Testimony of
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Before the Committee on Commerce, Science and Transportation
Subcommittee on Consumer Affairs, Foreign Commerce and Tourism
United States Senate
May 15, 2002

I. Introduction and Summary

Mr. Chairman and Members of the Subcommittee:

Thank you for the opportunity to testify concerning the developments and new evidence regarding Enron's role in manipulating western state electricity markets, focusing on California's electricity price increases and power shortage between May 2000 and June 2001.

Two major events in the past two years have raised significant concern over how well competitive electric markets are working, whether our nation's regulatory institutions and expertise are adequate to deal with such markets, and the wisdom of continuing to move forward to promote competitive electric markets. These events are the California energy crisis and the collapse of the Enron Corporation. Since last year, FERC has moved aggressively to take steps within its authority to remedy problems in the California and Western wholesale electric markets and to investigate potential manipulation of wholesale markets. Just as importantly, the Commission is taking forward-looking measures to realign the wholesale electric industry and ensure that there are adequate market rules and appropriate market oversight in place to support fully competitive markets. While the recent California and Enron events have caused industry observers to reevaluate where we are on the road to competition, I continue to believe that competition is superior to traditional cost-based regulation for providing reliable and adequate electricity supplies at the lowest reasonable cost to the nation's electric customers. Just as competition is thriving in the natural gas industry today, so too can it thrive in the wholesale electric industry – but there is more work to be done.

Let's confront the key issues head-on. Did California experience severe electric market problems? Clearly, yes. Were these problems the result of market manipulation? We are currently investigating that issue. Many observers agree that these problems stemmed in part from the poor design of the California electricity market and the lack of adequate reserves and demand response relative to growing electricity demand. Those conditions made it possible for Enron (apparently) – and possibly other market

participants – to exploit, profit from, and possibly exacerbate the magnitude of California's problems. Did FERC respond properly to help California deal with these problems? Yes. It is clear that FERC took action to address problems in California and western markets, which became apparent in May 2000, by instituting a fact-finding investigation into the nation's electric bulk power markets on July 26, 2000, and has been dealing with those issues extensively ever since. Since I joined the Commission in June 2001, we have addressed California and western states issues in almost every single open meeting and have dealt with each issue using the best information and evidence available to us under the guidance and limits of the law.

In the eleven months since I joined FERC, the nation has continued to reap the continuing benefits of wholesale electric and natural gas competition. The billions of dollars invested in efficient, economical, independent generation and gas pipelines and production over the past decade have caused wholesale electric prices across the nation to drop by 59 percent, while weighted average prices in California have dropped from almost $140 to about $25 per megawatt-hour. Approximately 41,000 new megawatts of electric generation capacity have been built across the country – but only 2,922 megawatts have come on-line in California. Since I arrived in Washington, FERC has issued over 60 orders on issues relating to California and the western states electric market and instituted numerous proceedings relating to the California and western electric market. And to ensure adequate market oversight for all wholesale electric markets in the future, FERC has formed and is now staffing a new Office of Market Oversight and Investigation.

My purpose today is not only to look backward, but to look to the future as well. I will begin this testimony by speaking about the Commission's ongoing investigation into potential market manipulation by Enron or other entities in the West, and then describe what steps the Commission has taken on California issues. But it is important to look forward, and address the broader issue of how we can assure that competitive electric markets work effectively across the nation, so all Americans can enjoy the benefits of vibrant wholesale electric competition. The Commission is working on numerous initiatives to build a sound foundation for competitive markets. These efforts – to improve and expand our nation's energy infrastructure, standardize and improve wholesale market design and rules, establish independent regional transmission organizations (RTOs) to manage our nation's electric grids and markets, ease and expedite new generation interconnection, enable the full participation of customer demand response, improve market transparency, and police market participants' behavior – should greatly improve the effectiveness of competitive wholesale markets, and assure that market power abuse does not compromise long-term market success.

II. The Commission's Western Markets Investigation

It has been alleged that Enron, through its affiliates, used its market position to distort electric and natural gas markets in the West. In response to these allegations, on February 13, 2002, the Commission issued an order directing its staff to launch a non-public, fact-finding investigation. This on-going staff investigation is gathering information to determine whether any entity, including Enron Corporation, through any of its affiliates or subsidiaries, manipulated short-term prices for electric energy or natural gas markets in the West, or otherwise exercised undue influence over wholesale prices in the West since January 1, 2000.

FERC staff members are collaborating with experts at the Commodities Futures Trading Commission (CFTC), pooling the agencies' expertise on the physical and derivative transactions involved. We have established information-sharing agreements with the CFTC and the Securities and Exchange Commission (SEC). In addition, FERC has contracted with leading experts in business and academia to assist in the investigation, and hired specialists in large-scale electronic data retrieval and analysis to perform needed data processing and analysis.

