Executive Summary

Overview

This Report is the culmination of a yearlong effort by Commission Staff to determine whether and, if so, the extent to which California and Western energy markets were manipulated during 2000 and 2001. While Staff found significant market manipulation, this evidence does not alter the Commission's original conclusion, set forth in its December 15, 2000 Order, that significant supply shortfalls and a fatally flawed market design were the root causes of the California market meltdown.

The underlying supply-demand imbalance and flawed market design greatly facilitated the ability of certain market participants to engage in manipulation. In addition, the ability to pass through gas prices in electric power prices provided no check on gas buyers' willingness to pay.

For the first 2 years of its operation, the California market performed well and saved the state's customers billions of dollars. Only after the Pacific Northwest could no longer provide abundant supplies of low-cost hydropower to the regional market did the negative effects of too little infrastructure and poorly designed market rules adversely affect customers' bills.

A key conclusion of this Report is that markets for natural gas and electricity in California are inextricably linked, and that dysfunctions in each fed off one another during the crisis. Spot gas prices rose to extraordinary levels, facilitating the unprecedented price increase in the electricity market. Dysfunctions in the natural gas market appear to stem, at least in part, from efforts to manipulate price indices compiled by trade publications. Reporting of false data and wash trading are examples of efforts to manipulate published price indices. This Report makes recommendations for conditions the Commission should impose to ensure that price indices represent better barometers of actual prices.

In a related finding, Staff concludes that large-volume, rapid-fire trading by a single company, in what was incorrectly assumed to be a liquid market, substantially increased natural gas prices in California. To compensate for this, Staff reiterates the recommendation of its August 2002 Initial Report, which called for the Commission to alter the natural gas pricing methodology employed in the California

Refund Proceeding. Using Staff's recommended producing area plus transportation price, instead of published price indices, while accounting for scarcity and keeping electricity providers whole for the actual prices they paid for natural gas, would result in larger refunds to California.

This Report finds that many trading strategies employed by Enron and other companies were undertaken in violation of antigaming provisions of the Commission-approved tariffs for the Cal ISO and Cal PX. Staff recommends the Commission initiate proceedings to require guilty companies to disgorge profits associated with these tariff violations. This disgorgement would affect activities beginning January 1, 2000 through June 21, 2001, and not just those during the October 2, 2000 through June 21, 2001 refund period. These disgorgements would be in addition to the refunds resulting from the California Refund Proceeding.

A central mandate in undertaking this Staff fact-finding investigation was to determine whether the dysfunctional spot market for electricity had an impact on the forward prices reflected in long-term power supply agreements. The Staff's analysis finds that spot prices influenced forward prices negotiated during the January 1, 2000 through June 21, 2001 crisis period. The influence is greatest for contracts with 1- to 2-year terms.

Staff concludes that EnronOnline (EOL), which gave Enron proprietary knowledge of market conditions not available to other market participants, was a key enabler of wash trading. This created a false sense of market liquidity, which can cause artificial volatility and distort prices. Enron's informational trading advantage on EOL was lucrative; the company took large positions and was an active, successful speculator. Staff estimates Enron's speculative profits from EOL exceeded \$500 million in 2000 and 2001. These speculative profits in financial instruments allowed Enron to sustain trading losses in physical trading. Staff further finds that Enron manipulated thinly traded physical markets to profit in financial markets. The Report recommends that the Commission prohibit the use of one-to-many trading platforms such as EOL and explicitly prohibit wash trading.

Staff concludes that prices in the California spot markets were affected by economic withholding and inflated bidding. Staff finds this violated the antigaming provisions of the Cal ISO and Cal PX tariffs and recommends proceedings to require disgorgement of profits associated with these inflated prices. This investigation did not address physical withholding of generation, an issue the Commission is addressing separately.

The balance of this executive summary discusses in greater detail the findings and recommendations in the body of this Report.

