

**Summary of Testimony of
Pat Wood, III
Chairman, Federal Energy Regulatory Commission
Before the Subcommittee on Energy Policy, Natural Resources and
Regulatory Affairs
Committee on Government Reform
United States House of Representatives
April 8, 2003**

My testimony addresses the Commission's recent ruling in the California refund proceeding, the Commission Staff's Final Report on Price Manipulation in Western Markets, the Commission's assessment of the current California electricity market, progress on reforming California's electricity market, and draft legislation, H.R. 964, which would provide the Commission with additional penalty and refund authority.

Competitive energy markets require three key elements: adequate infrastructure, efficient market rules and vigilant market monitoring and enforcement. The California electricity crisis in 2000-2001 has proven the need for these three elements. The major factors contributing to the electricity crisis in California were insufficient infrastructure, dysfunctional market rules, and inadequate market oversight and enforcement. These and other factors caused wholesale prices for spot power during the crisis to be unjust and unreasonable.

The Commission has taken steps to remedy these unjust and unreasonable prices through refunds. The Commission's order will increase refunds significantly compared to the earlier recommendation by a Commission Administrative Law Judge. In addition, the Commission has taken, and will continue to take, aggressive action in response to the Commission Staff's findings and recommendations following its investigation into market manipulation in the West during the California electricity crisis. The Commission has proposed to revoke market-based rates for several companies and is seeking public comment on other possible actions.

I support the provisions in H.R. 964, because they would provide greater customer protection by changing the refund effective date under Federal Power Act section 206, extending refund liability, and increasing penalty provisions.

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I. Introduction and Summary

Mr. Chairman and Members of the Subcommittee:

Thank you for inviting me to testify on the Commission's rulings on California refunds, the Commission Staff's Final Report on Price Manipulation in Western Markets (Final Report), the Commission's assessment of the current California electricity market, progress on reforming California's energy market, and H.R. 964, a bill giving the Commission additional penalty and refund authority.

Competitive energy markets require three key elements: adequate infrastructure, efficient market rules and vigilant market monitoring and enforcement. The California electricity crisis has proven the need for all three elements. The major factors contributing to the electricity crisis were insufficient infrastructure, dysfunctional market rules, and inadequate market oversight and enforcement. These and other factors caused wholesale prices for spot power during the crisis to be unjust and unreasonable.

My testimony will discuss the action the Commission, for its part, has taken to remedy these unjust and unreasonable prices through refunds. I will also discuss the Commission Staff's findings and recommendations on market manipulation and the

actions the Commission will take in response. Finally, I will address H.R. 964's provisions on penalties and refunds and the importance of adopting these changes.

While the Commission has a major role in these aspects of California's bulk power markets, long-term solutions depend on market participants and a strong Federal-State partnership. The addition of generation and transmission infrastructure, for example, and creating clear price signals and demand response options for end users, are largely within the control of others, including the State of California. The Commission will do everything within its control to ensure efficient market rules, to actively monitor markets to make sure that everyone follows the rules, and to encourage the development of much-needed infrastructure, but action by others is also needed.

II. California Refund Proceeding

In December 2002, after an extensive hearing involving more than 100 parties, in a proceeding spanning nearly 18 months, an Administrative Law Judge (ALJ) found that power suppliers owe the California Independent System Operator Corporation (CAISO) and California Power Exchange Corporation (Cal PX) an estimated \$1.8 billion in refunds. On March 26, 2003, the Commission issued an order adopting many of the ALJ's findings. However, the Commission used a different method of calculating gas costs in its formula for determining just and reasonable spot prices. Instead of the published indices for gas prices adopted by the ALJ (and used previously by the Commission), the Commission adopted the Commission Staff's recommendation in its

Final Report to base the gas costs on producing-area prices plus an allowance for transportation costs. A generator will be allowed to recover its gas costs above this level only if it documents those costs. This method strikes a balance between protecting customers from prices based on manipulation in spot gas markets and ensuring that generators recover the costs they actually paid. Using this method will increase significantly the amount of refunds paid to California. The exact amount of refunds will be determined this summer, after the Commission receives and evaluates gas cost documentation from power sellers, and the complex calculations are completed.