On March 5, 2002, Commission staff issued an information request directing all jurisdictional and non-jurisdictional sellers with wholesale sales in the U.S. portion of the Western Systems Coordinating Council (WSCC) to report by April 2, 2002: (1) on a daily basis, their short-term and firm and non-firm wholesale sales transactions for years 2000 and 2001; (2) on a monthly basis, monthly firm and non-firm capacity and energy wholesale transactions for years 2000 and 2001; and (3) long-term capacity and energy sales transactions executed for delivery on or after January 1, 2000. Enron filed a deficient filing on April 15, 2002, and was directed to remedy its filing immediately. In a letter to Enron's counsel, on April 18, 2001, the Commission's staff noted that the deficiencies of Enron's response signaled a breakdown in supervision and quality control and seriously impeded the Commission's investigation. In light of these concerns, the Commission has sent two computer specialists to Enron's Houston office to help access the Enron databases that contain the information the Commission's staff seeks. At this time, Enron has yet to fully comply with the March 5, 2002, information request, particularly with respect to providing affiliate sales data.

On May 6, 2002, counsel for Enron turned over to Commission staff three internal Enron memoranda that were partially responsive to previous data requests issued by Commission staff. Two of the memoranda are dated from December 2000 and the other memorandum is undated. Enron's counsel informed Commission staff that Enron's Board of Directors had voted, on May 5, 2002, to disclose these documents and waived all claims of attorney-client privilege. Enron's counsel also informed the SEC, the Department of

Justice, and the Attorney General of California about these documents. FERC promptly released these memoranda to the public on the Commission's website, along with a letter asking follow-up questions about the documents. Because the investigation is non-public, the Commission has not made available to the public questions issued under subpoena or companies' responses containing confidential information.

The two dated Enron memoranda provide a detailed description of certain trading strategies engaged in during the year 2000 by Enron traders, and, allegedly, traders of other companies active in wholesale electricity and ancillary services markets in the West and, particularly, in California. The last section of the dated memoranda discusses the California Independent System Operator's (CAISO) tariff's definition of, and prohibition of, "gaming" and other "anomalous market behavior." The memoranda then list and discuss actions that the CAISO could take if the CAISO were to discover that Enron was engaging in such activities.

According to the memoranda, the trading strategies generally fall into two categories. The first category is described as "inc-ing load" – slang for increasing load – into the CAISO real-time market, whereby a company artificially increases load on a schedule it submits to the CAISO with a corresponding amount of generation. The company then dispatches the generation it scheduled, which is in excess of its actual load, and the CAISO pays the company for the excess generation. Scheduling coordinators that serve load in California were apparently able to use this trading strategy to include generation of other sellers. The second category is described as "relieving congestion" and involves a company first creating congestion in the California Power Exchange (PX) market (which terminated January 31, 2001), and then "relieving" such congestion in the CAISO real-time market to receive the associated congestion payments. This trading strategy is accomplished through such actions as reducing schedules or scheduling energy in the opposite direction of a constraint (counterflows), for which the CAISO pays the company. The two dated Enron memoranda also outline ten "representative trading strategies" that were used to "inc load" and "relieve congestion" for profit.

On the same day Enron counsel divulged these documents, the Commission's staff sent a follow-up data request to Enron to elicit more information about the trading strategies described in the memoranda. The follow-up data request ordered Enron to give the Commission, by May 10, 2002, the names of the traders who were interviewed and whose trading strategies are the subject of the memoranda. The Commission's staff also requested the production of any comparable memoranda that discuss trading strategies and asked Enron to provide all correspondence related to the subject matter of the memoranda. At this time, Enron has partially complied with the Commission's follow-up data request.

The Enron memoranda allege that traders from other companies also employed several of these trading strategies. Therefore, the Commission's staff issued a notice, on May 7, 2002, to all sellers of wholesale electricity and/or ancillary services in the West, alerting them that the Commission would seek information about their use of the trading strategies discussed in the Enron memoranda in a data request, and directing them to preserve all documents related to such trading strategies. Also on May 7, 2002, the Commission's staff issued a data request to the CAISO, seeking information for the two-year period 2000-2001; FERC staff is currently analyzing this material.

On May 8, 2002, the Commission's staff issued a data request to over 130 sellers of wholesale electricity and/or ancillary services in the West during the years 2000-2001, with a due date of May 22, 2002. This data request asks every company with wholesale sales during this period to admit or deny whether it has engaged in the types of trading activities specified in the Enron memoranda, as well as any other trading strategies. The data request asks for all internal documents relating to trading strategies that the company may have used during the relevant time period, including correspondence between companies, reports, and opinion letters, and information concerning megawatt laundering transactions that any of these sellers might have engaged in with Enron. The data request specifies that the company's response should be an affidavit signed under oath by a senior corporate officer, after a diligent investigation into the trading activities of the company's employees and agents.