Background

On February 13, 2002, in Docket No. PA02-2-000, the Commission directed Staff to investigate whether any entity, including but not limited to Enron or any of its affiliates, manipulated short-term prices for electric energy or natural gas in the West or otherwise exercised undue influence over these prices and whether this resulted in unjust and unreasonable rates in long-term power sales contracts.

In August 2002, Staff released its Initial Report in Docket No. PA02-2-000. In that Report, Staff recommended the initiation of various company-specific proceedings² to further investigate possible misconduct and recommended several generic changes to marketbased tariffs to prohibit the deliberate submission of false information or the deliberate omission of material information, and to provide for the imposition of both refunds and penalties for violations. Staff also concluded that the most widely used published price indices were compiled without adequate standards or controls, were subject to attempted manipulation, could not be independently verified, and should not be used for setting the market-clearing prices in the California Refund Proceeding. Accordingly, Staff recommended the use of producing-area natural gas prices plus transportation. Finally, Staff analyzed the now infamous Enron trading strategies and found many of them to be forms of gaming based on price manipulation and the falsification of information.

Overall Organization and Primary Objectives of the Final Report

This Final Report achieves a multitude of objectives, many of which were listed in the Initial Report. It begins with two core objectives: to provide the Commission with our analysis of whether spot power prices in the West were just and reasonable in 2000–2001 and whether spot power prices adversely affected long-term power prices. While the Commission has already held that spot electric prices were unjust

¹The Initial Report is available on the Commission's Web site at www.ferc.gov/electric/bulkpower/pa02-2/Initial-Report-PA02-2-000.pdf. ²These proceedings, which are currently pending before the Commission, are Docket Nos. EL03-113-000, EL03-114-000, and EL03-115-000.

and unreasonable, its refund methodology hinges on the use of a competitive gas input cost. Therefore, the first four chapters of this Report are dedicated to this critical gas issue and the fifth chapter addresses the correlation of spot electric prices to long-term electric prices. The remaining chapters address the other critical issues that help to explain the gas and electric markets in 2000 and 2001.

This Report reflects the views of Staff only. It has not been considered or adopted by the full Commission. In addition, whenever this Report concludes that prices were or appear to have been manipulated, it does so in the context of determining whether rates were unjust and unreasonable under the Federal Power Act or the Natural Gas Act or whether persons may have violated tariffs or regulations under those acts. Those acts do not require that intent be proven in order to make a determination that rates are or were unjust and unreasonable or that a person violated tariffs or regulations under those acts.

Chapter I: Context of the Gas and Electric Markets in the West

In this chapter, Staff provides essential background and context of the gas and electric markets in the West during 2000–2001. We analyze many factors that affected prices, including reduced hydro output, supply/demand imbalance, flawed market rules, illiquidity at a key gas trading point, stringent pipeline balancing rules, low gas storage levels, and pipeline constraints. We conclude that the electric and gas markets were so inextricably interrelated that their dysfunctions fed off each other

Spot Gas Prices Reached Extraordinary Levels and Were Used to Set Clearing Prices for the Entire Electric Spot Market

The crucial conclusions of this chapter are that spot gas prices reflected extraordinary basis differentials that far exceeded the cost of transportation and that the effects of these inflated gas prices were greatly magnified because they were used to compute clearing prices paid by most California wholesale buyers for spot power. In Chapters II to IV we examine the causes in more detail.