III. Commission Staff's Final Report

In an order issued on February 13, 2002, the Commission directed its staff to investigate whether Enron Corporation, or any other entity participating in the wholesale energy markets in the West, had manipulated prices for electricity or natural gas, or otherwise exercised undue influence over wholesale electricity prices, since January 1, 2000. Pursuant to this order, the Commission Staff conducted an extensive investigation using data requests, depositions, and other fact-finding tools.

On March 26, 2003, the Commission Staff released its Final Report. In the Final Report, the Commission Staff found evidence of significant market manipulation in Western energy markets during 2000 and 2001. However, the Commission Staff noted that this evidence does not alter the Commission's earlier findings that significant supply shortfalls and a flawed market design were the root causes of the California market

meltdown. In the Final Report, the Commission Staff noted that, for the first two years of its operation, the California market performed well and saved the state's customers billions of dollars. But after the Pacific Northwest could no longer provide abundant supplies of low-cost hydropower to the regional market, the effects of too little infrastructure and inefficient market rules adversely affected wholesale prices.

A key conclusion in the Final Report was that markets for natural gas and electricity in California are inextricably linked. According to the Final Report, extraordinary increases in spot gas prices contributed to the unprecedented price increase in the electricity market. Dysfunctions in the natural gas market appeared to stem, in part, from efforts to manipulate price indices compiled by trade publications, including reporting of false data and wash trading. Also, large-volume, rapid-fire trading by a single company, in what was incorrectly assumed to be a liquid market, increased the reported natural gas prices in California. As a result, the Commission Staff reiterated the recommendation in its August 2002 Initial Report on Price Manipulation in Western Markets that the Commission should alter the method for calculating gas costs in the California refund proceeding discussed above.

In addition, the Final Report recommended that many trading strategies used by Enron and other companies be found to constitute a violation of anti-gaming provisions of the Commission-approved tariffs for the CAISO and Cal PX. The Commission Staff recommended that the Commission initiate proceedings to require those companies to

disgorge profits associated with these practices. This disgorgement would affect activities beginning January 1, 2000, even before the refund period began on October 2, 2000. Further, any disgorgements would be in addition to the refund amounts resulting from the California refund proceeding.

The Commission Staff also concluded that prices in the California spot markets were affected by economic withholding and inflated bidding. The Commission Staff found that such behavior violated the anti-gaming provisions of the CAISO and Cal PX tariffs and recommended proceedings to require disgorgement of profits associated with these inflated prices.

Based on the Final Report, the Commission has taken, or will soon take, a number of steps to reduce the possibility that these problems will recur. These actions include:

1. Revocation of Authorizations

In response to the apparent abuses of California's market rules, including the submission of false information, the Commission has already issued two show cause orders. The Final Report contained evidence that Reliant Energy Services, Inc. and BP Energy Company appeared to have engaged in coordinated efforts to manipulate electricity prices, and that Enron Power Marketing, Inc. and Enron Energy Services, Inc. engaged in gaming practices and failed to inform the Commission in a timely manner of significant changes in their market shares. Based on this evidence, the Commission issued orders directing these four companies to explain why the Commission should not

revoke their authority to sell power at market-based rates. Also based on evidence in the Final Report, the Commission directed eight gas marketers, Bridgeline Gas Marketing, L.L.C., Citrus Trading Corporation, ENA Upstream Company, LLC, Enron Canada Corp., Enron Compression Services Company, Enron Energy Services, Inc., Enron MW, L.L.C., and Enron North America Corp., to show cause why the Commission should not terminate their blanket marketing certificates under the Commission's Natural Gas Act (NGA) jurisdiction. The companies' responses are due by April 16, 2003. Upon review of the evidence, if the Commission finds that such action is warranted, it will revoke their authorizations or terminate their blanket certificates.

2. Generic Restrictions and Reporting Requirements

The Commission will soon initiate a generic proceeding on whether to impose certain restrictions and reporting requirements on all blanket certificates for sales of natural gas and market-based rate authorizations for sales of wholesale power. These restrictions and reporting requirements include: explicit guidelines or prohibitions for trading natural gas under Commission blanket certificates; reporting and monitoring requirements for sellers of natural gas under blanket certificates; and restrictions on the submission of false information or omission of material information as a condition of granting market-based rate authorizations, natural gas blanket certificates, or service under an open access transmission tariff.

