisions about investment, acquisitions and divestment based upon these proprietary price curves. We believe, through our philosophy, experience and actions, that price signals work.

As I discussed before, when economically feasible, we actively mitigate risks. For example, to mitigate the risk inherent in construction, we entered into a joint venture with the Shaw group. Similarly, fluctuations in fuel prices can be hedged in the derivatives market. We buy insurance for natural disasters (which might cover the cost of the hardware, but not the lost revenue), and we buy quality equipment to maximize reliability and reduce the risk of not operating. And now, even the risks of weather can be managed in the marketplace, through innovative transactions being offered through our affiliate Entergy-Koch.

However, significant earnings Uncertainties that cannot be anticipated in our forward curves or mitigated through various market tools, present special challenges to any business, especially to one as capital intensive as ours. Risks that are visible can be evaluated relative to expected return and to other projects.

Significant Uncertainties that are unclear or unmanageable lead us to make decisions not to invest in projects affected by such Uncertainties. One Uncertainty that fits this description is the risk of adverse governmental laws or actions. In general, we choose to invest in markets where the regulator has made a commitment to develop rules that are transparent, stable, and fair. The rules do not have to be exactly what we want, so long as we can operate within their framework. Consequently, we look for markets where the rules of competition are clear, encouraged and relatively stable. During the past 3 years, we have exited from a number of international markets, specifically because of regulatory and governmental uncertainties that would deny us the opportunity to apply our competencies effectively in pursuit of an adequate return for our investors.

As you carefully consider steps to address California's difficult power situation, it is important to consider not only how your decisions may affect generators and customers today, but also for years to come. The steps taken today will affect whether generators decide to build in California, or whether they perhaps choose to invest in other markets, or perhaps invest only at a higher return, or perhaps not at all. If steps taken today result in a perception by investors that the California market is not merely a market with normal risks, but one in which uncertainties in market rules, taxes, and the general investment climate are seen as unmanageable, then they will either increase the required return on their capital, or build elsewhere. Moreover, if the actions taken today are perceived as reflecting a trend for the broader generation market, it could impact hurdle rates and power plants development decisions across the nation.

As I stated before, the market rules do not have to be perfect. Electricity has the most complex physics of delivery of any major commodity, and the market rules governing the business of electricity tend to be complex as well. So, market rules tend to be compromises—between the requirements of the physical laws vs. simplicity for market operation, between the needs of generators and investors and the needs of end-users. As a market participant, we understand the give-and-take inherent in any system of market rules. As long as they are reasonable, fair and predictable, we can figure out a way to work within their structure. Regulatory volatility, how-

ever, is an uncertainty we cannot tolerate. One cannot predict or mitigate the risk—the major outcomes are recriminations, and dissatisfied investors. I will always choose a market with stable rules over one without—and I will guide my investment program accordingly. If I do build, it will require a much higher hurdle rate to ensure that my investors' interests are reasonably protected. This is no different from how the capital markets view individual markets around the world. If the particular market is more risky, the costs of that capital are higher—to compensate investors for the increased risk.

EWO is concerned with the energy situation in California. We are empathetic with the hardship being faced by its citizens. We hope this testimony helps those with responsibility for public policy, so that California's situation does not become long-term, or affect the markets in other parts of the country.

The CHAIRMAN. Thank you very much.

Dr. McMahan, why don't you go right ahead.

STATEMENT OF RONALD L. McMAHAN, Ph.D., MANAGING PARTNER, ENERCAP ASSOCIATES, LLC, BOULDER, CO

Dr. MCMAHAN. Thank you. I will digress from the remarks I submitted in light of the time squeeze and also the comments by the FERC.

I do want to say that I have 25 years experience as an economist, mostly with the company I founded, RDI, watching these swings in cycles in the electricity market in particular. I think we should understand two things from the outset. First of all, nothing that has been done by the FERC today or yesterday will do anything to help with the chronic electricity shortages that are going to be faced in California and the rest of the West. And secondly, we will still see high prices in the West.

On a positive note, all the pieces are in place to help mitigate these problems. There is a tremendous amount of generating capacity either under construction or having been announced in recent years given the opening of the market. There is clearly public awareness that has led to considerable conservation efforts, and clearly the regulatory authority does exist to deal with the pricing issues that people have talked about.

So, while it is no surprise where we stand, and rather than sort of pound on the California issue and how we got here, let me just give some orders of magnitude of what we are looking at this summer and talk about the supply side.

First of all, the hydro issue that people have been talking about. I included some numbers in my prepared remarks, but let me just give some orders of magnitude around that. Given the reservoir levels in the Northwest, even though we have been seeing some decent spring runoff and some relief in prices, given where we are now and according to a study by Henwood and Associates in Sacramento, we are going to be looking at chronic shortages in the middle of the summer and into August. The loss of about 4,000 to 5,000 megawatts of average generation due to just the hydro problem, the loss of about 8,000 to 9,000 megawatts of peaking capacity. That is the equivalent of losing the entire PG&E system at noon on a hot summer day. It is a lot of electricity.

Right now we are looking at deficits in August of about 8,000 megawatts; 139,000 megawatts of demand and only about 131,000 megawatts of effective capacity. Do not forget, a stage 3 emergency, which is the highest level of emergency in California, is when they have a 1.5 percent reserve margin. We are projecting August re-

serve margins of minus 5.3 percent. There will be blackouts unless there is some relief in the weather, and there will be a lot of voluntary curtailment of load.

I prepared a map that shows where the electricity plants are being constructed. I do not know if it is here. I have some copies if the Senators would like to look at them.

The CHAIRMAN. Yes, we would like to see that. If somebody could go grab those for us, I would appreciate it.

Dr. MCMAHAN. Those are attached to the remarks that I brought.*

Essentially what this shows is all of the plants that have either been under construction, have been announced or are somewhere in the permitting process throughout the WSCC region. The dots that are fully filled in are those that are under construction. You can see, by the color, the red ones will be coming on in 2000; the green ones in 2002; and the others in 2003. Some of the longer range ones are the bigger plants that have more lead time.

But we see about 6,000 megawatts in the whole region that is under construction to come on this summer. As you know, that is still not enough to make up the kind of 8,000 megawatt deficit that I was talking about.

Even if all of these plants that are completed, all the ones that are under construction, over the next 3 years, we would see about 17,700 megawatts of new capacity. That is encouraging, but that still does not even get us up to the 15 percent reserve margins that people look for.

So, what is going on with all of those other plants that you see on there that are not fully shaded? I think that those plants are in jeopardy for several reasons.

First of all, now the analysts are going to all go back home at the development companies that are developing projects, break out their calculators, look at what they consider to be the proxy price going forward, and will make decisions, as my colleague has stated, about whether they should continue the development of these projects, whether they should postpone the development of those projects, or abandon them altogether.

The second big question that arises is how are the financial markets going to react because, again, all of those plants that are not fully shaded in are still somewhere in the financing process, and how the markets and Wall Street react is going to be very important.

The final technical point that I will make that sort of takes a little bit of the gloss off of this nice development picture is that natural gas is supplying 98 percent of these plants that are being built. As you know, there are tremendous strains on the natural gas system. If all of the plants were built in the West and in Texas, we would see about half again as much gas needed for that as all of the electricity that we generated in the United States last year. So, the gas infrastructure system and the gas replacement system is going to be very critical. It could be we will have all these plants and nothing to fire them.

---

* Retained in committee files.

So, just in conclusion, as far as what should be done, I think clearly conservation, investing in renewables, development of new powerplants and reinforcing the pipes and wires infrastructure is very important.

I think cost-of-service pricing mechanisms would be a disaster and would essentially wipe out most of the new development that is planned. I think that punishing the rest of the country for what is happening in California is kind of like picking out one student who has been bad and punishing the whole class for it. I think we need to be careful about what we do as far as sweeping legislation in order to be sure that we keep this pipeline of powerplants full.

Thank you.

[The prepared statement of Dr. McMahan follows:]

PREPARED STATEMENT OF RONALD L. MCMAHAN, MANAGING PARTNER, ENERCAP ASSOCIATES, LLC, BOULDER, CO

Mr. Chairman and Members of the Committee:

I am pleased to be here today to summarize the findings of a study I recently completed addressing the electricity supply situation in the West. I will begin by saying that no matter what the Committee does here today, and no matter what actions the Congress takes in the coming weeks, this much is certain: electricity shortages will continue to plague California in the months to come, and high energy prices will persist throughout the region.

There are no quick fixes for the current situation. However, I believe that all of the pieces are in place today to see us out of this problem.

- Enough new generating capacity is under construction and/or planned to meet the West's projected needs by late next year.
  —This assumes that legislators do not take rash actions that will cause developers to withdraw.
- Public awareness coupled with increasingly painful price signals promise to deliver substantial conservation.
  —At the same time, innovative suppliers and buyers are devising methods to better understand electricity consumption patterns and to more carefully tailor usage—particularly at the industrial and commercial level.
- The regulatory authority and mechanisms currently exist to curtail price gouging and to deter suppliers from "gaming the system."

ELECTRICITY SUPPLY

The situation that we face today in the West should come as no surprise. Four years ago, in May, 1997, when I was invited to address this same Committee on the topic of electricity deregulation and stranded cost recovery, I pointed out that California's deregulation scheme would most likely lead to supply shortages, and recommended strongly that Congress not pattern a national scheme on such a model.

The California approach was flawed from the outset for a couple of very basic reasons:

- First, it attempted to address the problem of inordinately high electricity rates in the state by "re-mortgaging" historic, high-cost power policies—these policies themselves the product of short-sighted legislative and regulatory constraints.
- Second, the state assumed it could take advantage of low-cost power then available in the rest of the Western grid from states whose utilities had taken a more reasoned approach to capacity development.
  —However, it did nothing to address the issue of developing new supply to meet growing demand.
  —An unintended consequence of the stranded cost recovery mechanism was the migration of capital away from new project development, and largely out of the state.

Unfortunately, the inevitable supply squeeze has been exacerbated by two factors—faster than anticipated economic (and, hence, electricity demand) growth, and two consecutive seasons of extremely low hydro availability in the region. To illustrate the severity of the hydro problem consider the following chart:

WESTERN SNOW PACK IS WELL BELOW NORMAL

	% of normal	Peak capacity
Pacific Northwest	67%	30,600 MW
California	78%	9,600 MW
Colorado River	80%	8,400 MW

- The loss of 4,000–5,000 MW of average generation
  —Equivalent to losing the entire PSCO and Colorado Springs systems for a year.
- The loss of 8,000–9,000 MW of sustainable peak
  —Equivalent to losing the entire PG&E or Pacificorp system at noon on a summer day.

According to a recent study by Sacramento-based Henwood Energy Services, Inc., *WSCC at the Brink: Disaster or Recovery*, the West is on a collision course with disaster later this summer as projected peak demand is expected to exceed the region's total effective capacity of 131,000 MW by 8,000 MW—a massive shortfall. For perspective, in California, a Stage 3 emergency occurs when reserve margins fall to 1.5%. In August, the study projects that peak hour reserve margins could drop to minus 5.3%. Only drastic voluntary and forced cutbacks in load will avert what could ultimately be the worst shortage the region has seen.

Developers are racing to bring new generation on-line as quickly as possible. In just the interconnected Western grid alone (WSCC), roughly 6,000 MW of new generation capacity is under construction and scheduled to come on line by the end of the year—most likely too late to fully avert this summer's chronic shortages. But the good news is that over the next three years, significant new capacity is scheduled to come on line, as illustrated in the table below and on the attached map of power plant activity.