Chapter II: Topock Was Illiquid—A Single Company Substantially Increased Prices

In this chapter, we conclude that Reliant engaged in a high-volume, rapid-fire trading strategy to purchase its physical spot gas needs at Topock. Reliant often bought and sold many times its needs in quick bursts, which significantly increased the price of gas in that market. We describe this as "churning" and define its characteristics later in the chapter. We use this term even though it has other connotations in securities or futures trading because it gives the best visual image of Reliant's behavior. Reliant's churning enabled it to reduce the overall cost of the gas it actually needed. Through its churning, Reliant profited by selling gas at or near the top of the price climb it caused. Reliant was often such a large presence at Topock (e.g., for the 3month period from December 2000 to February 2001, nearly 50 percent of the spot gas trades at Topock on EOL were with Reliant) that its trading strategy moved the entire market price. Our analysis shows that the price of gas would have been lower by about \$8.54/MMBtu in December 2000 and by about \$1.69/MMBtu over the 9 months of the California Refund Proceeding absent Reliant's churning. These inflated gas prices significantly influenced index prices and the clearing prices paid by most California wholesale buyers for spot power.

Staff concludes that these gas prices are not the result of competitive conditions and would not produce just and reasonable electric prices in the California Refund Proceeding. In Chapter IV of this Report, we recommend alternative gas prices for the Commission's consideration in the California Refund Proceeding.

Recommendations To Amend Gas Marketing Certificates and Generic Proceeding

Reliant's churning did not violate the blanket certificate under which it sold gas because Section 284.402 of the regulations contains no explicit guidelines or prohibitions. We recommend that Sections 284.284 and 284.402 of the regulations be amended to provide explicit guidelines or prohibitions for trading natural gas under Commission blanket certificates. We also suggest a generic proceeding to develop appropriate reporting and monitoring requirements for sellers of gas under Commission certificates.

Chapter III: Traders
Attempted To Manipulate
Price Indices Through False
Reporting

Market participants provided false reports of natural gas prices and trade volumes to industry publications. These publications used the reports to compile price indices, and false reporting became epidemic. Five major traders (Williams, Dynegy, AEP, CMS, and El Paso Merchant Energy) have admitted that their employees falsified information provided to *Gas Daily* and *Inside FERC*, the most influential and relied-upon compilers of natural gas price indices. The false reporting included fabricating trades, inflating the volume of trades, omitting trades, and adjusting the price of trades.

The predominant motives for reporting false information were to influence reported gas prices, to enhance the value of financial positions or purchase obligations, and to increase reported volumes to attract participants by creating the impression of more liquid markets. Market participants that sold power in California, or that were affiliated with such sellers, also had incentives to manipulate reported prices because the clearing price set for power was based, in part, on natural gas spot prices.

Many traders acknowledged that false reporting was done openly in the industry. Some traders believed that the periodicals that prepared the indices were able to distinguish between fictional and accurate reports, but the Staff was unable to confirm that the periodicals could discern fictional trades and eliminate them from the index calculation. The widespread false reporting led Staff to conclude that reported prices did not reliably reflect market activity and, accordingly, that reported prices should not provide the basis for setting spot power clearing prices in the California Refund Proceeding.

Recommendations for Changes in the Reporting Process

Staff recommends various changes to the price reporting process. These changes will eliminate the ability and incentive of those reporting the data to manipulate the indices and will improve the price calculation methods.

 Only data that can be audited and verified by the Commission or other agencies can be used to construct the natural gas or electric price index.

- Data sent to firms publishing natural gas or electric price indices must be provided by the risk management office of the company, not the trading desk or a trader, and must be certified by the chief risk officer.
- ♦ The Commission should consider conditioning all electric marketbased rate authorizations and blanket gas marketing certificate authorities on the companies providing complete, accurate, and honest information to any entity that publishes the price indices.
- ◆ The Commission should consider conditioning all electric and natural gas market-based rate authorizations on retaining all relevant data and information needed to reconstruct a published price index for a period of 3 years.
- ◆ Any published natural gas or electric price indices for Commission-jurisdictional transactions (e.g., pipeline tariff rates, market-based electric sales) must be subject to audit to ensure the accuracy of the data going in and the calculations themselves.
- ◆ The Commission should consider encouraging standard product definitions for published natural gas and electricity price indices and standard methodologies for calculating the price indices.