3. Reporting of Price Indices

The Commission Staff concluded that published indices of natural gas prices in or near California were not reliable. Five entities have already admitted that their traders provided false information on natural gas transactions. Based on responses to data requests, it appeared that other entities may also have engaged in similar behavior. The Commission Staff concluded that the publishers of gas price indices lack systematic reporting procedures and internal verification processes.

These indices are often relied upon by market participants and sometimes are used in Commission-regulated agreements. To avoid reliance on inaccurate indices in jurisdictional agreements, the Commission intends to initiate one or more proceedings on whether to: (1) condition all electric market-based rates and natural gas blanket marketing certificates on the companies providing complete and accurate information to publishers of price indices and retaining all data needed to reconstruct the indices for three years; (2) require that any published price indices for Commission-jurisdictional transactions be subject to audit; and (3) encourage standard product definitions for published natural gas and electricity price indices and standard methods of calculation. In addition, the Commission intends to adopt its Staff's recommendations that certain companies demonstrate that their internal processes for reporting have been corrected (or that they no longer sell natural gas at wholesale); the employees who participated in the manipulations have been disciplined; they have a clear code of conduct on reporting

prices; and, all trade data reporting will be done by an entity within the company that does not have a financial interest in the published index.

4. Wash Trading

The Commission will propose specific rules banning any form of prearranged wash trading and prohibiting the reporting to industry indices of any trades between affiliates.

5. Electronic Trading Platforms

The Commission intends to propose that blanket gas marketing certificates, as well as electric market-based rates, be conditioned to require that sellers who use trading platforms use only those trading platforms that agree to provide the Commission with full access to trade reporting. The trading platforms must also agree to appropriate monitoring requirements.

6. Other Gaming and Economic Withholding

The Final Report found that a number of entities, either individually or with others, appear to have used the "Enron trading strategies" and to have engaged in economic withholding and inflated bidding. The Final Report reflects the Commission Staff's view that such conduct violates the tariffs of the CAISO and Cal PX. Accordingly, the Final Report recommended that the Commission issue show cause orders proposing to require these companies to disgorge the profits obtained through the claimed violations.

In response to this recommendation, on April 2, 2003, the Commission issued an order providing for interested persons to submit briefs addressing the Commission Staff's interpretation of these tariffs. After receiving and analyzing these briefs (as well as responses filed to the "100 days evidence"), the Commission will act on the Final Report's recommendations regarding these show cause orders.

7. Physical Withholding

On September 17, 2002, the California Public Utilities Commission (CPUC) released a report concluding that, if certain generators had operated their available capacity, the blackouts experienced in California during its energy crisis could have been largely avoided. In conjunction with an overall review of the California energy crisis, the Commission Staff undertook an analysis of the CPUC report and conducted an extensive review of the actual CAISO data for the dates when blackouts occurred. The Commission Staff concluded that 87 percent of the power determined in the CPUC report to have been withheld was actually accounted for and that the remaining 13 percent would not have averted firm service interruptions. However, the Commission is continuing to examine specific claims of physical withholding and, on March 26, 2003, Commission Staff sent a data request to a number of generators seeking additional information on alleged physical withholding.

IV. Other Pending Proceedings

During the Commission's March 26, 2003 public meeting, the Commissioners discussed two pending proceedings in which complainants seek to modify long-term contracts for wholesale power signed during the Western energy crisis. The Commissioners also discussed a complaint involving bilateral spot power sales in the Pacific Northwest during the crisis.

With respect to the long-term contracts, the Commission will be acting on those within the next two months. On the spot power sales in the Pacific Northwest, I expressed support for directing the parties to engage in settlement judge procedures for a limited period of time and, if those efforts do not succeed, requiring briefing by the parties on the unresolved issues in the case. The Commission has not issued orders on these cases yet, but intends to do so soon.