NEW POWER PLANTS IN THE WSCC REGION

[Net Capacity in MW]

	Under construction	Permits	Announced	Total
2001	5,983	160	699	6,842
2002	6,850	4,066	3,148	14,064
2003	4,909	5,148	9,469	19,526
Total	17,742	9,374	13,316	40,432

Source: Henwood Energy Services, Inc., *NextGen Database.*

While this level of development activity is encouraging, we must temper our optimism in light of recent developments and public initiatives.

- The 17.7 GW of capacity under construction is helpful, but not enough to insure safe capacity margins—even in normal hydro years.
- The investment climate is cooling.
  —Much of the 22.7 GW of capacity currently in the permitting process or announced is in jeopardy of not being built as developers become wary of increased regulatory control and the possibility of price caps.
  —The psychology of the market has turned around as developers are "demonized" and inclined to wait this out or invest their capital elsewhere.
- Natural gas supply issues—too many eggs in one basket?
  —Of the 17.7 GW of capacity under construction 17.3 GW (98%) will be fired by natural gas.
  —Of the total 40.4 GW announced, 39.6 GW (98%) will be fired by natural gas.
  —Between the WSCC and ERCOT (Texas), all of the natural gas projects currently under construction or permitted will require 3.8 Bcf/d or 1.4 Tcf/y.
- For comparison, in 1999, in the entire U.S., total gas-fired electricity consumption consumed 3.1 Tcf/y.
  —Current natural gas exploration is not even enough to maintain supply.
- We need to find 8.5 Bcf/d just to stay even—10,000 wells/year.
- An "all out effort" can produce 9.5 Bcf/d—net +1 Bcf/d.

—This level of development means further demands on a gas pipeline system that is already operating at 85%-90% of capacity with only minimal expansion under way.

WHAT SHOULD BE DONE?

In April, I presented these findings at a round table in Denver chaired by Senator Craig with participation from FERC Chairman Hébert, the Governor of Montana, and numerous state officials including the chairmen of the California Energy Commission and the Texas Railroad Commission. At that time, when asked what we should do, I responded, "We need to do everything—we need to conserve as never before; we need to invest aggressively in promising renewable energy technologies; we need to encourage the development of new natural gas and clean-coal power plants; and we need to reinforce the 'pipes and wires' infrastructure."

Today, I will make an emphatic addition to that response—i.e., what we should not do. We should not move toward sweeping cost-of-service pricing mechanisms for electricity. This would be a giant leap backward to a time when cost-plus regulation created the very problems that we are trying to untangle today. It discourages innovation; it hurts productivity; it does nothing to check demand; and it sends all the wrong signals to project developers.

In many ways the genie is already out of the bottle, and believe it or not, the system is working as a plethora of new power plants are coming on line to meet demand. If the market is left to work as it should, we will soon see a period of increasing supply and lower prices—especially on the spot market.

The FERC already has the authority to check "unjust and unreasonable" prices, and in recent weeks has moved to implement temporary rules aimed at accomplishing virtually the same results as the proposed legislation. What is important is to be able to apply these rules judiciously and fairly without invoking the dreaded image of "price caps" that can send investors running.

There is always the fear that if the federal government doesn't step in and provide price relief, the natural trend toward deregulation will suffer. This may be true, and it may fall to the FERC to navigate through the next few months until needed supply once again begins to build and the situation cools down.

California continues to show us what can happen as a frustrated government thrashes about trying to impose quick fixes—going into the transmission business; signing high-priced power contracts at the peak of the market; and demanding federal intervention. If Congress were to react by implementing sweeping legislation at this time, it would be like punishing the whole class for the misdeeds of one pupil.

The CHAIRMAN. Thank you very much.

Mr. Fetter, why don't you go right ahead.

STATEMENT OF STEVEN M. FETTER, MANAGING DIRECTOR, GLOBAL POWER GROUP, FITCH, INC., NEW YORK, NY

Mr. FETTER. Thank you, Mr. Chairman. I must say I came prepared for a brawl over price caps and ran into a love fest regarding regulation. As a former regulator, I am honored to be here.

The CHAIRMAN. Which side are you on on this issue? I am not clear from your statement if you are for regulation or opposed.

Mr. FETTER. Well, I am someone who felt that regulation served some beneficial purposes but would prefer a market oriented setting.

The CHAIRMAN. All right. We will let you further explain your views on what FERC did yesterday.

Mr. FETTER. On the small chance that FERC's action yesterday does not solve all the problems within the Western United States, and the members of this committee are accosted at July 4th barbecues on the issue of price caps, let me say these thoughts.

Major investments have been made in California and other States based on the particular competitive frameworks mandated by State legislatures and commissions. Price levels for generation asset auctions were driven by the new market orientation. A re-

trenchment on these policies back to a form of cost-of-service regulation would likely curb investors' enthusiasm for additional investment pending clearer signs as to future policy direction. This is especially the case where the change in direction might come from the Congress, which is considering proposals for price controls that could apply to just California, or potentially all 11 States within the Western energy market, or in view of Senator Schumer's remarks a few minutes ago, conceivably would apply to the entire United States.

Industry participants, including Federal and State regulators and elected officeholders, have called for substantial amounts of investment both for new generation and transmission upgrades if the Nation's utility restructuring movement is to progress.

I believe the policies encompassed in the legislation under consideration today would add to the uncertainty currently in minds of investors in light of the serious financial difficulties facing California. I draw an analogy to the well-intentioned but flawed Federal policy enacted within the Public Utility Regulatory Policies Act, known as PURPA. Passed in 1978, PURPA sought to encourage both cogeneration and small power production in order to diversity electricity supply away from traditional large utility-owned powerplants.

In that regard, the law failed miserably. It did succeed, however, in touching off 2 decades of regulatory and judicial disputes and creating billions of dollars in stranded costs, as I saw firsthand has a State utility regulator.

Though PURPA issues were with me every day during my 6 years at the Michigan Public Service Commission, its aims only became evident to me from a reading of PURPA because its goals were never achieved in its implementation within the State of Michigan or anywhere else in the United States.

I offer this example because I firmly believe that utility regulation is not an area where the Congress can step in every few years and attempt to deal with the pressing issue of the moment. As we saw with PURPA, such a step can have long-term negative economic consequences. If illegal behavior is occurring within the California market or elsewhere in the West, laws already exist to remedy those wrongs. But if this body seeks to preempt State regulatory prerogatives, indeed step in in place of the FERC and act as a guardian against market movement in an upward direction, you will generate growing concern in the minds of investors and lead them to question whether they really do want to be part of the changing energy landscape.

Already in California questions are arising about the long-term contracts the State recently negotiated because wholesale electricity prices have collapsed from the highs of a few months ago. In view of the proposed about-face on competition under consideration today, what investor would not fear that 5 to 7 years hence, when the rates flowing from California's long-term supply contracts far exceed market levels, just as happened under PURPA, that today's proponents of price caps would fight to relieve their constituents from having to pay the outrageous above-market rates being forced upon them?

And the situation is not necessarily confined to the West. The Midwest electricity spike of June 1998 and its aftermath led my company Fitch, to state, "The electricity market involves unusual risks that will affect the credit of all market participants." Some industry observers have speculated that the New York City region might experience price or supply problems this summer.

Does this Congress intend to maintain an ongoing oversight role so that price controls may be extended beyond the western market whenever prices in other regions fluctuate upward? If so, the efficiency gains envisioned coming from a truly competitive energy environment will likely never be achieved.

Thank you, Mr. Chairman, Senator Murkowski.

[The prepared statement of Mr. Fetter follows:]

PREPARED STATEMENT OF STEVEN M. FETTER, MANAGING DIRECTOR, GLOBAL POWER GROUP, FITCH, INC., NEW YORK, NY

I appreciate the opportunity to testify before the Committee on Energy and Natural Resources to offer the views of Fitch on S. 764, a bill to direct the Federal Energy Regulatory Commission to impose just and reasonable load-differentiated demand rates or cost-of-service based rates on sales by public utilities of electric energy at wholesale in the western energy market, and sections 508-510 of S. 597, the Comprehensive and Balanced Energy Policy Act of 2001, relating to wholesale electricity rates in the western energy market, natural gas rates in California, and the sale price of bundled natural gas transactions. I will speak from the perspective of a member of the financial community as well as former Chairman of the Michigan Public Service Commission.

By now we are all familiar with the factors that have led to the energy catastrophe in the Western U.S. electricity market. California's restructuring plan encouraged utility divestiture of generation and called for a high proportion of customer demand to be met by spot market supply from day-ahead or hourly transactions. This exposed the state's three investor-owned utilities, which were operating under retail price caps, to extreme financial pressures due to wholesale market volatility. By contrast, in more rational market structures for electricity and other energy commodities, approximately 85-90% of demand is normally provided through long-term contracts, with at most only 15% subject to spot market fluctuations. The extreme volatility of price at the wholesale level has given rise to urgent calls for a "fix" in the form of lower and lower price caps.

Three months ago, before this committee, I offered Fitch's views as to whether price caps could provide a solution to the problems facing California and the West. While I continue to believe that price caps would negatively influence the evolution to a competitive electricity market, I am willing to admit that federal enactment of a uniform price cap at a high level—such as $1000 per mwh—might serve a useful purpose. It could operate as a circuit breaker to cap wholesale prices during the brief periods when extremely volatile circumstances result in a market that cannot be contained by any manner of competitive forces. It also probably would not interfere with any strategic decision making by industry participants since builders of new generation or transmission would not employ prices at that level (or higher) in their financing models.

However, to go lower than such a safety valve type level would undoubtedly slow the nation's movement toward an efficient competitive wholesale market. We have already seen that imposition of a low price cap, such as $250 per mwh or even $150 per mwh, can have the negative effect of encouraging suppliers to seek alternative market outlets or even to slow production, or could create anomalous pricing patterns during off-peak periods. Continued tinkering with market rules, especially if at the macro federal level, is sure to create uncertainty among energy investors and delay implementation of their business plans—this is even more the case in light of recent ambiguous economic signs.

A further concern for market participants is that major investments have been made in California and other states based on the particular competitive frameworks mandated by state legislatures. Price levels for generation asset auctions were driven by the new market orientation. A retrenchment on these policies back to a form of cost-of-service regulation would likely curb investors' enthusiasm for additional investment pending clearer signs as to future policy direction. This is especially true where the change in direction comes from the Congress, which is considering pro-

posals for price controls that could apply to just California, or potentially all eleven states within the western energy market, or conceivably the entire U.S.

What concerns me most about Congressional involvement in regulation of the wholesale electricity market is the uncertainty it engenders among investors. Industry participants, including federal and state regulators and elected officeholders, have called for substantial amounts of investment if the nation's utility restructuring movement is to progress. New generation must be added across the country and upgrades to the existing transmission grid are needed to transform the former integrated utility structure into a complement of regional competitive markets operating in a coordinated manner.

I believe the policies encompassed in the legislation under consideration today would add to the uncertainty currently in the minds of investors in light of the serious financial difficulties facing Pacific Gas & Electric and Southern California Edison. I draw an analogy to the well-intentioned, but flawed, federal policy enacted within the Public Utility Regulatory Policies Act, known as PURPA. Passed in 1978, PURPA sought to encourage both cogeneration and small power production in order to diversify electricity supply away from traditional large utility-owned power plants. In that regard, the law failed miserably. It did succeed, however, in touching off two decades of regulatory and judicial disputes and creating billions of dollars in stranded costs—as I saw first-hand as a state utility regulator.