Certain Companies Must Demonstrate That They Currently Have Sound Procedures in Place

Staff recognizes the importance of accurate price indices in the overall health of competitive energy markets. The companies discussed at length in this chapter are significant participants in the U.S. electricity and natural gas markets. In order for the published price indices to be accurate and credible, firms publishing such indices must receive complete and accurate information from these companies. As such, Staff recommends that the following companies be required to demonstrate that they have corrected their internal processes for reporting trading data to the Trade Press or that they no longer sell natural gas at wholesale:

- ◆ Dynegy
- ♦ Aquila
- ◆ AEP
- ♦ El Paso Merchant Energy
- ♦ Williams
- ♦ Reliant
- ♦ Duke
- ♦ Mirant

- ♦ Coral
- ♦ CMS
- ♦ Sempra Energy Trading

At a minimum, these companies need to show the following:

- ◆ Those employees, including trading desk heads and managers, who participated in manipulations or attempted manipulations of the published price indices have been disciplined.
- The company has a clear code of conduct in place for reporting price information.
- All trade data reporting is done by an entity within the company that does not have a financial interest in the published index (preferably the chief risk officer).
- ♦ The company is cooperating fully with any government agency investigating its past price reporting practices.

Chapter IV: Spot Gas Prices Were Not the Product of a Well Functioning Competitive Market—They Should be Replaced for the California Refund Proceeding

> In this and previous chapters of this Report, Staff concludes that California spot gas prices were artificially high due to market dysfunctions, illiquidity, misreporting, and a rupture causing an abnormal pipeline capacity shortage. The spot gas prices reflected extraordinary basis differentials that far exceeded the cost of transportation and reached levels that would never have been sustained in a competitive market. While some portion of these price levels reflected legitimate scarcity, we cannot calculate the portion attributable to scarcity alone. These inflated gas prices were used in the California Refund Proceeding to compute clearing prices for the entire electric spot power market. While there is no way to precisely replicate the level that spot gas prices would have reached in a competitive market, Staff recommends the use of producing-area prices plus transportation as a proxy for competitively derived gas prices in computing the market-clearing prices in the California Refund Proceeding. Over the 9-month refund period, Staff's proposal would reduce gas costs used in the refund formula by \$7.03 in

southern California and \$4.18 in northern California, or about \$5.60 on average.

Many generators paid these distorted gas prices and fundamental fairness dictates that they be able to recover these costs. Accordingly, Staff also recommends that generators be made whole for the spot gas prices they paid, but that this recovery be on a dollar-for-dollar basis and not part of the market-clearing price.

Staff's proposal would increase the level of the refunds for California.

Chapter V: Spot Power Prices Adversely Affected Long-Term Power Prices

The vital link between the spot price and forward price for a commodity is the ability to store that commodity. In essence, someone can meet future needs by purchasing the commodity now and storing it for future consumption. As a result, the forward price that someone is willing to pay will approximate the cost of purchasing plus the carrying cost involved with stockpiling. Since the feasibility of storing electricity is very limited, we would expect to see little or no relationship between spot electric prices today and the forward price of electricity. Instead, forward prices should mostly reflect a buyer's expectations of prices in the future. Since natural gas is the marginal fuel in the West, forward gas prices should, in large part, explain forward power prices. Our analysis shows, however, that forward power prices negotiated during 2000–2001 in the western United States were significantly influenced by the then-current spot power prices. This tells us that the trauma of the dysfunctional spot power prices at that time so influenced buyers that they placed great weight on these prices in forming future expectations. The influence of spot prices on forward prices was the greatest for forward contracts with the shortest time to delivery (1-2 years) and varied by location. While Staff has found a statistically significant relationship, the magnitude of the impact is limited (that is, the impact of spot power prices on longterm power prices is clearly not dollar-for-dollar). Rather, a reduction of about one-third in the price of a 2-year forward contract would require a finding that spot power prices were three times above the just and reasonable level.