V. Assessment of Current California Bulk Power Markets

California's power needs this summer will be met by a combination of in-state generating resources and imported energy from the Northwest and Southwest states. According to the California Energy Commission, California is forecasting a peak electric demand this year that will be approximately four percent greater than in the summer of 2000. Since 2000, in-state generating resources have grown by 6,000 megawatts or nine percent. West-wide resources have grown by 16,000 megawatts, also nine percent in the same period.

The California electricity market is dependent, not only on its own power generating resources, but also West-wide resources. Neighboring states have historically provided up to 18 percent of California's electricity. Hydroelectric production in the Northwest is projected to be approximately 85 percent of average levels this year and may reduce the amount of electricity available for export to California. The Commission continues to monitor Northwest climatology, energy supplies, and exports to California. The actual level of electricity exports will be sensitive to variations in electricity demand, e.g., demand could be higher than forecast if there is hotter than normal weather or substantially increased economic activity.

The following factors will help limit California's exposure to any reduction in Northwest hydropower-generated electricity supplies this summer:

- California is forecast to produce about 90 to 100 percent of normal levels of electricity from its own in-state hydropower facilities.
- The California investor-owned utilities have been assigned long-term power contracts that the California Department of Water Resources originated in 2001. Thus, the utilities will rely substantially less than in previous years on spot market purchases to meet their peak supply needs this summer.
- Demand response programs have helped limit California's demand growth.

VI. California's Market Redesign

In May 2002, the CAISO filed a comprehensive set of market improvements known as Market Design 2002, or MD02. The CAISO initially proposed to implement MD02 in various phases (described below) over a period of about 18 months, starting in October 2002. Although the phases are proposed to be implemented sequentially, they are designed to work together. The CAISO has subsequently requested several changes to its MD02 proposal, as well as a delay in the implementation plan.

So far, only elements of Phase 1 of MD02 have been implemented. The other phases, however, are just as important in preventing a recurrence of the dysfunctions and abuses that occurred during the California energy crisis. While the enforcement efforts undertaken since the crisis have reduced the likelihood of certain problems, the best approach is to make sure the market rules work well, encourage development of infrastructure and prohibit or discourage inappropriate behavior by market participants. The other phases of MDO2 are critical in achieving these objectives.

Phase 1A - Market Power Mitigation: Phase 1A consists of revised market power mitigation measures (which were implemented on October 30, 2002). The mitigation plan has three main elements: (1) a "must-offer" provision requiring generators to offer uncommitted generation; (2) a bid cap of \$250 per MWh; and (3) an Automatic Mitigation Procedure (AMP) designed to prevent economic withholding. The "must-offer" requirement and the bid cap apply West-wide; the AMP procedures apply only to

bids in the CAISO market.

The AMP procedures, which were fashioned after similar mitigation procedures used in other markets, apply a three-part test to bids received by the CAISO. The first threshold for imposing mitigation under the AMP procedures is whether the market clearing price (the highest bid accepted in a given period) exceeds \$91.87. If so, the second threshold is to compare each bid against the bidder's latest three-month bid history. If a bid exceeds this baseline by the lower of \$100 per MWh or 200 percent, the third threshold is applied. Under this step, the question is whether the bid will raise the market clearing price by the lower of \$50 or 200 percent. If so, the bid is mitigated.

Phase 1B - Real-Time Economic Dispatch: This provision consists of more closely integrating the economic and physical factors that dictate which generating units the CAISO will dispatch to meet real-time demands on the grid. Phase 1B also includes uninstructed deviation penalties, whereby the CAISO can impose penalties on generators that fail to respond to dispatch instructions outside of a reasonable range.

Phase 2 - Integrated Forward Market: The CAISO has proposed to develop a day-ahead market that will simultaneously clear three markets (energy, congestion management and ancillary services) as one market. This day-ahead market offers several advantages: resources will be procured *before* real-time, thereby increasing reliability, price transparency and financial certainty; the cost to California customers will be minimized through more efficient selection of generating units; and only feasible energy

transactions will be scheduled, thus reducing the opportunity for gaming in those markets. Phase 2 also includes various changes to the ancillary services, hour-ahead and real-time markets.