This investigation is non-public and confidential, as are all of the Commission's enforcement activities. From the start, we have made many of our activities public (such as the questions asked of industry participants) and have released the Enron documents for which privilege was waived, because of the high level of public interest and the right of the public to be confident in our conduct of the investigation. But at the same time, we must protect the integrity of the on-going investigatory process and the rights of those being investigated. We need a complete record and extensive analysis on which to base any findings, and we have not yet compiled such a record. Although the Enron memos clearly are very serious, we cannot and should not indict either a single company or an entire industry based on three memos. Once the facts are clear, FERC will take appropriate actions within our statutory authority. But first we must gather all the facts.

The Commission staff's discovery process has elicited, and continues to elicit, important information about trading strategies that several sellers in the West may have used. The Commission's staff is currently assessing how best to respond in terms of further discovery, analysis and theories of the case. As soon as the fact-finding investigation is complete, a thorough and timely report will be submitted to Congress and the public.

III. Other FERC Investigations Relating to California and the West

The current Enron investigation should be placed in context with the Commission's other activities and investigations pertaining to California and the western states. The Commission has been working diligently on the evolving California issues, and will be acting on key pieces in the coming months. Some of these activities include:

1. Requests for refunds for spot market sales through the CAISO and the California Power Exchange are now in hearings initiated by the Commission's order of July 25, 2001 (and supplemented on December 19, 2001). This proceeding should determine the appropriate mitigated market clearing price in each hour of the refund period consistent with the rate pricing methodology prescribed by the Commission; the amount of refunds owed by each supplier according to the Commission's pricing methodology; and the amount currently owed to each supplier, with separate quantities due from each entity, by the CAISO, the investor-owned utilities, and the State of California. Consistent with refund authority under Section 206 of the Federal Power Act, the effective refund period extends from October 2, 2000, to June, 2001.

2. The Commission's order of July 25, 2001, initiated hearings on whether there may have been unjust and unreasonable charges for spot market bilateral sales in the Pacific Northwest for the period beginning December 25, 2000, through June 20, 2001. The proceeding addresses the extent to which dysfunctions in the California markets may have affected spot market prices in the Pacific Northwest. The administrative law judge issued an initial decision on September 24, 2001, recommending against the ordering of refunds.

- On October 9, 2001, the Commission released a request for proposal for an independent audit of the CAISO, which included an evaluation of the CAISO's ability to manage the California market, and appropriate recommendations. The audit, submitted to the Commission on January 25, 2002, by Vantage Consulting, Inc., confirmed FERC's prior findings that the CAISO board is not fully independent, and offered recommendations to improve the CAISO's management and processes. This matter is a pending, contested proceeding before the Commission.

- On April 11, 2002, the Commission ordered a hearing for the complaints filed by Nevada Power Company and Sierra Pacific Power Company, Southern California Water Company and Public Utility District No.1 Snohomish County, Washington. These utilities allege that dysfunctions in the California electricity spot markets

caused long-term contracts negotiated in the bilateral markets in California, Washington and Nevada to be unjust and unreasonable; they ask that FERC remedy the problem by modifying the contracts. The Commission directed the parties to first participate in contractually mandated mediation.

- On April 25, 2002, the Commission issued an order setting for evidentiary hearing complaints by the Public Utilities Commission of the State of California and the California Electricity Oversight Board against a group of sellers under long-term contracts with the California Department of Water Resources. The state agencies allege that the prices, terms and conditions of such contracts are unjust and unreasonable and seek contract modification. Here too, the Commission strongly encouraged the parties to pursue settlement.

IV. The Commission's Actions To Mitigate Market Manipulation or Failures in California and the West

To understand FERC's actions and their impacts in California and the western power markets, it is useful to first understand how Enron's trading strategies were designed to exploit the California market:

- Strategies that involved "inc-ing load" -- artificially increasing load on schedules, dispatching generation in excess of actual load, and getting paid for the excess generation at the market clearing price;

- Strategies that exploited the congestion management system by relieving real or artificial congestion;

- Strategies that exploited the California v. Western price differential (e.g., megawatt laundering); and,

- Strategies that involve misrepresentation (paper trading of ancillary services when the company doesn't actually have the services to sell, submitting false information about the identity of the plants providing the services, and selling non-firm energy as firm to the PX).

With the exception of those strategies which involved deceit, these strategies were specifically designed to exploit flaws in California's market design. Since November 2000, FERC has been taking action to address these flaws and alleviate their consequences, even though the specific trading behaviors outlined in the Enron memos

were not the target of the Commission's efforts. These Commission actions are described below.

Energy price levels – An extensive series of Commission orders served to moderate California and Western states' electricity prices, both through direct action on prices and through indirect action to stabilize California's spot and long-term markets.

- On December 8, 2000, at the CAISO's request, the Commission responded to the supply emergency and snowballing price conditions in California by modifying the $250 price cap, so that bids above that level would be accepted but would not set the clearing price paid to all sellers. That order also limited generators' ability to withhold generation (using scarcity to drive up prices) by authorizing the ISO to penalize participating generators that refuse to operate in response to emergency dispatch instructions.