Chapter VI: Trading Strategies, Anomalous Behavior, Economic Withholding, and Inflated Bidding

In this chapter, we identify various entities that appear to have participated in some Enron price manipulation strategies; entered into profit-sharing arrangements with Enron, which masked Enron's real-market share; engaged in economic withholding; and raised clearing prices through inflated bidding. We also find evidence of price manipulation of the electric price index at Palo Verde and evidence that the spot power prices in the Pacific Northwest were inflated.

Violations of Cal ISO and Cal PX Tariffs

Since 1998, the Cal ISO and Cal PX tariffs have contained Market Monitoring and Information Protocols (MMIP). The MMIP include antigaming and anomalous market behavior provisions that identify various abuses and misconduct, such as taking unfair advantage of market rules, excessive pricing or bidding, and behavior not consistent with competitive markets, to the detriment of the efficiency of customers in the Cal ISO and Cal PX markets.

The Cal ISO and Cal PX initially submitted the MMIP (along with other protocols) for informational purposes only on October 31, 1997. The Commission, however, found that the protocols, including the MMIP, "govern a wide range of matters which traditionally and typically appear in agreements that should be filed with and approved by the Commission." Therefore, the Commission accepted the protocols, including the MMIP, for filing, and directed the Cal ISO and Cal PX to post the protocols on their Internet sites and to file the complete protocols pursuant to Section 205 of the Federal Power Act within 60 days of the Cal ISO's Operations Date. The Cal ISO and the Cal PX made that compliance filing on June 1, 1998. Accordingly, the MMIP has been part of the Cal ISO and Cal PX filed rate schedules since the Cal ISO's Operations Date (April 1, 1998).

Because of the fact that Part 2 of the MMIP specifically enumerates suspect practices, that Section 7.3 of the MMIP authorizes the Cal ISO to impose "sanctions and penalties" or to refer matters to the Commission for appropriate sanctions or penalties, and that the MMIP

Docket No. PA02-2-000

 $^{^{3}}$ *Pacific Gas and Electric Co., et al.*, 81 FERC ¶ 61,320 at 62,470-471 (1997). 4 Id.

is part of the Cal PX's and Cal ISO's rate schedules on file with the Commission, Staff concludes that entities that transact through the Cal PX or Cal ISO and engage in such enumerated practices are in violation of those filed rate schedules. The stated objectives of the MMIP are to identify abuses of market power by giving particular scrutiny to a list of abusive practices and misconduct and to take corrective action, including sanctions and penalties. In Staff's view, the identified misconduct remains a violation of the Cal ISO's and Cal PX's filed rate schedules even if such formal procedures as referral outlined in the MMIP did not occur. The Commission can enforce a rate schedule on file even when there are processes in that rate schedule which, had they been used, would have assisted the Commission. Ultimately, the Commission can enforce a tariff with or without the assistance of a complaint or referral.

Orders To Show Cause

We conclude that many of these behaviors violated the Cal ISO and Cal PX tariffs and recommend that these entities be ordered to show cause why they should not disgorge revenues and why market-based authorizations should not be revoked. This disgorgement would be in addition to the refunds in the California Refund Proceeding.

Spot Power Prices in the Pacific Northwest Appear Inflated

Staff analysis of actual transaction data for the period January 2001 to June 2001 indicates that spot power prices in the Pacific Northwest appear to be excessive, as were spot power prices in the California portion of the integrated Western market.

Recommendation for Further Pacific Northwest Proceedings

Staff recommends that this Report and, in particular, the conclusions herein related to the Pacific Northwest spot power prices, be remanded to the Administrative Law Judge in Docket No. EL01-10-000.

Chapter VII: Wash Trading on EOL Created a False Impression of Liquidity

Wash trades were common on EOL across many products and locations. In fact, EOL often posted its willingness to buy and sell at the same price. This invited counterparties to wash trades, and these trades created a false sense of liquidity, which can distort prices.