Phase 3 - Locational Marginal Pricing (LMP): Phase 3 will use a precise model of the grid to determine the pricing on the grid in various locations or "nodes." The shift from the current three-zone system to a more detailed and precise nodal system will require new market rules and computer systems. The current three-zone system only recognizes transmission bottlenecks between the zones, effectively concealing bottlenecks within each zone (known as "intra-zonal congestion"). The implementation of a nodal system with LMP will largely alleviate the concerns about intra-zonal congestion that arise when a zonal system is used.

Phase 3 has several advantages, including: (1) allowing a more efficient use of the existing transmission system; (2) encouraging rational congestion management; (3) providing transparent price signals for efficient location of transmission and generation assets; (4) reducing the opportunities for Enron-type gaming; and (5) better representing the physical realities of the existing transmission facilities and providing for more accurate modeling and reliable use.

Future Phase - Resource Adequacy Requirement: This requirement would provide for forward contracting and resource commitment to ensure an adequate supply to meet the expected demand plus reserve margins. The State of California Inter-agency Working

Group is currently discussing the best method of implementing a resource adequacy requirement. The resource adequacy requirement should provide appropriate signals for investment in infrastructure and demand response technologies.

Commission Actions on MD02 Proposal

After carefully considering the proposal and the public comments, on July 17, 2002, the Commission issued an order on the initial elements of the MD02 proposal. In that order, the Commission approved Phase 1A (the market power mitigation procedures) to replace the crisis-oriented approaches that were due to end in October 2002, and provided guidance on the process and timetable for going forward with the other redesign work for the California wholesale market.

Also in the July 17, 2002 Order, the Commission expressed concern that MD02 does not establish an available capacity requirement until 2004. Such a requirement would assure long-term adequate resources and is vital because most resources take years to develop and spot market prices alone will not signal the need to begin development of new resources in time to avert a shortage or pay suppliers for the capacity value they provide. In addition, the Commission noted that, without a requirement for long-term generation adequacy, the proposed mitigation program would not encourage sufficient investment. The Commission will continue to work with the CAISO and others to assure that this gap in the market design is filled appropriately.

Finally, in the July 17, 2002 Order, the Commission directed its staff to communicate with the CAISO and all market participants to develop MD02 through technical conferences, and pre-filing conferences. In addition, three full-time Commission Staff members are now working at the CAISO's offices in Folsom, California. The Commission Staff has held technical conferences (three in California and one in Washington, D.C.) with the CAISO Staff and market participants to discuss the MD02 effort.

At a technical conference held in August 2002, the CAISO stated that it could not implement the Phase 2 elements by the Commission-directed deadline of January 1, 2003. In addition, stakeholders and the CAISO discussed various options for the MD02 implementation timeline.

In an order issued on October 11, 2002, the Commission found reasonable a CAISO alternative proposal to implement a "Phase 2 Lite," and directed its implementation by January 31, 2003. On this basis, the Commission also permitted the postponement of the remaining Phase 2 elements until the Fall of 2003. On rehearing, the CAISO contended that it could not implement "Phase 2 Lite" by January 31, 2003. Accordingly, in response to these concerns, the Commission removed the requirement that "Phase 2 Lite" be implemented by January 31, 2003.

In a status report filed on March 3, 2003, the CAISO reported that implementation of Phase 1B must be delayed until October 1, 2003, because of a software implementation

delay. The CAISO stated that it will file its updated MD02 proposal in April 2003.

While a delay in implementation may be necessary to ensure revised market protocols operate correctly, the lag prevents customers from receiving the benefits of improved market operations.

Summary of California Market Reform

Over the past three years, the Commission has been addressing issues related to the availability and price of electricity in California and the Western states. As the Commission observed in its July 17, 2002 Order, in which it approved the initial elements of the MD02 proposal, the underlying issues in the California electricity market remain the same. Namely, within an interconnected, interdependent electric grid and market, California depends more than any other state upon its neighbors for a steady supply of electricity and gas to feed its growing energy needs. Unless California builds new generation and transmission; increases the physical and contractual security of its natural gas supply; helps its customers see and respond when electric prices increase; and continues and increases its conservation efforts, no set of market rules and market power mitigation measures can make its markets fully competitive, or protect California's customers from the inevitable problems that will result.