- FERC's December 15, 2000, order reduced the impact and vulnerability of the spot market by ending the requirement that California's three investor-owned utilities (IOUs) sell all of their resources into and buy all of their requirements through the California PX. By terminating the requirement, FERC released a total of 40,000 MW of load from the spot market and placed 25,000 MW of the IOUs' resources directly under the jurisdiction of the California Public Utilities Commission.

- To reduce possible withholding of generation and increase available supplies, FERC's April 26, 2001, order allows the CAISO to order increased production from any on-line, uncommitted in-state generation capacity in the real-time market if the energy is needed. The June 19, 2001, order expanded this must-offer requirement to include all utilities in the Western Systems Coordinating Council (WSCC).

- FERC's April 26, 2001 order also established a prospective mitigation and monitoring plan for wholesale sales through the CAISO spot market, and established an inquiry into whether a price mitigation plan should be implemented throughout the Western Systems Coordinating Council (WSCC). This plan included price mitigation for all sellers (excluding out-of-state generators) bidding into the CAISO real-time market during a reserve deficiency (i.e., when reserves fall below seven percent), with a formula to calculate the market clearing price when mitigation applies.

- FERC's June 19, 2001 order established price mitigation for spot markets throughout the West, equalizing region-wide price limits across all western states through September 30, 2002; this reduced the incentive to megawatt launder. Key

elements of the mitigation plan, to be in effect from June 21, 2001, through September 30, 2002, included: retaining the use of a single market clearing price for sales in the CAISO's spot markets in hours when reserve margins fell below 7 percent; applying that market clearing price for sales outside the CAISO's single price auctions (i.e., bilateral sales in California and the rest of the WSCC); and establishing a different price mitigation level formula for those hours when California does not face a reserve shortage.

Congestion management – The fundamental flaw in California's congestion management system is that it does not fully recognize the existence of major transmission constraints outside the real-time market. Therefore, the CAISO schedules buyers' and sellers' transactions without regard to the system's actual physical transfer capabilities, so that day-ahead pre-schedules are often not feasible. In such a case, the infeasible day-ahead schedule causes the CAISO to anticipate a congested system, so it pays entities in real-time to relieve the congestion. This can be prevented – as it has been in all other active ISO organized markets – by designing the day-ahead market to recognize all transmission system constraints and reliability limits, and limiting the number of transactions and transmission accordingly to avoid artificial congestion and reduce real congestion. Other ISOs also use some version of congestion pricing that charges the cost of congestion to the entities that cause it. These approaches limit the ability of market participants to manipulate congestion and to profit from such manipulation.

The Commission told the CAISO in January, 2000, that California's congestion management system was flawed and needed to be fixed. Although the CAISO has proposed significant changes to the system, those reforms are not scheduled to be in place until 2003-2004. Similarly, the addition of much needed generation and transmission capability, which will also help relieve congestion, will not occur in the near future, but rather will take years to accomplish.

- In an order issued on January 7, 2000, FERC found the CAISO's congestion management structure to be fundamentally flawed and directed the CAISO to develop and submit a comprehensive congestion management and market redesign.
- In the face of limited response from the CAISO, FERC issued its December 15, 2000 order, requiring the CAISO to file a comprehensive redesign of its congestion management program by January 31, 2001. The CAISO, under a new state-appointed Board, did not make the filing.
- To the degree that exploitation of the interplay between trading on the Cal PX and the ISO's day-ahead market enhanced the ability of traders to manufacture congestion for profit, the Commission's termination of the California PX rate

schedule reduced the effectiveness of these strategies. Trading on the California PX was halted in January, 2001.

- In an order issued May 25, 2001, the Commission clarified that price mitigation applies to both energy and congestion management, thus limiting congestion payments and disincenting this behavior.
- One year after directing changes to the CAISO's congestion management system, FERC's December 19, 2001 order again directed the CAISO to file a revised congestion management plan, due May 1, 2002.
- The CAISO filed a market redesign proposal on May 1, 2002, which anticipates implementing some congestion management reforms by fall 2003 and winter 2004. The aspects of the ISO's proposal that are proposed to become effective by September 30, 2002, will not change the congestion market substantially.

The price mitigation measures put in place in the April 26, 2001, and June 19, 2001, orders have limited the effect of anti-competitive behaviors on market prices, and they will continue to do so until September 30, 2002, when price mitigation is scheduled to terminate. Before that date, the Commission will ascertain the appropriate mitigation tools needed for the California and western market going forward. The CAISO has filed its plan for post-September mitigation, and I expect the Commission to address this matter soon.

Megawatt laundering – These strategies exploited the fact that there were price caps in effect for generation within California, but no caps affecting out-of-state imports into the California market. FERC addressed this through a number of actions, including its actions to increase the availability of in-state generation and to stabilize prices across all of the western states.

- In early August, 2000, the CAISO prohibited non-firm exports.
- FERC's April 26, 2001, order forced marketers outside of California bidding into the CAISO to be price-takers, so they could not bid a higher price for imports and set the price for the entire market; rather, as price-takers, importers accept whatever price is set by in-state, non-imported generation.
- The June 19, 2001, order treated sales within and outside California uniformly and imposed uniform price mitigation throughout the West. These measures eliminated incentives for megawatt laundering.