Enron also manipulated prices on EOL by having affiliates on both sides of certain wash-like trades. This created artificial price volatility and raised prices.

Ban Wash Trading and Prohibit Reporting of Affiliate Trades to Indices

Staff recommends that the Commission establish specific rules banning any prearranged trades that wash and prohibiting the reporting of affiliate trades to industry indices.

Chapter VIII: Enron's Trading Practices on EOL Were Lucrative

EOL's one-to-many platform provided no transparency to the market. However, EOL provided Enron with a huge information advantage that Enron used to earn large profits.

EOL was not simply a conduit for transactions earning a moderate but steady profit on the spread between what it paid and what it sold. In fact, EOL took large positions and was an active, successful speculator. Enron used the information advantage acquired from its central position in physical markets to earn large speculative profits in financial products—more than \$500 million in 2000 and 2001. Enron could sustain trading losses in the thinner physical markets as the cost to gain its information edge, which enabled it to earn large net profits.

Condition Market-Based Rates and Blanket Gas Certificates

We recommend that market-based rates and blanket gas certificates be conditioned to require sellers who use electronic platforms to use only those platforms with certain transparency and monitoring attributes. As discussed in this chapter and Chapter IX, Staff recommends that these platforms employ various monitoring tools, such as a churn alarm, to detect a large amount of buying and selling in a short timeframe.

Staff also recommends that information about all trigger events, e.g., identity of the market participants and the transaction data, be made available to the Commission through a real-time data feed.

Chapter IX: Enron
Manipulated Thin Physical
Markets for Profit in
Financial Markets

Financial energy products are used to hedge risk on physical energy products, and the two are interrelated. Physical transaction prices dictate the pricing of financial products, i.e., financial products derive their value from the underlying physical market. The depth and liquidity of financial energy markets are far greater than those of physical markets.

The relationship between financial and physical energy products and the relatively thinner and less liquid physical markets provides opportunities to manipulate the physical markets and profit in the financial markets. This is true regardless of whether the manipulation in the physical market raises or lowers prices for the physical commodity.

This Report analyzes an experiment by Enron to test a manipulation strategy and an actual manipulation by Enron using EOL. Enron manipulated the price of physical gas upward, then downward. Although the price change in the physical markets was only about \$0.10/MMBtu, Enron profited due to the effect that this small change in the physical price had on its large financial position. Enron earned more than \$3 million from this manipulation.

Show Cause Why the Commission Should Not Revoke Enron's Gas Marketing Certificate

We recommend that the Commission issue an order directing Enron to show cause why it should not have its blanket gas marketing certificate revoked.

Chapter X: Allegations That Williams Cornered the Market in Southern California Gas Are Unsubstantiated

Staff investigated allegations that Williams Energy Marketing & Trading Company cornered the natural gas market in California in January 2001. Based on the data, information, and documents reviewed, Williams purchased natural gas in amounts roughly

equivalent to its needs and had a small share of the natural gas demand. The allegations that Williams cornered the natural gas market in southern California for January 2001 are unsubstantiated.

Details of Staff Recommendations

Below we identify in one comprehensive list the specifics of Staff's recommendations for the Commission's consideration in addressing the issues arising out of this investigation. Staff recommends that the Commission:

- Amend Sections 284.284 and 284.402 of the regulations to provide explicit guidelines or prohibitions for trading natural gas under Commission blanket certificates. (Chapters II and IX)
- Consider a generic proceeding to develop appropriate reporting and monitoring requirements for sellers of natural gas under the Commission's blanket certificates. (Chapters II and IX)
- Condition all electric market-based rates and natural gas blanket marketing certificates on the companies providing complete, accurate, and honest information to any entity that publishes the price indices. (Chapter III)
- ◆ Condition all electric market-based rates and natural gas blanket marketing certificates on retaining all relevant data and information needed to reconstruct a published price index for a period of 3 years. (Chapter III)
- ◆ Require that any published price indices for Commissionjurisdictional transactions (e.g., pipeline tariff rates, market-based electric sales) must be subject to audit to ensure the accuracy of the data going in and the calculations themselves. (Chapter III)
- ◆ Require that only actual trade data be used to construct the price indices. (Chapter III)
- ◆ Require that data sent to firms publishing price indices be provided by the risk management office of the company, not the trading desk or a trader, and be certified by the chief risk officer. (Chapter III)
- Encourage standard product definitions for published natural gas and electricity price indices and standard methodologies for calculating the price indices. (Chapter III)
- ◆ Require Dynegy, Aquila, AEP, El Paso Merchant Energy, Williams, Reliant, Duke, Mirant, Coral, CMS, and Sempra Energy

Trading to demonstrate that they no longer sell natural gas at wholesale or that:

- Those employees, including trading desk heads and managers, who participated in manipulations or attempted manipulations of the published price indices have been disciplined.
- The company has a clear code of conduct in place for reporting price information.
- All trade data reporting is done by an entity within the company that does not have a financial interest in the published index (preferably the chief risk officer).
- The company is cooperating fully with any government agency investigating its past price reporting practices. (Chapter III)
- ◆ Use producing-area prices plus transportation as a proxy for competitively derived gas prices in computing the market-clearing prices in the California Refund Proceeding. (Chapter IV)
- ♦ Allow generators, many of which paid high gas prices, to recover these costs on a dollar-for-dollar basis, but not as part of the market-clearing price. (Chapter IV)
- ◆ For contracts that are subject to a just and reasonable standard of review in the ongoing consolidated complaint proceedings, the Commission should send this analysis to the Administrative Law Judges to use as seen fit to resolve the complaints. (Chapter V)
- ♦ Conclude that the Cal ISO and Cal PX tariff antigaming and anomalous market behavior provisions identify various abuses and misconduct, such as taking unfair advantage of market rules, excessive pricing or bidding, and behavior not consistent with competitive markets; that these provisions authorize the imposition of sanctions and penalties by the Commission; that these provisions are part of the Cal ISO and Cal PX rate schedules on file; and that entities that engaged in the identified practices violated the Cal ISO and Cal PX filed rate schedules. (Chapter VI)
- ◆ Conclude that the Commission can enforce a rate schedule on file on its own motion without complaint or referral. (Chapter VI)

⁵Consolidated proceeding: Nevada Power Company and Sierra Pacific Power Company v. Enron Power Marketing, Inc., El Paso Merchant Energy, and American Electricity Power Services Corporation; Nevada Power Company v. Morgan Stanley Capital Group, Calpine Energy Services, Reliant Energy Services, and Mirant Americas Energy Marketing, L.P.; Southern California Water Company v. Mirant Americas Energy Marketing, L.P.; and Public Utility District No. 1, Snohomish County, Washington v. Morgan Stanley Capital Group, Inc.—Docket Nos. EL02-28-000, EL02-33-000, EL02-38-000, EL02-29-000, EL02-30-000, EL02-32-000, EL02-32-000, EL02-32-000, EL02-39-00, EL02-43-000, and EL02-56-000.

- ◆ Apply these provisions in issuing and implementing various show cause orders. (Chapter VI)
- Explicitly prohibit the use of false information as a condition for granting all market-based rate authorizations and blanket gas marketing certificates and add this condition to all open access transmission tariffs. (Chapter VI)
- ◆ Direct certain market participants identified in the January 6, 2003 Cal ISO Report⁶ to show cause why their behavior did not constitute gaming in violation of the Cal ISO and Cal PX tariffs, with disgorgement of unjust profits associated with the violations or other appropriate remedies. (Chapter VI)
- ◆ Direct AES/Williams, Dynegy/NRG, Mirant, Reliant, BPA, LADWP, Idaho Power, Powerex, and Enron to show cause why their prices from May to October 2000 did not constitute economic withholding or inflated bidding in violation of the antigaming and anomalous market behavior provisions in the Cal ISO and Cal PX tariffs, with disgorgement of unjust profits associated with the violations or other appropriate remedies. (Chapter VI)
- ◆ Issue an order to Enron and the entities with whom it jointly engaged in the Enron trading strategies⁷ (both public utilities and governmental entities) to show cause why this did not constitute gaming in violation of the Cal ISO and Cal PX tariffs, with disgorgement of unjust profits associated with the violations or other appropriate remedies. (Chapter VI)
- ◆ Issue an order for Enron to show cause why its market-based rate authorization and its blanket gas marketing certificate authority should not be revoked. (Chapters VI and IX)