In 1987, I was appointed to the Michigan Public Service Commission (MPSC). At the time, I had no idea what PURPA was, but I soon learned of the positive objectives Congress sought in enacting the legislation. Unfortunately, those aims only became evident to me from a reading of PURPA, because its goals were never achieved in its implementation within the State of Michigan or anywhere else in the U.S.

Soon after the announcement of my appointment, I began to receive calls—both pro and con—about the largest cogeneration facility in the world, a 50% utility-owned facility, that was to be considered by the MPSC under PURPA. I was confronted with PURPA issues every day of the six years I served as a state regulator. Finally, in May 1993, the MPSC resolved the final major cogeneration matter before the Commission. I left soon after, never having seen the congressional intent—and good intentions—underlying PURPA being manifested.

I offer this example because I firmly believe that utility regulation is not an area where the Congress can step in every few years and attempt to deal with a pressing issue of the moment. As we saw with PURPA, such a step can have long-term negative economic consequences. If illegal behavior is occurring within the California market, laws already exist to remedy those wrongs. But if this body seeks to preempt state regulatory prerogatives and act as a guardian against market movement in an upward direction, you will generate growing concern in the minds of investors and lead them to question whether they really do want to be part of the changing energy landscape.

Already in California there is talk that the state may try to back out of some of the agreements it recently negotiated because wholesale electricity prices have collapsed from the highs of a few months ago. And what of the contracts that remain in place for the next ten to twenty years? In view of the proposed about-face on competition under consideration today, what investor would not fear that five to seven years hence—when the rates flowing from California's long-term supply contracts far exceed market levels (just as happened under PURPA)—that today's proponents of price caps would fight to relieve their constituents from having to pay the "outrageous" above-market rates being forced upon them.

And the situation is not necessarily confined to the West. The Midwest electricity spike of June 1998 and its aftermath led Fitch to state that "the electricity market involves unusual risks that will affect the credit of all market participants" (See Fitch report, "Electricity Price Spike: Lessons Learned," October 29, 1998, at www.fitchratings.com). Indeed, there have been other instances of rate aberrations in both the electric and natural gas sectors in various regions of the country over the recent past. Some industry observers have speculated that the New York City region might experience price or supply problems this summer.

Does this Congress intend to maintain an ongoing oversight role so that price controls may be extended beyond the western market whenever prices in other regions fluctuate upward? If so, the efficiency gains envisioned coming from a truly competitive energy environment will likely never be achieved.

Already in the wake of California's serious difficulties, restructuring activities have come to a dead halt across the country. You may believe you are playing the role of the cavalry coming over the hill to save the day, but from where investors sit, it appears more like the waving of a white flag on electric industry competition.

The CHAIRMAN. Thank you very much.

Mr. Brill, why don't you go right ahead.

STATEMENT OF THOMAS R. BRILL, DIRECTOR OF REGULATORY POLICY AND ANALYSIS, SEMPRA ENERGY, SAN DIEGO, CA

Mr. BRILL. Thank you, Mr. Chairman. Thank you, Senator.

Today I am going to limit my remarks to the provisions of S. 764 that would reinstate the maximum rate ceiling on short-term capacity releases for transportation of natural gas into California. I am going to attempt to do so in the context of the order that FERC issued yesterday, which will be something of a challenge in light of the fact that I have yet to see that order. But I certainly have listened to the Commissioners' statements.

The CHAIRMAN. This is the only place where we have intensive, in-depth discussions of orders that have not yet been issued.

[Laughter.]

Mr. BRILL. It makes it easier to be right.

The CHAIRMAN. That is correct. That is why we do it.

[Laughter.]

Mr. BRILL. What I will try to do is make reference to the order based upon what I have heard the Commissioners say in describing the order, and specifically I would like to refer to some of the comments of Commissioner Massey who pointed out that whether or not and the extent to which the order is effective will depend upon the natural gas prices at the border of California. Now, they have three pricing points, but in any event, those input prices that will form such a significant impact on the electric prices provided for under this order will be impacted by the price of natural gas at the wellhead as well as the imputed value of interstate transportation services for getting that natural gas to California.

In order to save some time, I am going to cut my remarks short, but at the end of my testimony, there is a table. I am going to make reference in the comments I am about to make to the table at the end of the testimony that I have provided. I do have additional copies if that would be helpful.

The CHAIRMAN. It would be helpful. Thank you.

Mr. BRILL. Essentially the table that is being provided to you tracks natural gas prices at the California border beginning January 1 of last year. On that table, you will see the imputed value of interstate transportation services since the beginning of last year as well as the FERC-approved cost-of-service rate for interstate transportation. The line at the bottom of the table represents the weighted average FERC-approved cost-of-service rate, including fuel use for transportation to California.

As you will note, the table depicts three dates: the effective date of FERC order 637 which lifted FERC's cap on capacity release transactions last year; second, the date that SDG&E filed an emergency request with FERC, seeking relief similar to that embodied in S. 764 with regard to natural gas rates; and three, the date of a recent FERC order requesting comments in response to SDG&E's emergency filing on whether FERC should reimpose the maximum rate on short-term capacity releases into California.

As you can see, shortly after the cap was lifted, the imputed value of interstate transportation began to exceed the FERC-ap-

proved cost-of-service rate. In fact, prices remained well above the as-billed rate since mid-June of last year. To understand the magnitude of the cost Californians and generators in California have had to pay since this cap was lifted, keep in mind that the FERC-approved cost-of-service rate for transportation to California ranges from 31 to 67 cents, excluding fuel use. By contrast, since mid-June of last year, excluding fuel use, the imputed value of this service has exceeded $2 on 147 days. The imputed value of this service has exceeded $6 on 110 days. This is for a service whose weighted average rate is worth about 50-52 cents.

This is not all. Excluding fuel use, the imputed value of transportation to California has exceeded $10 on 36 days. It has exceeded $18 on 15 days and even reached a high of $49, all for a transportation service with a FERC-approved cost-of-service rate of less than 67 cents.

In light of these values, there should be no doubt that the experimental lifting of the cap, at least for natural gas transportation services to California, has failed.

As I have noted, the chart contains three dates, and you can easily see what has happened in reaction to each of these three dates. After FERC lifted the cap on an experimental basis, the values began to increase. The values hit a high last December, but possibly in response to a threat of reimposition to the caps, the values declined significantly. After a period of time when it appeared that there would be no action, the values increased again, and when FERC issued an order requesting comments on this issue, indicating potential action, values began to decline once again. However, they remained significantly above the as-billed rate.

The point of this presentation is that if FERC's order of yesterday is to be effective and is to effectively drive electric prices to a just and reasonable level, it will be dependent upon what FERC or Congress does with regard to the imputed value of natural gas transportation service to California.

[The prepared statement of Mr. Brill follows:]

PREPARED STATEMENT OF THOMAS R. BRILL, DIRECTOR OF REGULATORY POLICY AND ANALYSIS, SEMPRA ENERGY, SAN DIEGO, CA

Good morning. I am Tom Brill, Director of Regulatory Policy & Analysis for Sempra Energy. Sempra Energy is a Fortune 500 energy services holding company headquartered in San Diego. Our subsidiaries provide electricity and natural gas services. Sempra Energy's two California regulated subsidiaries are San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company (SoCalGas). Thank you for the opportunity to testify here today.

I would like to first commend Senator Feinstein for the leadership she has shown on this issue. As Californians are all too aware, there are some who would rather blame others for the energy crisis than look for meaningful solutions. There is more than enough blame to go around, but that won't build powerplants any faster or lower the high-energy prices that nearly all Californians are paying for both electricity and natural gas. Senator Feinstein has worked tirelessly to craft a solution, found in S. 764, that is equitable to both consumers and producers. Senator Bingaman, we also appreciate your willingness to hold today's hearing as one of your first acts as Chairman, to address this crisis which threatens the western United States.

Sempra Energy has testified on previous occasions before this and other Congressional Committees, both regarding how the western energy crisis began, and stating our support for the effort that Senators Feinstein and Smith have undertaken in this legislation.

The western states, consumers, utilities and other interested parties have sought a meaningful solution to the current crisis of high energy costs, which include both wholesale electric costs and natural gas prices. S. 764 takes a critical step toward

solving the crisis by instituting a much needed cooling off period for California's dysfunctional energy market: first by imposing "Cost of Service Plus" rates and then for reinstating the Federal Energy Regulatory Commission's price regulations on short-term interstate pipeline capacity release transactions for transportation services to California.

Today I will limit my remarks to the provisions of S. 764 that reinstate the maximum rate ceiling on short-term capacity release transactions into California.

NATURAL GAS COSTS

Before discussing the merits of reinstating the cap on prices that can be charged for interstate pipeline capacity, I would like to briefly address the impact of natural gas spot prices on the price of electricity. I want to make very clear that our support for reinstatement of the cap is not in any way intended to lend credence to arguments that natural gas prices by themselves, or costs of production in general, explain the explosion in electricity prices in California. The interrelationship between the price of natural gas and the magnitude of change in electric commodity process is terribly out of alignment. For example, in the summer of 2000, the price of natural gas was $3.50 per mcf, yet the electric commodity price was as high as $2000 per MWh. These numbers provide little justification for the skyrocketing electric prices that have been charged in the wholesale market. In fact, some believe that the high natural gas prices are the result of the skyrocketing electricity prices we have seen in California, rather than the cause of those prices. Nonetheless, to the extent they are a factor in western electricity prices they need to be addressed. Indeed, FERC itself has made them a factor in its limited approach to market mitigation. Beyond their linkage to the electricity crisis, they are a cost factor for California consumers in and of themselves. So addressing this problem may have a dual benefit to the regional economy.

BACKGROUND

Holders of capacity on the interstate pipelines can sub-lease the space to marketers or others in a transaction known as a "capacity release." While the pipelines can only charge FERC-approved rates, non-pipeline sellers can charge as much as the market will bear for released capacity if it is sold for a term of less than one year. Often, marketers sell the commodity of natural gas and capacity together as one product as a "bundled sale" for delivery at the California border. The price of this bundled product is known as the California Border Price. Until the spring of 2000, the FERC had imposed a cap (the regulated rate) on the prices that could be charged for capacity that was released to others. At that time, prices at the California border were about 25 cents per therm. In Order 637, the FERC lifted the cap on an experimental basis at a time when there appeared to be excess capacity and before demand increased so dramatically during the summer of 2000. What has happened since is telling.

The table that is attached* to this testimony depicts the imputed value of interstate transportation services since the beginning of last year based upon an analysis of California border prices and commodity prices at the wellhead. The line at the bottom of the table represents the weighted average FERC-approved cost of service rate, including fuel use, for transportation to California. This table depicts three dates: (1) the effective date of FERC Order 637, which lifted the cap last year; (2) the date that SDG&E filed an emergency request with FERC, seeking relief similar to that embodied in S. 764; and (3) the date of a recent FERC Order Requesting Comments on whether FERC should re-impose the maximum rate on short-term capacity releases into California in response to SDG&E's filing.