Attachment A is a detailed list of the significant FERC orders and actions pertaining to California and western states electric markets since November, 2000.

Deliberate misrepresentation of information – This is clearly wrong. For instance, selling or reselling what is actually non-firm energy but claiming that it is "firm" energy is

prohibited by the rules of the North American Electric Reliability Council. But it should be recognized that many of the trading strategies contained in the Enron memos were not necessarily prohibited under the CAISO tariff, except for the general prohibitions against gaming.

Although we have not completed our fact-finding investigation with respect to sellers in California and the western electric markets, as a general matter it is clear that regulators must have two essential tools to prevent or mitigate significant misbehavior. First, the market regulator must have adequate monitoring and oversight capabilities, and a good understanding of market activities and patterns, to identify when and whether misrepresentation and manipulation is occurring. Second, regulators must have meaningful penalty authority, to ensure that market participants do not jeopardize reliability or manipulate market outcomes. FERC is working to develop and improve its understanding of markets and market manipulation through the new Office of Market Oversight and Investigation and its on-going cooperation with the CAISOs' Market Monitoring Units and other federal agencies. But it is clear that the Commission's penalty and enforcement authorities are limited and need to be expanded if they are to serve as effective deterrents to market misbehavior. I will discuss this issue further below.

As the California situation evolved between 1996 and mid-2001, I was a state regulator, and I appreciated from afar FERC's deference to California's legislators and regulators as they worked to design competitive wholesale and retail markets for electricity. In 1996, California's restructuring legislation, AB 1890, was unanimously passed by the state's Legislature. In retrospect, the Commission may have been too deferential to California's market design, allowing it to go forward because California had gone through a great deal of stakeholder consensus and compromise – and because many crucial measures of the market design were dictated by state legislation. But as the magnitude of the problems in California and the West deepened, it has been difficult to find a constructive way out of the binds that our joint history has created.

There are several other pertinent questions to consider here. First, are current disclosure rules sufficient to discover the kinds of behavior referred to in the Enron memos? That is not entirely clear. Based on a proposal issued in July, 2001, FERC recently adopted a rule requiring detailed, standardized, electronic reporting on electricity market transactions. We believe that these data will help to detect inappropriate behavior in energy markets, but it will take some time to assess whether the new information permits us to monitor markets effectively. We are also undertaking a comprehensive analysis of our information collection requirements to determine what information is needed to effectively monitor a competitive marketplace, and may seek to change reporting further in the future.

Are there behavior patterns in the market that should be considered presumptively manipulative? I don't know yet. Clearly anything that involves deceipt, fraud or misrepresentation is manipulative, but it is not always easy to detect and prove such behavior. I hope we will be able to answer this question more definitively after the Commission completes its on-going western states investigation.

Are FERC's market rules sufficient to ensure that markets are not being manipulated? I believe that the rules now in effect across the organized markets in the eastern markets prevent major market manipulation of the type outlined in the Enron memos. And the Standard Market Design rules which we are now developing, through a public process, seek to prevent such market manipulation in the future. But the rules which have been in place in California have allowed some types of manipulation to be practiced. Until organized electric markets exist across the entire nation and transmission grid, it is still possible for market participants in vast areas of the country to engage in behaviors that can adversely affect both the long- and short-term markets. The Commission's goal is to rely on clear rules of the road under standard market design, and non-discriminatory transmission access, that would apply to all transmission owners and operators and all generators and load-serving entities. For this reason, we have placed the Standard Market Design effort at the top of our regulatory agenda.

V. Interaction between the Commission and the CAISO

There are two critical issues affecting the future of the CAISO and its ability to remedy the problems that have occurred in California's electricity markets. One is the degree to which the Commission works with the CAISO to monitor activities and developments in the California market. The other is the independence of the CAISO itself.

In the past year, FERC staff has maintained frequent contact with members of the CAISO's staff, including its market monitoring staff. The Commission has also held a series of technical conferences, most recently on April 4 and 5, 2002, and May 9 and 10, 2002, to facilitate continued discussions between the CAISO, market participants, state agencies and other interested participants, on a revised market design for the CAISO. In addition, the CAISO's market monitoring staff routinely contacts FERC staff to discuss events and issues in the California markets. In an April 26, 2001, order, the Commission established a process to better track the developments in the California market. The CAISO now submits weekly reports to the Commission of schedule, outage and bid data to review current market performance, and includes any concerns such as possibly inappropriate bidding behavior.

When the Commission's new Office of Market Oversight and Investigation (OMOI) is fully staffed, it will take over the task of working with ISO and RTO market monitoring units (MMUs). The OMOI will coordinate closely with MMUs with respect to local and regional market patterns and problems, but will also look for patterns and problems across multiple regions and markets. OMOI will conduct monitoring and oversight and issue regular reports on the status of the nation's energy markets. It will also have the responsibility of investigating possible market problems and participant misbehavior and recommending improvements and solutions to the problems it finds.