The Commission can and must encourage sound market rules, enforce appropriate market oversight, and facilitate new infrastructure construction, but California must do its

part as well. New infrastructure development remains a significant part of the solution to sustained improvement of the California energy markets.

VII. Gas Pipeline Certification and Hydroelectric Licensing

Expedited Processing of Applications for Pipeline Projects

Expedited processing of applications for pipeline certificates has added new natural gas capacity to the region. Since 2001, the Commission has nationally certificated over 5,000 miles of new interstate pipelines with a capacity of about 16.4 billion cubic feet of natural gas per day. Since the majority of California and the Pacific Northwest's new electric generation capacity is powered by natural gas, new pipeline capacity will help ensure a reliable electric supply. New pipelines or pipeline projects to increase the capacity of existing pipelines that have been certificated since 2001 and serve California or the Pacific Northwest include:

- Approval of pipeline looping and compression on the Kern River Gas Transmission Company's pipeline, which has more than doubled its capacity;
- Approval of the conversion of an oil pipeline to natural gas service for El Paso Natural Gas Company;
- Approval of additional compression on Transwestern Pipeline Company's pipeline to increase capacity;
- Approval of a point of import at the Mexico-U.S. border for Otay Mesa Generating

Company, LLC for the import of natural gas;

- Approval of a new pipeline, North Baja Pipeline LLC, which will export gas to Mexico for the generation of electricity that will be imported back into the U.S.;
- Approval of projects to expand the capacity of Northwest Pipeline Corporation in the Pacific Northwest; and
- Approval of the Georgia Straits Crossing Pipeline, LP, which will import gas from Canada, transport the gas through the State of Washington and re-export the gas to Canada to be used for electric generation.

Hydroelectric Supplies

In recognition of the importance of hydroelectric generation to the California and Pacific Northwest region, the Commission maintains a constant surveillance of hydro conditions. Should drought conditions similar to those experienced in 2001 threaten hydropower generation, proactive measures would be taken to maximize available hydropower generation, while ensuring through monitoring and surveillance, the region has non-discriminatory access to generation outside the region through open transmission access.

For example, in June 2001, the Commission approved a plan to permit a temporary increase in hydroelectric generation at the Priest Rapids Hydroelectric Project in the State of Washington to meet the immediate power needs. The Commission suspended part of

an interim requirement that allows the licensee to spill water for 16 hours per day during summer migration of fish. This allowed an exchange of spill and power with the Bonneville Power Administration, thereby assuring flexibility and reliability to the regional grid and protecting fish species listed under the Endangered Species Act.

VIII. H.R. 964 - The Electric Refund Fairness Act of 2003

H.R. 964 proposes to modify FPA section 206(b) to set the refund effective date for a proceeding instituted on complaint as the date of the filing of such complaint. In a proceeding instituted by the Commission on its own motion, H.R. 964 would change the refund effective date to be the date of publication by the Commission of notice of its intention to initiate such proceeding. H.R. 964 also would replace language in FPA section 206(b) that limits the Commission in ordering a public utility to make refunds "through a date fifteen months after" the refund effective date, by allowing the Commission to order refunds "through the conclusion of the proceeding."

Further, H.R. 964 would amend the criminal penalty provisions in FPA section 316(a) to increase the fine from \$5,000 to \$1,000,000 and by increasing the prison sentence from two years to five years. H.R. 964 would also modify FPA section 316(b) by increasing the criminal penalty for violating the Commission's rules or orders from \$500 per day to \$25,000 per day. With respect to civil penalties, H.R. 964 would expand penalty authority under FPA section 316A to cover violations of any provision under FPA Part II.

I have long supported legislation providing the Commission with greater penalty authority and an earlier refund effective date under both the FPA and NGA in order to deter anti-competitive behavior, market manipulation, and other violations of the statutes. I believe that the provisions contemplated in H.R. 964 are consistent with this view, and would support the addition of refund provisions to the NGA as well.

IX. Conclusion

Thank you again for the opportunity to offer my views on recent Commission actions affecting California's electricity market and H.R. 964.