As you can see, shortly after the cap was lifted, the imputed value of interstate transportation began to exceed the FERC-approved cost-of-service rate. In fact, prices have remained well above the as-billed rate since mid-June of last year. To understand the magnitude of the cost Californian's have had to pay since the cap was lifted, keep in mind the fact that the FERC-approved cost-of-service rate for transportation to the California border ranges from 31 to 67 cents, excluding fuel use. By contrast, since mid-June of last year, excluding fuel use, the imputed value of this service has exceeded $2.00 on 147 days and even exceeded $6.00 on 110 days. But this is not all: excluding fuel use, the imputed value of transportation to California has exceeded $10.00 on 36 days; exceeded $18 on 15 days; and even reached a level as high as $49.00, all for a transportation service with a FERC-approved cost-of-service rate of less than 67 cents! In light of these values, there should be

*The table has been retained in committee files.

no doubt that the experimental lifting of the cap, at least for natural gas transportation service to California, has failed.

As I have noted, this chart contains three dates. What is important to note is what happened to prices shortly after each of these dates.

Shortly after FERC lifted the cap on short-term capacity release transactions, the imputed value of interstate transportation increased above the FERC-approved as-billed rate, where it has remained ever since.

By contrast, shortly after SDG&E made a filing at FERC seeking relief similar to that proposed in S. 764 including reinstatement of the cap, prices declined. However, after several weeks, when it appeared that relief would not be forthcoming, at least any time soon, prices began to increase again.

Finally, on May 22, FERC issued an Order Requesting Comments on whether FERC should re-impose the maximum rate on short-term capacity releases into California. As you can see, FERC's May 22 Order was followed by another decline in prices. Clearly, even the prospect of reinstatement of cost-of-service regulation has provided some relief to California gas consumers, but under current market conditions, this is not enough. Unfortunately, it is unclear that the FERC will take any meaningful action to address this issue, which is why S. 764 is so critical. In short, there is a clear need for congressional action.

WHAT CAN CONGRESS DO TO HELP?

S. 764 would require the re-imposition of the maximum rate ceiling on short-term capacity release transactions into California and reasonable reporting requirements for bundled sales at the border, action that FERC has hesitated to take but that would significantly affect the price of gas in California. A reduction in natural gas prices would address one significant energy cost in the western region. The extreme nature of wholesale electric price swings and generation costs may be so out of alignment that we would hesitate to claim that reducing natural gas prices would by itself reduce wholesale power prices. However natural gas costs have been a consistent component of the market mitigation measures that have been proposed and adopted by FERC and are a significant factor in the costs of electric generation that form a basis for the electric rate provisions of S. 764.

CONCLUSION

While it continues to be Sempra Energy's desire that FERC follow the law and ensure "just and reasonable" energy rates, we have seen little evidence that the Commission will take actions that are necessary to mitigate the extreme prices that we have seen over the past year in the western United States. The magnitude of the energy crisis has reached the point at which consumers are entitled to action.

The energy crisis in the Western United States has already wreaked havoc on local and state economies. Congress must direct FERC to follow the law and enforce rates that are just and reasonable by temporarily reinstating the cap on prices that can be charged for interstate pipeline capacity and requiring that sellers separately disclose to FERC the transportation and capacity components of their rates. We urge Congress to pass S. 764.

The CHAIRMAN. Thank you very much.

Mr. Henning, why don't you go right ahead.

STATEMENT OF BRUCE B. HENNING, DIRECTOR, REGULATORY AND MARKET ANALYSIS, ENERGY AND ENVIRONMENTAL ANALYSIS, INC., ARLINGTON, VA

Mr. HENNING. Thank you, Mr. Chairman. My name is Bruce Henning, and I am director of regulatory and market analysis at Energy and Environmental Analysis, Incorporated. EEA is a privately owned consulting firm that provides analysis to institutional, government, and private sector clients in the areas of natural gas, electricity, transportation, and related environmental issues.

Along with my colleagues at EEA, I have conducted a number of analyses in the North American gas market. EEA provided the analytical support for the National Petroleum Council study of natural gas, published in 1999; the INGAA Foundation study of the in-

frastructure requirements to meet a 20 trillion cubic foot market; and provides the modeling services for the Gas Research Institute's baseline. We also do numerous studies for individual private clients looking at the infrastructure requirements.

I am here today to discuss the natural gas market in California and to relate the California market to the recent behavior in the entire North American market. The views that I express are my own and do not reflect the views and positions of any of EEA's clients.

Over the past 2 decades, the structure of the natural gas market has changed from a market that relied almost exclusively upon price regulation to a market where prices are determined by the balance of supply and demand, subject to the oversight of the FERC. Over this period, consumers have benefitted in terms of declining real natural gas prices. From 1983 to 1999, the average price delivered to all consumers fell by almost 50 percent in real terms. And even with the run-up that occurred in the year 2000, the average consumer price fell by more than 34 percent compared to 1983.

That being said, natural gas prices in the California market experienced unprecedented increases beginning back in April 2000. The increase reflected two distinct components. The first component reflected the price increases that were occurring all across the United States because of the overall tightness in the balance of the market between supply and demand. Producers were producing all that they could and there virtually was no excess deliverability. Production utilization approached 100 percent.

But in addition to that general tightness in the supply/demand balance, California prices also were affected by a significant increase in the transportation basis. The transportation basis is the market value of transportation capacity available to move gas from one location to another. As gas throughput increases and approaches the capacity of the pipe, the value of transportation services increases. In a capacity constrained market, the value of transportation can significantly exceed the maximum regulated rate. This happened in California, but it has also happened for shorter periods of time in other markets, such as in New York and in the Northeast last December. But in California, however, the condition did persist for much of the past 12 months.

The maximum regulated rate is a measure of the cost of transportation on an annual or long-term basis. Since the market value for transportation is often below the cost of transportation, it must also at times be above the regulated transportation rate. If not, the market value of transportation is lower than its overall cost. When the market value of transportation is below cost, no one invests in the new infrastructure that is required.

The California market reached the point of constraint last summer. Gas consumption for power generation increased dramatically. The low hydro availability, which we have talked about here today, required that gas generators run far more hours than they ever were expected to do before. EEA estimates that the California power generation gas consumption rose by 87 percent from 1999 to the year 2000.

Now, the growth in consumption unmasked an intrastate capacity constraint. In short, there was more capacity available to bring gas to the State border than there was to take the gas and move it to the ultimate customers. The power generation customers bid against one another for a limited supply of natural gas, and those generation customers are generally very price sensitive, but they were willing to pay very dearly for their natural gas supplies and bid against one another.

Now, the fact that the constraint occurred inside the State is a subtle but important point. The reality was that there just was insufficient take-away capacity to distribute the natural gas to all of those customers, and the value reflected the intrastate capacity constraints as well.

Now, in economic terms, a rent is when its value exceeds its production cost. And the existence of these large basis differentials are not proof of market manipulation. There is a distinction between a market rent or a scarcity rent and a monopoly rent. I am not prepared to make a conclusion regarding that. That analysis is being done by the FERC, and I believe that they are perfectly capable of making that analysis.

From my perspective, the natural gas market is far more mature and competitive than the electricity market in virtually every region of the country, including in California. As such, I would like to throw out a couple of distinctions between proposals for caps for the gas market and the electricity market.

First, the electricity market in California was responsible for pulling up the gas prices, not the other way around. High electricity prices pushed up the entire gas demand curve.

Second, the prices in the California gas market are actually doing what they are supposed to. They are drawing more infrastructure into the State. In fact, if all of the proposed capacity expansions get built, EEA believes that that market will wind up returning to a period where substantial discounts will be prevalent.

Finally, if price caps are imposed in the gas market, they run the risk of delaying that infrastructure needed to serve that market.

I would be happy to answer any questions.

[The prepared statement of Mr. Henning follows:]

PREPARED STATEMENT OF BRUCE B. HENNING, DIRECTOR, REGULATORY AND MARKET ANALYSIS, ENERGY AND ENVIRONMENTAL ANALYSIS, INC., ARLINGTON, VA

INTRODUCTION

Good morning. My name is Bruce Henning. I am Director, Regulatory and Market Analysis at Energy and Environmental Analysis, Inc. EEA is a privately owned consulting firm that provides analysis to institutional, governmental, and private sector clients in the area of natural gas, electricity, and transportation and related environmental issues and policy. For the past 24 years, I have been an analyst of natural gas and energy markets. Along with my colleagues at EEA, I have conducted a number of comprehensive analyses of the North American natural gas markets and energy infrastructure requirements. EEA provided the quantitative analytic support for the 1999 National Petroleum Council study, *Natural Gas: Meeting the Challenges of the Nation's Growing Natural Gas Demand.* EEA also authored the INGAA Foundation study, *Pipeline and Storage Infrastructure Requirements for a 30 TCF Gas Market*, and performs the forecast and market analysis for the *GTI* (formerly Gas Research Institute) *Baseline Projection.* In addition, we have performed a large number of natural gas market analyses for private sector clients from all sectors of the energy industry including local natural gas distribution companies,

natural gas producers, interstate natural gas pipeline companies, energy marketers, regulated electric utilities and independent power generation companies.

I am here today to discuss the natural gas market in California and to relate the California market to the recent behavior in the entire North American gas market. The views that I express are my own and do not reflect the views and positions of any of EEA's clients.

BACKGROUND AND STRUCTURE OF THE NATURAL GAS MARKET

Over the past two decades, the structure of the natural gas market has changed from a market that relied almost exclusively upon price regulation to a market where prices are determined by the balance of supply and demand subject to the regulatory oversight of the Federal Energy Regulatory Commission (FERC). Over that period, U.S. consumers benefited greatly in terms of declining real natural gas prices. From 1983 though 1999, the average price of gas delivered to all consumers fell by almost 50 percent in real terms. Even with the run-up in prices that occurred in 2000, the average consumer price was more than 34 percent below the average price in 1983. (see Exhibit 1).

That being said, natural gas prices in the California market experienced an unprecedented increase beginning in April of 2000. The increase reflected two distinct components. The first component reflected the price increases that were occurring across the U.S. because of an overall tightness in the market. Gas producers were producing all that they could. There was virtually no excess deliverability and production capacity utilization approached 100 percent. Since the gas price was already above oil product prices, dual-fueled customers had already switched to their alternative fuel, generally oil. As cold weather arrived in November and December, the market required customers that did not have a readily available alternative fuel source to reduce their gas consumption. The market was brought into balance via this difficult load shedding. EEA estimates that more than 6 billion cubic feet a day out of a potential gas load of 98 billion cubic feet was shed as a result of the price increases. In short, although it was very painful to consumers throughout the country, gas market prices performed as economists expect, allocating a commodity during periods of scarcity to those customers that value it most. Moreover, the high prices also fulfilled their role by sending the price signals to producers, resulting in a dramatic increase in gas drilling activity that is increasing deliverability and contributing to the recent moderation in wellhead prices.

THE CALIFORNIA GAS MARKET

But in addition to the general tightness in the supply/demand balance, California prices were also affected by a significant increase in the transportation basis. The transportation basis is the market "value" of transportation capacity available to move natural gas from one market to another. When excess capacity is available, the market "value" for pipeline capacity is generally far below its maximum regulated rate. As the gas throughput increases and approaches the capacity of the pipe, the "value" of transportation increases. In a capacity-constrained market, the "value" of transportation can significantly exceed the maximum regulated rate. This happened in California, but it has happened for shorter periods of time in other markets, such as New York and the Northeast last December. In California, however, the condition has persisted for much of the last year.