The issue of the CAISO's independence remains pending before the Commission as a compliance issue. In its December 15, 2000, order, the Commission directed that the CAISO board should be replaced with a non-stakeholder board that is independent of the market participants. The CAISO declined to respond to this directive. FERC hired consultants to conduct an independent audit of the CAISO, and has recently received public comments on that audit report. To avoid pre-judging the issue, I cannot state any conclusions now on this contested matter, but at a minimum we should note that the issue of ISO independence and credibility is critical not only for California but for every ISO and RTO. Participants in a competitive, effective market need to be confident that the entity which manages the grid and the market is independent and unbiased and will not act in a way that favors or disadvantages any market participant. I expect the Commission to take up this matter soon.

VI. CAISO's Comprehensive Market Redesign Plan

On May 1, 2002, the CAISO submitted for filing a comprehensive market design proposal, as directed in the Commission's order on clarification and rehearing, issued on December 19, 2001. The CAISO states that its proposal largely reflects the market structure in the Commission's standard market design rulemaking, i.e., an integrated day-ahead and real-time congestion management, energy and ancillary services market based on locational marginal pricing.

The market redesign issue is pending before the Commission, so I cannot offer any substantive comments on its merits. I can say that California is part of, and dependent upon, the broader western states grid, and there will be many issues to resolve with neighboring markets before we can realize seamless, efficient, full competition that benefits California and all of its western neighbors.

VII. Will Market Design Alone Save California?

Even with the CAISO's proposed market redesign, California's electricity problems will not be over. As California and others have recognized, a combination of factors combined to cause the state's problems in the year 2000:

> (1) tight supply conditions in California and throughout the West; (2) lack of significant demand response to hourly prices; (3) high natural gas prices; (4) inadequate infrastructure (including inadequate transmission capacity); (5) lack of long-term supply arrangements and underscheduling in the forward markets; (6) inadequate tools to mitigate market power; and (7) poor market design. (Charles F. Robinson and Kenneth G. Jaffe, CAISO's May 1, 2002 filing before the FERC of its Comprehensive Market Design Proposal, pp. 7-8, footnotes omitted)

Since 2000, natural gas prices have dropped and a majority of California's demand is now served under long-term bilateral contracts rather than through the spot market. There are currently market mitigation measures in place for the load remaining in the spot market, and the CAISO has filed a proposal for a new and better market design and congestion management system. But little else has changed:

- California has built little new generation – only 3,055 megawatts of new generation have come on line since 2000, so there is now a total of 50,345 MW in-state to serve a peak demand of 54,255 MW projected for 2002. Power plant developers have announced the cancellation of 17 plants previously proposed to be built in California, for 1,296 MW, over the past year alone; Attachment B, a map of new and cancelled power plants across the western states since the year 2000, shows that many proposed plants have been cancelled. Although the CAISO itself has stated that "the capacity reserve margin ... should be 14% to 19% of the annual peak load to promote a workably competitive market outcome" ("Preliminary Study of Reserve Margin Requirements Necessary to Promote Workable Competition", Anjali Sheffrin, Market Analysis, CAISO, November 19, 2001), California remains dependent on out-of-state imports for a significant share of its load, and on unpredictable hydroelectric generation for 15% of its supply. In the year 2000, California's reserve margin was only 2%; for the summer of 2002, the CAISO predicts a reserve margin of 8.4% at expected peak.

- California has built no new bulk transmission, either to link the north and south portions of the state grid or to improve its import capabilities from out-of-state generators. Recently, the Western Area Power Administration, PG&E and TransElect filed a proposal to upgrade California's Path 15 line.

- The ability of individual customers to receive price signals and adjust their energy demands accordingly remains limited. California has done much to reduce peak

customer loads, but more demand response is needed across the western states, as a crucial check on the ability of suppliers to exercise market power by raising prices.

Most of the above problems can only be resolved by California itself; but FERC stands ready to assist the state within the limits of the law and our respective jurisdictions. For instance, over the past year this Commission has acted expeditiously to approve several natural gas pipeline applications to assure that additional gas supplies can be delivered to the California border to serve the state's growing load.

VIII. Making Markets Work for the Long Term

The Commission believes firmly that sound, competitive wholesale electric markets serve America's energy users better than the cost-of-service, vertically integrated utility alternative. FERC has been working hard to implement Congress' vision of this since the passage of the 1992 Energy Policy Act. Since that time, we have seen clear evidence in other countries and states that wholesale competition improves reliability, drives down delivered energy prices, sparks technological innovation, and enhances local economies with new capital investment. It is time to recommit ourselves to the challenge of completing the transition to fully competitive wholesale markets.