⁶Sempra/San Diego Gas and Electric; Morgan Stanley Capital Group; Coral Power, LLC; Powerex Corporation; Enron Power Marketing, Inc.; Enron Energy Services Inc.; Avista Energy Inc.; Pacific Gas and Electric Company; American Electric Power Services Corporation; Duke Energy Trading and Marketing; Mirant; Cargill-Alliant, LLC; Idaho Power Company; Puget Sound Energy; Dynegy; PGE Energy Services; Calpine Corporation; Modesto Irrigation District; City of Glendale, California; Arizona Public Service Company; Williams Energy Services Corporation; PacifiCorp; Automated Power Exchange; Bonneville Power Administration; Portland General Electric; Los Angeles Department of Water and Power; Aquila; Southern California Edison; Citizens Power Sales; Constellation Power Service; Sierra Pacific; Azusa; Riverside; Pasadena; Vernon; Salt River Project; and Reliant.

⁷Energy West; Montana Power Company; Puget Sound Power and Lighting Company; Powerex Corporation; City of Redding, California; City of Glendale, California; Colorado River Commission; Las Vegas Cogeneration; Washington Water Power Company (later named Avista); Valley Electric Association; Public Service of New Mexico; Grant Public Utility District; Grays Harbor Paper Company; Modesto Irrigation District of Northern California; and TOSCO.

- Order all jurisdictional entities to file any agreements with other entities that have any of the characteristics of the Enron joint partnership arrangements within 30 days. (Chapter VI)
- Order Reliant and BP Energy to show cause why their authorities to sell power at market-based rates should not be revoked by the Commission due to manipulation of electricity prices at Palo Verde. (Chapter VI)
- ◆ Remand this Report and, in particular, the conclusions herein related to the Pacific Northwest spot power prices, to the Administrative Law Judge in Docket No. EL01-10-000. (Chapter VI)
- Establish specific rules banning any form of prearranged wash trading and prohibiting the reporting of any affiliate trading activities through industry indices. (Chapter VII)
- ◆ Condition blanket gas marketing certificates, as well as electric market-based rates, 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 and order book information for the trading systems and agree to adhere to appropriate monitoring requirements. (Chapters VII, VIII, and IX)
- ♠ Recommend that Congress consider giving direct authority to a Federal agency to ensure that electronic trading platforms for wholesale sales of electric energy and natural gas in interstate commerce are monitored and provide market information that is necessary for price discovery in competitive energy markets. (Chapters VII, VIII, and IX)
- ◆ State that the allegations that Williams Energy Marketing & Trading Company cornered the natural gas market in California in January 2001 are unsubstantiated. (Chapter X)
- ◆ Reevaluate the "simultaneous offer" rule that it uses to discipline affiliate transactions to ensure that it is effective and verifiable. (Initial Report)
- ◆ Require that all market-based rate tariffs include a specific prohibition against the submission of false information or the omission of material information to the Commission or to an entity such as an independent system operator, a regional transmission organization, or an approved market monitor. (Initial Report)
- Recommend that Congress expand the Commission's civil penalty authority that applies to jurisdictional companies that violate Commission orders, regulations, or tariffs. (Initial Report)