The maximum regulated rate is a measure of the "cost" of transportation service on an annual or long-term basis. Since the market "value" of transportation is often below the "cost" of transportation, it must also be above the regulated rate at times. If it is not, the market value of the pipeline capacity is less than the costs. When market value is less than cost, no additional expansion of capacity is made. New capacity is proposed only when investors see or anticipate that the market "value" of capacity exceeds its cost.

The California gas market reached its point of constraint last summer. Gas consumption for power generation increased dramatically. Low hydroelectric availability in the Pacific Northwest and high electricity demand throughout the entire western part of the United States required that gas-fired generators in California operate far more hours than normally expected. EEA estimates that power generation using natural gas in California in 2000 was 42 percent higher than the 1999 level. Moreover, the units that were running were often older and inefficient peaking units. As a result, the amount of gas being consumed for generation experienced even greater amounts of growth than the overall growth in kilowatt hours of electricity generated from natural gas. EEA estimates that California power generation gas consumption rose by 87 percent, from 375 billion cubic feet in 1999 to 700 billion cubic feet in 2000.

I believe this growth in consumption unmasked an intrastate capacity constraint. In short, there was more capacity available to bring gas to the state border than there was to move gas to the consumers in the state. The total amount of intrastate capacity available was insufficient to satisfy the demand. Power generation customers bid against each other for the scarce supply. Moreover, because of the extreme conditions in the electricity market with very high prices, generators—who are usually extremely sensitive to fuel prices—were willing to pay dearly for any supply available. The result was the extremely high basis value.

The fact that the capacity constraint was inside the state is a subtle, but important point. Trade publications, which are widely used for price discovery in the gas industry, were reporting very high gas prices at the California border delivery points. Industry analysts initially concluded that the constraints must have existed on the interstate pipeline system. However, pipeline web sites that are required by FERC to show operationally available capacity indicated that some interstate capacity to the California border had no takers. This raised concern that market participants were withholding capacity and exercising market power. The reality was that there is insufficient "takeaway" capacity to increase the deliveries from the pipelines to their capacity limit. The prices being reported at the border reflected the "value" of the scarce intrastate capacity minus the state regulated cost of distribution.

SCARCITY RENTS VS. MARKET POWER RENTS

In economic terms, a rent is the market value of a product in excess of its costs. In and of themselves, rents are not a dispositive indicator of an exercise of market power. The existence of very large basis differentials to the California market is not proof of market manipulation. The legal and economic analysis required to differentiate between scarcity rents and market power rents is complex, and at this time I am not prepared to reach a conclusion. It is this very analysis that is being conducted by the FERC and, in my opinion, that is the appropriate venue for the inquiry. I have confidence in the ability of the agency to fulfill its statutory authority. As discussed earlier, in a market where prices can often be below costs, scarcity rents are necessary to attract capital for infrastructure expansion. Any attempt to limit the scarcity rent runs the risk of eliminating the price signals needed to attract the investments required to alleviate the infrastructure constraints.

RESPONSE OF THE MARKET TO PRICE SIGNALS FROM THE CALIFORNIA MARKET

The marketplace is responding to the market signals coming from the California market. A number of projects have been announced that will increase the pipeline capacity to the state and—more importantly—inside the state. In our recent monthly review, EEA identifies almost 3.6 billion cubic feet per day of FERC jurisdictional projects and both Sempra and PG&E have announced plans to expand their systems as well. Ironically, EEA believes that construction of all of these projects and a return of "normal" rainfall to the Pacific Northwest would result in the return of California to a market with "excess gas transportation capacity" and discounted rates.

MARKET DATA COLLECTION

Part of the legislation being considered would require collection of copious amounts of data regarding gas transactions in the California market. FERC is already proposing to collect data similar to that required by the legislation. In this effort, FERC is considering a comprehensive collection effort based upon the agency's extensive expertise in examining natural gas markets. Within this process, all interested parties have the opportunity to comment on the proposed data collection proposal. With this input FERC is capable of identifying any market manipulation and has the authority to promulgate and enforce any required remedy.

PRICE CAPS AND RESOURCE ALLOCATION

From my perspective, the natural gas market is far more mature and competitive than the electricity market in virtually every region of the country including California. As such, I would like to draw several distinctions between price cap proposals for the gas market and the electricity market. First, the electricity market in California was responsible for pulling the California gas market prices up, not the other way around. High electricity prices pushed the entire gas demand curve up, as power generators could still operate profitably despite high gas prices.

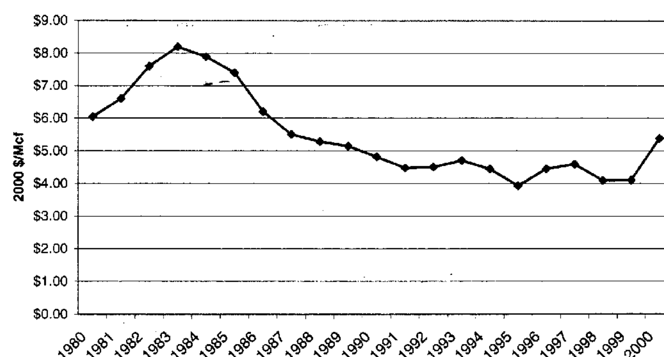
Second, prices in the California natural gas market acted to allocate the incremental supply of natural gas in the state. If price caps are placed on the gas market, regulators will be forced into the position of deciding which customers will get the gas that they want and which customers won't. There is really no getting

around that reality. Finally, if price caps are imposed in the gas market, they run the risk of delaying the infrastructure needed to serve the gas requirements of the state.

CONCLUSION

I'd like to thank the committee for the opportunity to express my views and I would be happy to answer any question that I can.

Exhibit 1: Average Real Price of Natural Gas
Delivered to Consumers in the U.S.
-2000$ per Thousand Cubic Feet (MCF)-



Source: Calculated from data published by the DOE Energy Information Administration in various issues of the *Monthly Energy Review* and *Natural Gas Monthly*

The CHAIRMAN. Well, thank you very much. Let me ask just a few questions and then defer to Senator Murkowski.

Very broadly speaking, I picked up that there is a difference of opinion between Mr. Brill and Mr. Henning on whether or not FERC should go ahead with this reimposition of a maximum rate on short-term capacity releases into California. Mr. Brill, you believe that reimposing that will get this imputed value of transportation down where it should be, where it traditionally has been. And Mr. Henning, I understand your view is that unless we continue to leave that unregulated, we will not have the incentive for the construction of the additional capacity that is needed to bring gas into California and disburse it around the State.

Let me ask first Mr. Brill. Is that a fair paraphrase of the difference of opinion that exists there or not?

Mr. BRILL. Well, I am not sure. I will not speak for Mr. Henning.

But with regard to my point of view, yes, either for FERC or Congress to reinstate the cap and require reasonable reporting requirements for bundled sales at the border, you have to realize that when FERC lifted the cap, it did not do so for pipeline sellers. So, those that actually construct capacity are not in a position of getting these revenues that exceed the as-billed rate.

Now, I have heard arguments against caps in the past because people are very concerned that they might discourage additional construction. In this case, these values are not going to those that do the construction. That argument therefore does not apply to FERC's lifting of the cap on an experimental basis.

The CHAIRMAN. Who is getting these payments?

Mr. BRILL. Anyone from marketers to I have read about companies that happen to have long-term contracts for interstate capacity that have actually shut down their plants and sold the gas at the border. But any seller of natural gas within California or at the border is in a position to obtain that value, and that would be anyone that has a long-term commitment to interstate capacity for transportation to California or a production contract with a California producer.

The CHAIRMAN. Mr. Henning, what is your view on this?

Mr. HENNING. There are two points I would like to make, Mr. Chairman. One is that very clearly the increase in market value, as the transportation differentials that we are talking about here, do wind up spurring additional pipeline construction. While Mr. Brill is correct that it is not a direct deregulation of what the pipeline company gets, the change in those market values affects how shippers contract for their services. A little over a year ago, no one was interested in buying capacity into the California market. More recently, when it was resold, people were willing to pony up for max rate contracts for a term of 5 years. So, the effect of the value of that transportation winds up affecting how the gas shippers wind up contracting for the regulated natural gas pipelines.

It has brought about in EEA's estimates—we can document more than 3.6 billion cubic feet a day of new pipeline proposals that have been going into the market—FERC jurisdictional proposals. In addition, Mr. Brill's company and the other intrastate companies are involved in proposals to expand their own infrastructure as well. So, the market signals are being sent.

The second point I would like to make is if one winds up imposing price caps, beyond the subject of whether or not it attracts the capital, it puts government in the position where government and regulators will have to decide which customers that want the gas will get it and which customers will not because at this point in time, it is the market prices that are making that determination in the natural gas market. It is a much more competitive and mature commodity market than the electricity markets. I am very hopeful that the concerns regarding electricity markets do not drive mistakes for the natural gas markets.

The CHAIRMAN. Let me ask I guess Mr. Roberts about your comments about the need for regulatory certainty. Would you not concede that the issuance of the order that came out yesterday adds to regulatory certainty, at least for the next 15 months, in the sense that there is not nearly as much questioning going on about what FERC is likely to do. We now know what they have done, and assuming that they stick with it and assuming that it has some of the results that they are anticipating, do you not think that they have helped to stabilize the market and thereby bring regulatory certainty and thereby perhaps encourage some investment?

Mr. ROBERTS. Mr. Chairman, going directly to the question, I think that in the short term, yes, there is some regulatory certainty. However, the tonic of drinking price controls, price caps is one that is often difficult to wean yourself of.

In addition to that, I think that the investment horizon that a company like myself works under, where from a start of a project

conceptually, it may be anywhere from 2 to as many as 5 or 6 years before that project is actually on line. We look far beyond that time horizon. Also, clearly we end up with an asset that has a 40- or 50-year life, and so we are looking very much long term on that.

So, I would agree that in the short term it does provide some certainty, but the certainty, as one who is looking to be active in an active and healthy marketplace, is one where it adds a lot of regulatory uncertainty because you start at one point and it is very easy to start down a slippery slope imposing other additional controls, et cetera.

So, I guess in answer to the question, I see two issues. One is the fact that we have a different type of a time frame. The other one is a concern in general on caps and price controls.

The CHAIRMAN. Dr. McMahan, let me just ask about the chart that you have given us with all of the powerplant development that is projected in the West. Is it your opinion that the order that went out yesterday or that FERC is going to issue tonight that they started talking about yesterday is going to interfere with the development of these? Is that what you were saying? Do you think that possibility exists?

Dr. MCMAHAN. Yes, Senator, I definitely think that that possibility exists. The projects that are under construction are going to be built. Those are the projects essentially that the FERC is counting on coming on line by September of 2002 that should hopefully get the market back in balance. If you put yourself in the position of a developer of a project not currently under construction, you are going to ask yourself if and when you should actually break ground on that plan.

I would expect to see a lot of these companies sort of go into a wait and see mode for certainly the next 6 months, depending on where they are in their development process, until they can understand whether this is going to be in fact some short-term control or whether the entire development environment has changed. I have just dealt with these things, again, through boom cycles, bust cycles in the industry and I know that this sort of thing tends to take the steam out of some of this development drive that has been stimulated in the last few years.