The Commission's strategy to complete the task of making wholesale markets work has several key elements. Many of them are informed by what we have learned from observing markets in California and the western states over the past three years, and comparing them to other energy markets. Here are some of the lessons we have learned, which underlie the Commission's initiatives concerning competitive wholesale electric markets.

Standard Market Design

Energy markets are geographically large and regionally inter-dependent, so it is critical to promote clear, fair market rules to govern wholesale competition that benefits all participants, and assure non-discriminatory transmission access. Market rules must also specify what constitutes inappropriate behavior and the consequences for such behavior. Through its ongoing Standard Market Design (SMD) rulemaking initiative, the Commission intends to reform public utilities' open access tariffs to reflect a standardized wholesale market design. SMD will help enhance competition in wholesale electric markets and broaden the benefits and cost savings to all customers. The goals of the SMD initiative include providing more choices and improved services to all wholesale market participants; reducing delivered wholesale electricity prices through lower

transaction costs and wider trade opportunities; improving reliability through better grid operations and expedited infrastructure improvements; and, increasing certainty about market rules and cost recovery for greater investor confidence to facilitate much-needed investments in this crucial economic sector. A sound market design, similar to the designs developed and tested in the East, will reduce the incentives and opportunities to manipulate the market.

Regional Transmission Organizations (RTOs)

As long as they are properly structured and truly independent, RTOs will provide significant benefits to electric utility customers across the nation by eliminating obstacles to competition and making markets more efficient. RTOs facilitate wholesale competition and, where states choose to pursue it, retail competition. Even in the absence of retail competition, electricity customers benefit from increased competition in wholesale markets because it reduces bulk power prices and improves reliability. First, RTOs should eliminate "pancaking" of transmission rates, that raises the cost of moving power across multiple utility systems. Second, RTOs that have the proper tools can better manage transmission congestion, reduce the instances when power flows on transmission lines must be decreased to prevent overloads, and effectively solve short-term reliability problems. I believe that RTOs (and independent transmission companies operating under an RTO umbrella) will attract the capital and expertise needed to expand the grid and serve the generation capacity necessary for growing, competitive electricity markets. Third, RTOs should ensure that vertically-integrated transmission-owning utilities do not discriminate in favor of their own generation over another seller's generation. Fourth, RTOs can facilitate transmission planning across a multi-state region and, by operating the grid as efficiently as possible, should provide assurance to state siting authorities that new transmission facilities are proposed only when truly needed.

Infrastructure

The Commission continues to work with others to promote adequate infrastructure by anticipating the need for new generation and transmission facilities, determining the rules for cost recovery of new energy infrastructure, encouraging the construction of new infrastructure, and licensing or certificating hydroelectric facilities and natural gas pipelines. Without adequate infrastructure, prices will rise due to scarcity and there will be greater opportunity for market manipulation. To speed the interconnection of new generation facilities, FERC has proposed a rule to standardize interconnection agreements and procedures, for use between all transmission owners and generators. The Commission is also assessing the available energy infrastructure across the nation, working by region-by-region with state officials and industry members to determine

whether any problems or gaps exist and how joint effort and attention can help to remedy the deficiencies.

Market Monitoring and Mitigation

The Commission has instituted measures to ensure market mitigation in the future in all RTO markets. The Commission's Office of Market Oversight and Investigation will interface with the RTOs' market monitoring units and will monitor markets to ensure that market rules are working. Furthermore, under the Commission's ongoing standard market design initiative, monitoring for physical and economic withholding will be an important focus of the market monitoring units within each RTO region. Each market monitor will report directly to the Commission and to the independent governing board of the RTO. The Commission will exercise oversight over market monitoring and the impact of RTO operations on the efficiency and effectiveness of the market.

IX. Legislative Actions That Could Help FERC Deal with Market Power

A. Earlier Refund Effective Date

The Commission must rely on Federal Power Act section 206(b) for refund protections if it finds that market-based rates are no longer just and reasonable. Section 206(b) provides that whenever the Commission institutes a section 206 investigation of a rate or charge that may be unjust or unreasonable, the Commission must establish a refund effective date. If the investigation is based on a complaint, the refund effective date must be no earlier than 60 days after the complaint is filed. Congress can help the Commission protect customers against the exercise of market power by amending Section 206(b) to allow the Commission to establish a refund effective date that is as early as the date a complaint is filed.

Permitting the Commission to set a refund effective date as of the date a complaint is filed will have two principal effects. First, it will increase the deterrent effect of refunds by increasing the period over which the Commission can require refunds for market manipulation or other improper conduct. Second, it will give customers a stronger incentive to notify the Commission immediately when they perceive manipulation – even very short-term manipulation – of the electricity markets, because customers will have greater access to refunds.

B. Increased Civil and/or Criminal Penalty Authority

The White House has requested that Congress, as part of the energy bill, increase criminal penalties under the Federal Power Act. Specifically, the White House proposes that the penalty for a willful and knowing violation of the FPA be increased from the current $5,000 level to $1 million and that the potential prison term be increased from two years to five years. For a violation of the Commission's regulations under the FPA, the White House proposes to increase the penalty from $500 per day to $25,000 per day. These changes will provide stronger deterrents to anti-competitive behavior, market manipulation, and other violations of the FPA and Commission regulations.