The CHAIRMAN. But let me just press you on that a little more. The Commission, at least the way they understand what they have done, they have entered an order which they believe does allow for a price to be charged by generators which is sufficient to incentivize additional investment. So, I think they would say—I probably should have asked them—that even if their order were extended for an additional period, it is sufficiently flexible and it is taking into account what potential costs will be of producing power and a reasonable profit in the future so that there is really no reason for anyone to suspend action on these plants as a result of what they issued yesterday. I think that would be their view, and you think that is just wrong.

Dr. MCMAHAN. Well, no. Essentially what I think is that the people that are developing these plants, to the extent that they now will get better commitments, long-term commitments on a contract basis for those projects, if the math works for that, they will do that. Those people that were building plants with, say, half of the

capacity under contract and counting on sort of recent history in the spot market, will think about that and maybe not really move these projects forward until they get more long-term contracts.

So, I think ultimately, yes, the result of the order will be to see more of these projects find longer-term commitments and come on in a more staggered manner. I do not think they will go away.

The CHAIRMAN. Mr. Fetter, let me just ask you, do you think there is anything positive in the order that came out yesterday in terms of providing stability and certainty to the investor community or to the markets in general? It seems to me that a lot of what the Commission was saying is that they believe their action will stabilize the situation, get it back into a range of normalcy that it has not been in in recent months. Do you think there is anything to that or not?

Mr. FETTER. Mr. Chairman, when I appeared before this committee in March, I was willing to admit that perhaps a $1,000 per megawatt hour cap might serve purposes where the price spikes cannot be contained by any market mechanism. I view the FERC's action yesterday should eliminate the potential for such out-of-control price spikes. At the same time, it maintains a connection between supply and demand within California and the entire Western region, and to the extent that the prices that flow from the FERC mechanisms are not satisfactory to the consumers or the elected officials in California, the fear of investors would be that then there would be growing support to lock into a price cap at a lower level that would impact on future investments.

In fact, the comments of Senator Schumer—just the thought that once you start down that slippery slope of setting price caps in a region, then anywhere in the country where a problem crops up, it just becomes so easy to say let us just import that idea to New York or New England or to the Midwest. And that is what investors fear.

The CHAIRMAN. Senator Murkowski.

Senator MURKOWSKI. I will try to be brief. I think we have come to the conclusion, based on the statements from Senator Feinstein and Senator Smith, that price caps, wholesale caps, as we were considering them, are probably, for all practical purposes, a thing of the past as a consequence of FERC's action.

But FERC's action is for 15 months. Now, Mr. Fetter, you are in the business of an investment analyst to some extent, among your other areas of expertise. Are you satisfied with 15 months? That 15 months is a small piece of time in relationship to an investment in a new powerplant costing several millions of dollars. And you are looking at an unknown factor after that. Does FERC come in? Do we have a free market? Do we have an increase in supply so we have a free market working?

In reference to Dr. McMahan's chart here, where he paints a very interesting picture of what is reality and what may be myth, these plants that are under construction are one thing, but those that are planned and those that are announced suggest that firm commitments for financing are probably yet to be arranged.

So, what I would like you to address is your evaluation of what this 15-month FERC order means in relationship to the plan and the announced capacity. If you could provide for the record, either

one of you, a determination of what you see—I think Dr. McMahan, you indicated about an 8,000 megawatt deficit still with those under construction. What we are trying to get, I guess, as a bottom line is some degree of certainty in the sense of your collective opinions on whether there is still an unknown quantity associated with September of next year relative to financing commitments that are going to have to be made now to address planned and announced new facilities. I would refer primarily to Steven Fetter and then Dr. McMahan.

Mr. FETTER. My view, Senator, is that once the order is issued and if it appears to be what was discussed today, if support coalesces and it appears that that is going to be the last word on these issues, I do not think it would affect investment either in California or elsewhere. To the extent that yesterday's FERC's action just becomes a first step and there are going to be other actions, either at the FERC or within this body, then I think there is a large likelihood that investment would be affected.

Senator MURKOWSKI. Dr. McMahan.

Dr. MCMAHAN. It is my opinion that the mechanisms that the FERC has implemented are very interesting. I think the one thing that they will do by the chart that the Commissioner drew this morning—basically it says that I am going to get some minimum price in the spot market. In other words, I do not have to wait until the market gets bid up and hope that I am above the curve, that all spot prices will come in at what is intended to be a reasonable rate. Again, I think once all of the developers punch this up in their computers and look at their models, we will see how much that impacts development. But I do commend the FERC for making such a good attempt at keeping some market stimulus in their order.

Senator MURKOWSKI. My last question is the cost-of-service issue, which I think you brought up. I think we had one of the FERC Commissioners also comment on it. I was surprised that it was brought up. It seemed it just kind of came up in his presentation individually as opposed to being connected to any of the other matters. Cost-of-service is fairly uniform in utility concepts, but in a situation like this, somebody has to set the rate of return. What is your comment relative to the application of cost-of-service as a standard guideline to try and address new developing power generating facilities?

Dr. MCMAHAN. Are you talking to me, Senator?

Senator MURKOWSKI. Yes.

Dr. MCMAHAN. Just as so many people characterized yesterday's order as a giant step forward, I think a cost-of-service regulation would clearly be a giant step backward. Obviously, the genie is out of the bottle on deregulation. It is moving ahead in several States, and in spite of what is going on now and perhaps because of what is going on now, it will move forward. I think that it would be almost impossible to administer and talk about the slippery slope. I just think it would be a big mistake.

Senator MURKOWSKI. I guess we generally agree that FERC action added stability to the market yesterday. I am curious to know in your opinion whether California's action—there is a grand jury investigation, legislative investigations, PUC investigations, exist-

ing proposals that the companies that allegedly overcharged refund the overcharge and some question that the Governor is going to file suit for repayment. We heard from Senator Boxer.

What does that do to the climate that we are looking at here, on the one hand, a positive application of FERC's work and, on the other, the political ramifications associated with the finger pointing in California? Mr. Roberts?

Mr. ROBERTS. As a potential investor, clearly the overall environment is positive I think from the steps that FERC is taking, but certainly very negative from the additional rhetoric that is in the environment surrounding any potential investor. Again, that would enter into any investment decision.

Senator MURKOWSKI. Does anybody else want to comment on that very briefly? The chairman has been as patient as I have had to be over the years. So, I will defer any further questions other than to thank the panel and to thank the chairman for arranging this very timely hearing.

The CHAIRMAN. Well, thank you, Senator Murkowski, Mr. Chairman, at least chairman for a substantial portion of this session of Congress.

Let me thank all the witnesses for being here and your excellent testimony. We appreciate it. We will include it all in the record.

The hearing will be adjourned.

[Whereupon, at 12:15 p.m., the hearing was adjourned.]

APPENDIXES

APPENDIX I

Responses to Additional Questions

FEDERAL ENERGY REGULATORY COMMISSION,
OFFICE OF THE CHAIRMAN,
Washington, DC, July 23, 2001.

Hon. JEFF BINGAMAN,
Chairman, Committee on Energy and Natural Resources, U.S. Senate, Washington, DC.

DEAR CHAIRMAN BINGAMAN: Thank you for your letter of June 25 enclosing questions from Senator Ben Nighthorse Campbell for the record of your Committee's June 19 hearing on the Federal Energy Regulatory Commission's price mitigation plan for California and the Western region of the United States.

I have enclosed my responses to Senator Campbell's questions. If you need additional information, please do not hesitate to let me know.

Sincerely,

CURT L. HÉBERT, JR.,
Chairman.

[Enclosures]

ANSWERS TO QUESTIONS FROM SENATOR CAMPBELL

Question 1. It appears that you have taken the unprecedented step to put FERC jurisdiction over the municipal utilities and co-ops. Is this true?

Answer. The Commission is not expanding its jurisdiction over non-public utilities, such as municipal utilities and co-ops. In the market monitoring and mitigation plan established in the Commission's June 19, 2001 order, the Commission is exercising its authority to impose conditions with respect to matters within its jurisdiction. Thus, to the extent a non-public utility voluntarily sells power in the California Independent System Operator (ISO) or other spot markets which are subject to the Commission's jurisdiction or voluntarily uses the ISO's or Commission-jurisdictional interstate transmission facilities elsewhere in the Western Systems Coordinating Council (WSCC), it must comply with the must-offer requirement and the price mitigation plan.

Question 2. It is unclear what the legal basis is for this action. Can you please explain?

Answer. The basis for this requirement is the Commission's mandate under Section 206 of the Federal Power Act to ensure that rates, terms and conditions for jurisdictional service are just and reasonable. The Commission determined that it cannot meet its statutory responsibilities in California and the WSCC if it allows non-public utilities to participate in relevant spot markets and use the interstate transmission grid unless they observe the same conditions as public utilities.

The Commission has previously exercised authority to review non jurisdictional activities or to take actions that may impact non-public utilities. For example, in *City of Vernon, California*, 93 FERC ¶61,103 (2000), rehearing denied, 94 FERC ¶161,148 (2001), the Commission explained that it has the authority to evaluate non jurisdictional activities to the extent they affect the Commission's jurisdictional activities. In *City of Vernon*, the Commission reviewed the transmission revenue requirement of a municipal utility that voluntarily participated in a public utility ISO subject to the Commission's jurisdiction to determine whether the municipal's rate methodology would result in a just and reasonable component of the ISO's rates. In

another case, the Commission concluded that any resellers of Firm Transmission Rights, whether public or non-public utilities, must require that all resales are subject to the terms and conditions approved by the Commission. *California Independent System Operator Corp.*, 89 FERC ¶61,153 (1999), rehearing denied, 94 FERC ¶161,343 (2001).

Question 3. Do you think that the rates under this new order are just and reasonable?

Answer. I am confident that the price mitigation established in the Commission's June 19 order will yield just and reasonable rates in California and throughout the WSCC. The Commission has expanded the market monitoring and mitigation plan to produce spot market prices in all hours that are just and reasonable and emulate those that would be produced in a competitive market. These rates must fall within a zone of reasonableness, and to achieve this mandate, the mitigation plan brings market-oriented price relief to the California and Western electricity markets, provides greater price certainty to buyers and sellers of electric energy, promotes conservation, and simultaneously encourages investment in efficient generation and transmission. The mitigation plan adopted in the June 19 order is designed to provide a structure that will minimize potential market power abuses, thus lowering customer rates, and encouraging adequate supply. I have every reason to believe it will succeed.

APPENDIX II

Additional Material Submitted for the Record

BEAR, STEARNS & CO. INC.,
New York, NY, June 14, 2001.

Senator FRANK MURKOWSKI,
Ranking Member, Committee on Energy and Natural Resources, U.S. Senate, Washington, DC.

DEAR SENATOR MURKOWSKI: Price controls are a recipe for disaster. Regulators in California have already proven this point. Their imposition of price controls at the retail level, along with regulations prohibiting energy suppliers from entering into long-term contracts, have created shortages in the form of blackouts and brownouts and forced one major supplier—Pacific Gas and Power—into bankruptcy. Now many involved in the creation of the current chaotic situation would like to see the federal government impose price controls at the wholesale level. This would be a mistake of gigantic proportions.

When caps are imposed and prices pushed below the market level, three things happen: (1) buyers seek to purchase more overriding public conservation efforts, (2) sellers supply less by diverting scarce supplies to more rewarding markets, and (3) new energy transportation and production facilities would continue to decline as the uncertainties created by the regulations drive investors elsewhere. Even when controls are imposed, this scenario is played over and over again, with some appearing not to notice. Somehow, they believe that the next episode of price controls will be different.

The ramifications of price controls imposed by President Nixon provide valuable lessons. Even though the general controls were imposed for a relatively short time, they retarded investment, reduced the mobility of labor and created other dislocations that hampered the U.S. economy throughout most of the 1970s.

When the general controls were removed in 1973, the price caps in the energy sector were retained. Were it not for their tragic impact on the lives of people, the results would be comical. Regulators and suppliers ended up in court, debating on whether crude oil originated from new wells or old wells because the caps permitted the former to be sold at a higher price. Even as the shortages multiplied, wells containing sizable amounts of oil were removed from the market because the price caps made it too costly to use modern technology to remove the remaining crude. The controls also led to long gas lines; service stations with limited supplies were open only a couple hours each day. These outcomes were not imposed upon us by either OPEC or greedy oil companies. They were the result of the energy price caps. Thus, they did not occur in Western Europe and other parts of the world where price caps were absent.

Price caps invariably make it appear that the situation is far more severe than is actually the case. The energy price caps illustrate this point. When President Reagan removed the energy price controls in early 1981, the pundits told us that gas prices, which were approximately $1.25 per gallon at the time, were sure to soar to $2 or more. Against the chaotic situation of the 1970s, their predictions had a credible ring. However, as market forces replaced political allocation, the reality was much different. During the first two weeks following the removal of the controls, prices rose by about a dime a gallon, but they soon leveled off and began to fall. Six months after the controls were removed, gasoline prices were well below the prior controlled level. Propelled by market forces, they continued to decline for almost two decades.

With regard to California's energy market, the conservationists are absolutely right. If blackouts and brownouts are to be avoided in the near term, conservation must be practiced and consumption reduced. Without the appropriate price signals, however, conservation will be weak and ineffective. Millions of people must be encouraged by high prices to switch to lower wattage light bulbs, use fans more and

air-conditioning less, purchase more energy-efficient appliances and so on. The California decision to shield consumers by picking up the energy tab ensured that conservation was not going to happen. Price incentives are absolutely essential for the practice of wise conservation.

While supply responses provide the long-term solution, price controls create uncertainty and undermine the incentive to invest, which is essential for the expansion of future supply. It is easy for politicians to promise that the controls will be imposed only temporarily and that reasonable profits would spur investment. Not so. Investors know that when regulators interfere with market signals today, there's no assurance that they will not do so tomorrow. Rather than placing themselves hostage to an uncertain regulatory climate, many potential investors will place their energies elsewhere driving up the cost of transportation and production energy capital in California.

The confidence of the investment community has already been severely damaged by California's regulatory policies. It will take time to repair the damage and regain credibility with investors. The worst thing regulators could do at this time would be to impose still more controls.

However well intended, political manipulation is no substitute for market forces. The Nixon price controls and the gas lines they created provide ample evidence on this point. The sooner regulators make it clear that they are not going to intervene, the sooner market incentives will restore order to the California energy market and the current crisis, like the gas lines of the 1970s, will be behind us.

Sincerely,

WAYNE D. ANGELL,
Senior Managing Director and Chief Economist.

STATEMENT OF MARCIA BAKER, EIR NEWS SERVICE

Dear Chairman Bingaman and Senators:

On the occasion of your hearing today, we wish to reiterate our support for passage of Bills intended to restore "just and reasonable pricing"—the traditional, standing mandate of our energy law, and in line with the General Welfare concept of the Constitution itself. We are glad at the renewed prospects for action by Congress.

The EIR News Service, in two previous testimonies submitted this year to the Senate Energy Committee, urged Congressional action to stop runaway electricity prices, along the lines of the Feinstein/Boxer Bills (S. 26, S. 80, and S. 287); and their House counterparts proposed by Rep. Jay Inslee, Rep. Peter DeFazio, and others, for cost-based pricing. We urged "going the whole way" to cover electricity prices nationwide, and also to take the same kind of action to put a stop to the energy hyperinflation and hyper-profiteering in all modes (natural gas, propane, gasoline, heating oil, coal spot-markets, etc.).

LaROUCHE FOREWARNINGS ON DEREGULATION, HYPERINFLATION

Since the 1970s, the EIR News Service, and its founding editor Lyndon LaRouche, in particular, have campaigned against implementing deregulation in the first place—in health care (HMOs, "managed care," and hospital closures), agriculture (ending parity-pricing), transportation, banking, etc.

A year ago, LaRouche warned of today's situation. On March 8, 2000 at the time of truckers' protest convoys in Washington, D.C., he said:

"There is a global hyperinflationary spiral in the process of taking off. And whatever else is also true about it, the essential bottom line is, that there is a global hyperinflation in real asset prices, prices you realize, now ongoing globally. And the petroleum price is chiefly a reflection of that, apart from whatever temporary incidental features there are. This is simply, predominantly—it is not some 'market-this, market that'—it's a hyperinflationary process, which has taken off, where it does take off. Hyperinflation tends to hit—when it hits in a real form, as opposed to inflation—tends to hit in primary values, such as food, and primary materials, and that's what's happening."

Since that warning, LaRouche has personally led a mass public education drive for reregulation of energy, including the use of all means available—Chapter 11 bankruptcy reorganization, where called for, and other measures, to keep economic activity going, and create the conditions in which to restore the economy.

In this testimony, we wish to bring to your attention three interrelated points, which we document below. They are:

1) The backdrop to the U.S. energy hyperinflation and blackouts crisis is that the entire financial and economic system worldwide, is in crisis.

2) Bringing energy prices under control is best considered as the first step to returning national policy in all respects, to a regulation-based way of serving the public good. In particular, new energy projects are needed. They must be undertaken in the traditional, successful way that the FDR-era projects—TVA, Colorado and Columbia River Dams, and Rural Electrification programs, etc.—were advanced. They were launched by government, and carried out by private enterprise. A most appropriate point of reference for the principle involved is the February 1996 report known as the "Bingaman-Daschle Report," titled "Scrambling To Pay the Bills: Building Allies for America's Working Families."

3) If the Senate acts in the national interest on energy, this will occur in concert with certain nation-serving initiatives now taking place in key parts of the world. Combined, these kinds of initiatives can have far-reaching strategic effects of economic and diplomatic benefit, to reverse the current plunge toward economic chaos and war.

'HOUSTON CARTEL' NOW WELL-DOCUMENTED

On the matter of hyper-profits of the energy cartel companies—Enron EOG, Mobil-Exxon, Reliant, AES, Dynegy, El Paso, and the many others—and their interconnections with the Administration and certain Congressional offices, we do not provide further information in this document. We think that the volume of information now coming into public view, to the attention of the relevant investigative committees, and the soon-to-be-formed California criminal grand jury, is sufficient to document that the current looting system, now referred to as the "Houston Cartel," should be stopped. Our News Service has provided detailed dossiers on the scope and scandal of these operations over the past months. We have coined the term "Southern Strategy, Inc.," to describe these political-business interconnections involved, which are now deservedly vulnerable to being thrust from power.

CONTEXT: FINANCIAL SYSTEM BLOWOUT

The backdrop to the energy hyperinflation and hyper-profiteering crisis now racking the U.S., and other economies, is that the financial system itself is in breakdown. We are seeing the end phase of a period of "casino economy" bubbles—stock market valuations, debt pyramids of all kinds, futures, and derivatives speculation. Look at the spectacular blowout of info-tech stocks, the foreign debt crises of major nations, from Argentina to Turkey, and the sweeping collapse of whole sectors of the economy, for example, the telecommunications sector. The U.S. manufacturing sectors since last July has lost more than 600,000 jobs.

The actions of Federal Reserve chairman Alan Greenspan, to lower interest rates and pump liquidity into the system, only create the conditions for worse breakdown ahead.

LaRouche is spearheading a collaborative effort to take nation-serving measures—such as energy re-regulation—to implement today a form of "New Bretton Woods" approach, like the steps taken in the aftermath of World War II, to deliberate about and set up a new financial system. On May 24, speaking in Warsaw, Poland, LaRouche described the situation:

"The world is gripped at the present, by the worst, biggest financial crisis in all history, in all human existence. . . .

"Let me give you a picture of how bad the situation is on the financial side. According to best estimates, official estimates, the Gross Domestic Product of all nations of the world combined is estimated at $42 trillion equivalent. Of this, the United States represents an estimated $11 trillion a year. In the past approximate 12 months, the United States' financial values have lost nearly $11 trillion. On the books, what is admitted publicly, is about $6 trillion have been wiped out of financial assets of the United States during this period. Actually, there is another $4 trillion or so, in hidden losses, which will come to the surface soon. The United States has been operating at a loss, as an economy, for a number of years. At my last actual count, late last year, the rate of the current account deficit of the United States was about $600 billion a year. That is, the United States was spending $600 billion more than it was earning on the world market.

"In addition, the United States was being supported, not only by what it was not paying for, but the United States was receiving trillions of dollars of influx of foreign exchange into the United States for investment in the U.S. financial markets. So that, at present, any collapse of this inflow of money, from Japan, from Europe, and so forth, into the United States, means an absolute catastrophe for the U.S. financial markets. . . .

"[So far, there is resort to liquidity-pumping in the U.S., Japan and elsewhere]. . . . As a result of this, there is an outbreak of significant hyperinflation in various parts of the world market. For example, inside the United States, there is a hyperinflationary rate of increase of prices of energy. . . ."

LaRouche described the scope of policy response required, in a radio interview in Mexico May 28, broadcast in Leon, Guanajuato:

"What you can do, is, you can put the whole world through bankruptcy reorganization. That's the only solution, which means cancelling most of the debt, especially the financial derivatives and similar debt. Most of the foreign debt of the Ibero-American nations will have to be cancelled. And then, what this 'New' Bretton Woods means, is, going back to 1945, to the legacy of Franklin Roosevelt, to create the kind of system we had between 1945 and 1958, and continuing into the middle of the 1960s.

"In other words, that means fixed exchange rates, that means capital controls, it means exchange controls, it means financial controls within and among governments. It means a protectionist policy on trade and tariffs. The best example is the Monnet Plan, the relationship between the United States and Europe during the immediate, first 15 years after World War II. There are a few differences today, but in principle, that plan, that method will work. The difference is that we have to apply it on a global scale, not just a transatlantic scale. The issue is, finding the political will to do that."

AFTER PRICE CONTROLS, START UP NATIONAL-INTEREST INFRASTRUCTURE

Along with ending out-of-control energy prices, restoring sound energy policy requires attention to actual infrastructure deficits in high-tech generation, up-to-date transmission systems, and related questions. Graph 1 (at the end of the document) shows the decline in U.S. generating capacity per capita. Taking appropriate action on energy infrastructure, will also be part of a driver for rebuilding economic activity, now in a spiral of shutdown.

The approach to be stopped at all costs, is that embodied in the Cheney/Bush National Energy Plan, and also in Energy Secretary Spencer Abraham's proposal of a private electricity transmission project for California. These plans axiomatically demand giving sovereign government power over to the "Houston Cartel" to decide whether, what, and where any aspect of energy provision would be built, and how it would function. Thus the cartel demands the right to locate, own, and operate, pipelines, wells, electric transmission lines, power plants, etc. on their terms, which means disaster. The fact that the cartel wraps itself in the mantle of promises of use of high-tech methods (nuclear innovations, superconduction, etc.), and providing jobs, is merely a crass case of the Big Bad Wolf, clad as Little Red Riding Hood's grandmother, explaining its big teeth by smiling.