Congress could create additional deterrents to anti-competitive and bad-faith behavior in the marketplace by broadening and strengthening the Commission's civil penalty authority. Currently, FPA section 316A provides for a civil penalty authority of up to $10,000 per day for violations of Section 211, 212, 213 or 214. These penalties could be broadened to all sections of the FPA and increased significantly.

C. Encouraging Construction of Needed Energy Infrastructure

Congress could encourage construction of needed infrastructure – particularly bulk transmission, to reduce costly (and manipulable) congestion – by adopting measures that include support for Regional Transmission Organizations and their regional planning function. Another crucial measure is to adopt needed tax code revisions to assure that municipally owned transmission owners can commit their assets to common grid use without losing the tax-exempt financing of those assets, and that investor-owned transmission owners can transfer or consolidate their assets without incurring a taxable event that raises the costs of the transaction. In May 2002, the Department of Energy released an excellent report, "The National Transmission Grid Study," which explains the crucial need for and value of a sound national transmission grid. The Commission strongly supports the report's recommendations.

X. FERC employee contacts with Enron between May, 2000 and August, 2001

The Subcommittee's letter of invitation asked about Enron's contacts with FERC between May 2000 and June 2001. Over this period, FERC employees report 367 meetings with Enron-affiliated personnel – including those representing FERC-regulated facilities and energy marketing activities across a number of Enron subsidiaries and affiliates as well as corporate representatives and electricity marketers and traders. During Enron Corporation's existence, FERC has had jurisdiction over 37 Enron affiliates (some of which may no longer be in existence). These affiliates have included electric generators, qualifying facilities, power marketers, one traditional electric utility (which owns FERC-regulated hydroelectric facilities), on-shore interstate natural gas pipelines,

off-shore natural gas pipelines, intrastate natural gas pipelines (which engaged in FERC-jurisdictional activities), crude-oil pipelines and petroleum products pipelines (FERC sets transportation rates for oil pipelines under the Interstate Commerce Act).

There were actually fewer meetings than the number above implies because each of these reported contacts represents a single FERC staffer at a meeting or event, and there was often more than one staffer at a meeting (thus one meeting may be reported numerous times). In addition, fewer staffers worked on Enron issues than the number implies because individual staffers attended numerous meetings over the course of the 14 month period. Numerous non-meeting "communications" were exchanged between FERC staff and Enron or Enron-affilated companies over this time period. However, "communications" is interpreted broadly to include formal submittals of filings to the Commission and its staff, concerning Enron's or its affiliates' regulated activities before the agency.

It is normal and necessary for the agency to have frequent contacts with a regulated entity such as Enron and its affiliates, since they control pipelines, hydroelectric projects and interstate transportation facilities under FERC jurisdiction. During the relevant time frame, Enron and its affiliated companies would have dealt with FERC as an applicant in some cases, as an intervenor in others, and as an interested and affected industry member in broader policy matters. FERC meets with and communicates with members of industry and interest groups every day, as a necessary and integral part of our regulatory life and responsibilities – for perspective, the Commission receives on average 70,000 filings a year. Thus, it would not be uncommon for employees to have had contact with Enron (and its affiliated companies) in (among other things): audits, technical conferences, settlement conferences, pre-hearing conferences, alternative dispute resolutions sessions, pre- and post-license and certificate site inspections, environmental scoping meetings, field inspections, pre-filing conferences, field compliance inspections, planning seminars, facility tours, archeological surveys, periodic environmental inspections, annual project inspections, outreach programs, rulemaking conferences, fact-finding excursions, restructuring conferences to implement Order No. 637 (natural gas), joint industry meetings to review accounting issues, joint FERC-industry meetings to implement the Gas Industry Standards Board protocols, and industry demonstrations of new technologies.

Such contacts are appropriate and valuable when conducted within the agency's regulatory procedures. Since I was not present at the Commission during most of the period in question, I cannot personally speak to whether Enron or its affiliates attempted to influence FERC's decision-making with respect to wholesale electric markets. But based on my experience, I do not believe that Enron's scope of contacts with our employees or managers have been inappropriate given the breadth of its regulated

interests, nor that Enron or any of its affiliates has had any undue influence on the decision-making process at the Commission. The Commission has had strict ex parte rules for many years and I have made it clear to staff at all levels that these must be rigorously followed at all times.

XI. Conclusion

The Commission is moving aggressively to investigate potential market manipulation in California and the West, whether by Enron or other market participants. We also are moving forward on initiatives that will put in place clear wholesale market rules and effective market monitoring to protect customers in every region of the country. We will continue to work with other federal agencies, with the states, and with Congress to protect the nation's electric customers and achieve the full benefits of wholesale electric competition.

I look forward to sharing the results of our western markets investigation with you this summer and welcome your input and questions.