Appended to this text, are four illustrations, to focus on the point of difference between public interest decisions on infrastructure and the cartel-demands.

Figure 1 shows proposed corridors of new, advanced rail routes worldwide, interconnecting the Americas with proposed Eurasian routes, and overall defining certain "corridors" of potentially new economic development zones—either alongside, or as intersection nodes. The principle involved, is the same as that applied in the 19th century to the building of the U.S. transcontinental railroads: opening up whole new areas for towns, agriculture, industry, mining. etc. In turn, power provision—nuclear, advanced-coal, even hydro-generation—could be sited in an integrated way, benefiting the overall development "process" for generations to come.

Figure 2 shows in schematic form, how the siting of oil and gas lines, power plants, and also electricity transmission systems (by implication) are most rationally located in connection with towns, agriculture, industry, and transportation.

Figures 3 shows a map, presented in September 2000 to the House Energy Subcommittee by Robert Evans, president of Duke Energy Gas Transmission Corp., on behalf of the Interstate Natural Gas Association of America. The association is demanding that they have rights to gas deposits shown. No pretense is made to explain how or why this might contribute to any overall resources and infrastructure development of the nation or continent.

Figure 4, for reference, shows the existing natural gas transportation corridors in the United State. Clearly there is a lack of adequate capacity to serve California; in a regulated energy business environment, correcting this would be made a priority. But in the recent era of deregulation, Houston-based El Paso Natural Gas has acted to keep transmission infrastructure limited, and is the target of multiple investigations for bilking California and racking up mega-profits. El Paso, recently merged with Coastal, accounts for well over 25% of all natural gas moved in the United States.

BINGAMAN-DASCHLE 1996 REPORT: 'PUBLIC BENEFIT'

A good taking-off point for understanding the concept of infrastructure development in the public interest, is a Feb. 28, 1996 report issued jointly by Senators Bingaman and Daschle, "Scrambling To Pay the Bills: Building Allies for America's Working Families." The study proposed to recreate a framework in law, which would once again give substance to the "General Welfare" provisions of the Constitution. Corporations should act in the public interest; their private profits could and should be made accordingly. This Constitutional view was a counter to the Conservative Revolution, and to what Sen. Ted Kennedy called at the time, the threat from the "most-favored corporations."

In the five years since then, the networks Kennedy called "most-favored," have bulled through unprecedented asset grabs in energy (and other vital supply lines—food, minerals, etc.), and are now conducting speculation, extortionist profit-rates, and destruction on an unprecedented scale. It is time to gain control over these processes, before we find ourselves returning to the worst of the bad old days of the 19th-century robber barons.

INTERNATIONAL MOMENTUM

At the same time as the Senate is taking up emergency action on the domestic electricity crisis, there are several key international diplomatic initiatives, involving rejection of the destructive "free-market" practices, in favor of what will benefit national economic interests. Energy, transport, and other infrastructure are at the core of these new policy commitments.

- On May 15, Moscow announced a new Eurasian Transport Union, to provide the institutional basis for nations and companies to collaborate on priority transportation and related infrastructure projects. A map of the series of "Main Directions" has been drawn up (available on www.mintrans.ru; and in EIR magazine's June 1 issue).
- On June 15, an historic six-nation summit occurred in Shanghai, launching the "Shanghai Cooperation Organization." The formal founding meeting was attended by the heads of state of China, Russia, Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan. The new "Shanghai Pact" agreed to, is committed to "safeguarding regional security," with mutually beneficial economic projects as the foundation. Russian President Vladimir Putin called stronger economic ties the key aim: "Cooperation in economics, trade and culture is far more important than military cooperation." Rebuilding the "Silk Road" (modern rail routes) and expanding water supplies, were the particular goals cited by Kazakh President Nursultan Nazarbayev.

Other expressions of return to national-interest economics, are the instances of resistance to demands by the energy cartel for privatization and takeover. For example, in April in Central Asia, AES—the Virginia-based energy mega-firm, now operating in 20 nations—was rejected in Armenia. AES had moved to acquire four electric distribution systems there, and all the power plants, but was stopped. There were protest rallies in Yerevan, and one-third of the Parliament came out strongly against the AES privatization as a threat to national security. There are many other instances of similar resistance.

Thus, the scope of action taken now in the U.S. Senate, will be crucial to the immediate economic condition for millions in the United States, and a leadership factor internationally. This is a matter of strategic concern. As we endeavor to maintain and strengthen alliances of long standing, and at the same time reach out to nations with which we have not previously had friendships, the United States of America, Americans, and American corporations can ill afford to appear like the heartless, ruthless robber barons whose brutalities became legend.

[Illustrations cited are available in hard copy, from EIR News Service]

STATEMENT BY WILLIAM C. DUDLEY, CHIEF U.S. ECONOMIST, GOLDMAN, SACHS & CO.

My name is William Dudley. I am the chief U.S. economist for Goldman, Sachs & Co. It is my pleasure to submit this statement to the U.S. Senate Committee on Energy and Natural Resources as part of the hearings on S. 597 and S. 764. The views expressed in my statement are my own and do not necessarily reflect the positions or views of Goldman Sachs.

The constituency that favors high electricity prices is a small one. Only the firms that earn extraordinary profits and their shareholders benefit much. As a result, the

pressure grows to come up with a solution. In the case of the California energy crisis, the call is to impose price caps on wholesale electricity rates. The idea is that this would prevent the type of large price spikes that have transferred considerably resources to a few power-generating companies.

What's wrong with that? After all, if the caps are set high enough, the firms involved will still make healthy returns on their investment and the cost of electricity to the State of California and, ultimately, its citizens and its businesses will be reduced.

The answer is that the imposition of price caps would have significant negative consequences. First, the imposition of price caps would deter the type of investment in electric power generation and transmission capacity that the State of California seeks to encourage. That is because price caps would reduce the prospective rate of return and raise the risks associated with new investment. The expected return would fall because one tail of the probability distribution of possible outcomes with respect to electricity rates—the tail associated with high price spikes—would be eliminated by the imposition of the caps. But the other tail of the distribution—the one of very low prices—would remain. After all, no one is proposing that, if wholesale electricity rates were to plummet, a corresponding transfer would be made back to the power generating companies. The proposals are for rate caps. They do not also include floors. That reduces the prospective rate of return.

The risk would rise because the imposition of price caps is by its nature arbitrary as to level, timing, and duration. If the caps were imposed, this would increase investor anxiety that the caps could, in the future, be lowered, broadened, or extended in terms of duration. This would increase the level of uncertainty concerning the likely future rate of return on the firms' investment. This risk would be reflected in the cost of capital the firms would incur and in their equity prices.

Lower expected returns, higher risk. This is not the desired outcome if the goal is to encourage greater investment. In fact, the imposition of caps would deter the type of investment that would, over time, act to ameliorate the California energy crisis. Put simply, price caps would work at cross-purposes to the goal of increased electric power generation and transmission capacity that is part of the solution to the California energy crisis.

Second, the caps would deflect attention away from the underlying problems that have caused wholesale electricity prices to spike: The lack of adequate power generation and transmission capacity and a system of price signals that encourage demand management. The spikes in wholesale electric power prices are a symptom of the underlying problem—a deeply flawed regulatory regime in which wholesale prices have been decontrolled, but customers do not see a corresponding increase in retail prices. The price caps would do nothing to fix this underlying problem. Moreover, they could do harm by reducing the sense of urgency needed politically to generate a viable, long-term solution.

Finally, even if one were convinced that price caps were not a terrible idea in general, one would still be faced with the difficulty concerning the specifics. When a market system is overridden, then the devil lies in the details. How high is too high? How long is too long? How would the price caps be administered? How would they be phased in? And out?

History has shown quite clearly that price caps distort the allocation of resources by wiping out the price signals determined in the marketplace. Command economies such as the late Soviet Union simply do not work. History has shown that price caps are difficult to administer and tough to remove. Once implemented, price caps create their own entrenched political constituency.

In my view, the solution to the California energy crisis lies not in price caps, but in encouraging the installation of additional electric power generation and transmission capacity. Imposition of price caps works against this.

In my view, the solution to the California energy crisis lies in California businesses and consumers seeing the true economic cost of incremental power generating capacity. In particular, a broad system of peak load pricing should be implemented. This would allow businesses and consumers to see the true costs of incremental power capacity. It would also encourage demand shifting that would reduce the size of the wholesale power rate spikes and the need for incremental power generation and transmission capacity. Moreover, because the demand shifting would be concentrated among those firms and individuals that had the lowest costs to shift demand away from the power peaks, the costs of shifting would be minimized. The goal should be to improve the quality of the pricing signals sent to consumers and businesses, not to subvert those signals.

June 18, 2001.

HON. FRANK MURKOWSKI,
U.S. Senator, Hart Senate Building, Washington, DC.

DEAR SENATOR MURKOWSKI: Over the past year, we have watched with concern as California's failure to provide adequate electricity to meet its needs has threatened to harm the energy supply throughout the West. In response to this concern, we have advocated policies which would increase the supply of energy in both California and the West—the only effective solution to the problem in our nation's largest state.

Accordingly, we are writing to reiterate our strongly held view that price controls on electricity in the West will not encourage conservation or the construction of the additional generation necessary to meet the long-term energy needs of our region. The uncertainty caused by such government intervention could very well discourage the development of the new generation we need.

This problem did not occur overnight, in fact California's first stage two alert was in May 2000. Thus, it is not reasonable to expect a solution to appear overnight, it will take time for California to work out of this difficult situation. We support the work they have undertaken to overcome the many years during which no new generation was constructed in their state.

We understand the Federal Energy Regulatory Commission (FERC) has acted unanimously to further address this issue through the existing process. This further underscores the effectiveness of the existing regulatory process and eliminates the need for Congressional legislation in this area. There is considerable evidence that the combination of state efforts and the extensive assistance from the Bush Administration is producing a positive turn in the California energy market. The reports of an energy savings of 11 percent in California indicate that they have the ability to achieve significant demand reduction. At the same time, numerous other initiatives by the state and federal governments have resulted in recent reduction in electricity prices in California.

Further, in rare instances where there have been attempts to take advantage of the people of California, since January the Department of Energy and the FERC have effectively instigated investigations of wrongdoing and obtained refunds where they are due.

Along with other Western Governors, we have previously expressed our willingness to support and participate in measures that would provide short-term relief for California as they move toward the electric generation necessary to meet their needs. However, we have also consistently stated our opposition to policies that would help California at the expense of its Western neighbors. The Clinton Administration order issued late last year essentially required other Western states to subsidize California's energy costs by requiring the sale of electricity from throughout the region into California.

We fear that were region-wide price controls adopted by Congress, it would provide no benefit to the West but potentially impair demand seduction, the operation of existing generation and the construction of generation that is imperative to the energy future of California and the West.

Thank you for your consideration of our position on this issue, which is of critical importance to the well-being and economic opportunity for the people in each of our states.

Sincerely,

JANE DEE HULL,
Governor of Arizona.
MICHAEL O. LEAVITT,
Governor of Utah.
JOHN HOEVEN,
Governer of North Dakota.
JIM GERINGER,
Governor of Wyoming.

○