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To: McCullough Research Clients

From: Robert McCullough

Subject: Ex-parte Testimony in Morgan Stanley v. Snohomish

A group of economists, including three expert witnesses from the underlying FERC case, filed an amicus curiae brief with the Supreme Court in Morgan Stanley v. Snohomish. In the main, the brief reiterates their original testimony. The brief makes a number of claims that are simply erroneous. Rather than cite authoritative primary sources, the economists rely on secondary or even tertiary sources. In several cases, the brief has searched out references that have been addressed in the original case or parallel cases at FERC, which a number of the authors would know to have been in error. This brief should be considered ex-parte testimony, and poorly researched testimony at that.

Interest of the Amici (Page 2)

In this ex-parte testimony, counsel stated:

> The parties have consented to the filing of this brief, and their letters of consent have been filed with the Clerk of the Court. Amici state that no counsel for a party authored this brief in whole or in part, and that no such counsel or party made a monetary contribution intended to fund the preparation or submission of the brief. Counsel's fees and expenses incurred to prepare this brief were paid by NRG Energy, Inc. NRG is the parent company of Cabrillo Power I LLC, El Segundo Power LLC, and Long Beach Generation LLC, which have filed a petition for a writ of certiorari (No. 06-1468) now pending before this Court. No other person or entity made a monetary contribution intended to fund the preparation or submission of this brief.[1]

The brief does not mention that three of the signatories testified for parties in the original case – Hogan and Harvey for Morgan Stanley and Kalt for El Paso Gas. Hogan and Harvey

[1] On Writ of Certiorari to the United States Court of Appeals for the Ninth Circuit, page 2.

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have continued in the litigation, recently sending an ex-parte communication directly to the FERC Commissioners addressing some of the issues also raised in this brief.[2]

The primary argument presented in the testimony is that consumer protection measures endanger markets. Inserted in the testimony are a number of additional arguments that Hogan and Harvey have made before. Many of these arguments are factually in error.

Volatility (Page 2)

The Amici brief addresses both price levels and price volatility as if they were synonymous on page 2. This is not the case. The original citation is to Paul Joskow's 2001 article which does not present evidence on volatility during this period, although he does, narratively, summarize the higher prices.[3] Volatility is a term of art in financial statistics – generally calculated as the standard deviation of price divided by the average of price for a specific period. Prices can be high with low volatility and low during periods of high volatility.

The following page continues the confusion over volatility and prices by citing a number of arguments why prices might have been higher. The data presented is incorrect, and will be addressed below.

Causes of the Electric Crisis (Page 3)

The brief gives five reasons for high volatility – high temperatures, the 2000 Pacific Northwest drought (sic), high natural gas prices, little addition of generating capacity in California, and market power. The brief does not cite any primary sources, although these are easily available and are the product of authoritative agencies. Instead, they cite a Congressional Budget Office report from 2001 and a law review article from 2002.[4]

The tendency to avoid primary sources has been a frequent fault of testimony by Hogan, Harvey, and Cicchetti, three of the signatories, both at FERC and in other litigation.

The primary data from the Western Electricity Coordinating Council and the Northwest River Forecast Center does not agree with their assertions – a fact that has been pointed out

[2] Comments of Scott Harvey and William W. Hogan re the analysis presented in FERC Staff's Final Report on Price Manipulation in Western Markets: Fact Finding Investigation of Potential Investigations of Electric and Natural Gas Prices, PA02-2, April 9, 2007.
[3] Paul L. Joskow, California's Electricity Crisis, 17 Oxford Rev. Econ. Pol'y 365, 365 (2001)
[4] Congressional Budget Office, Causes and Lessons of the California Electricity Crisis (2001) and How Will the California Debacle Affect Energy Deregulation?, 54 Admin. L. Rev. (2002).

to them on numerous occasions. It is also noteworthy that the high natural gas prices in California were, themselves, the product of market manipulation.[5]

Demand for Electricity

The authors of the brief use the term "demand" inappropriately. As a matter of usage, demand in the context of reliability refers to peak load – the highest load at a moment in time. The 125 emergency declarations in California over the period of the crisis represented periods in which generating capacity made available to the California ISO was dangerously close to peak load.[6]

Primary data on both generating capacity and peak load is the responsibility of the regional reliability group – in this case, the Western Electricity Coordinating Council. This organization has an extensive methodology for collecting historical data and assembling forecasts in order to protect the reliability of the fourteen western states and British Columbia.[7]

Instead of using the appropriate reports from the WECC, the authors use a 2001 report from the CBO. Although the issue is not material, the CBO report does not correctly report average total loads nor address peak loads at all.[8]

Since the CBO did not have access to the appropriate region wide data, they would not have known that peak loads had fallen in 2000 and 2001 from previous years.[9]

From a high in 1998, firm peak loads in California fell from 54,586 MW to 47,700 MW.[10,11] Corresponding firm peak loads for the western interconnection were 130,598 MW in 1998 and 123,193 MW in 2001.[12,13]

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[5] FERC Staff's Final Report on Price Manipulation in Western Markets: Fact-Finding Investigation of Potential Investigation of Electric and Natural Gas Prices, Docket No. PA02-2-000, March 2003, Chapters 1-3.

[6] Cumulative Totals of Restricted Maintenance Operations, Alert, Warning, Emergency and Power Watch Notices Issued from 1998 to Present, California ISO, October 31, 2007.

[7] http://www.wecc.biz/wrap.php?file=wrap/about.html.

[8] The reference in the brief is not to demand, but electric consumption. The chart referenced has an error for 2000, and does not correctly report electric consumption from table A21 of the EIA's 2001 Electric Power Annual, page 39. The EIA data shows 246,652 million kilowatt-hours (kWh). The chart cited by the authors of the brief shows a value in the range 0f 275,000 million kWh.

[9] The regional data is taken from WECC data published in the fall of the following year. Thus a report published in September 2001, would not have had access to either 2000 or 2001 data for peak loads.

[10] 10-Year Coordinated Plan Summary 1999 – 2008, WSCC, October 1999, Table 27 - California-Mexico Power Area Actual Loads and Resources for 1998.

[11] 10-Year Coordinated Plan Summary 2002-2011, WECC, September 2002, Table 27 - California-Mexico Power Area Actual Loads and Resources for 2001.

[12] 10-Year Coordinated Plan Summary 1999-2008, WSCC, October 1999, Table 3 - WECC Actual Loads and Resources for 2001.

[13] 10-Year Coordinated Plan Summary 2002-2011, WECC, September 2002, Table 3 - WECC Actual Loads and Resources for 2001.

In 1999, the 2000 firm peak forecast for California was 50,832 megawatts.[14] The actual 2000 firm peak load for California was 50,253 megawatts.[15] Simply stated, California's firm peak loads were lower than forecasted in 2000 and 2001. They were also lower than actuals for 1998 and 1999.

The Pacific Northwest "Drought" of 2000

This declaration is also in error. The Pacific Northwest did not have a drought in 2000. The authoritative source for weather and river forecasting is the U.S. Weather Service Northwest River Forecast Center.

The source for the erroneous information is a law review article by Richard J. Pierce, a professor from George Washington University. Mr. Pierce cites two possible sources for this date, a web article by Will McNamara and a law article by John Hilke and Michael Wise.[16] Neither source provides the justification for Mr. Pierce's incorrect statement.

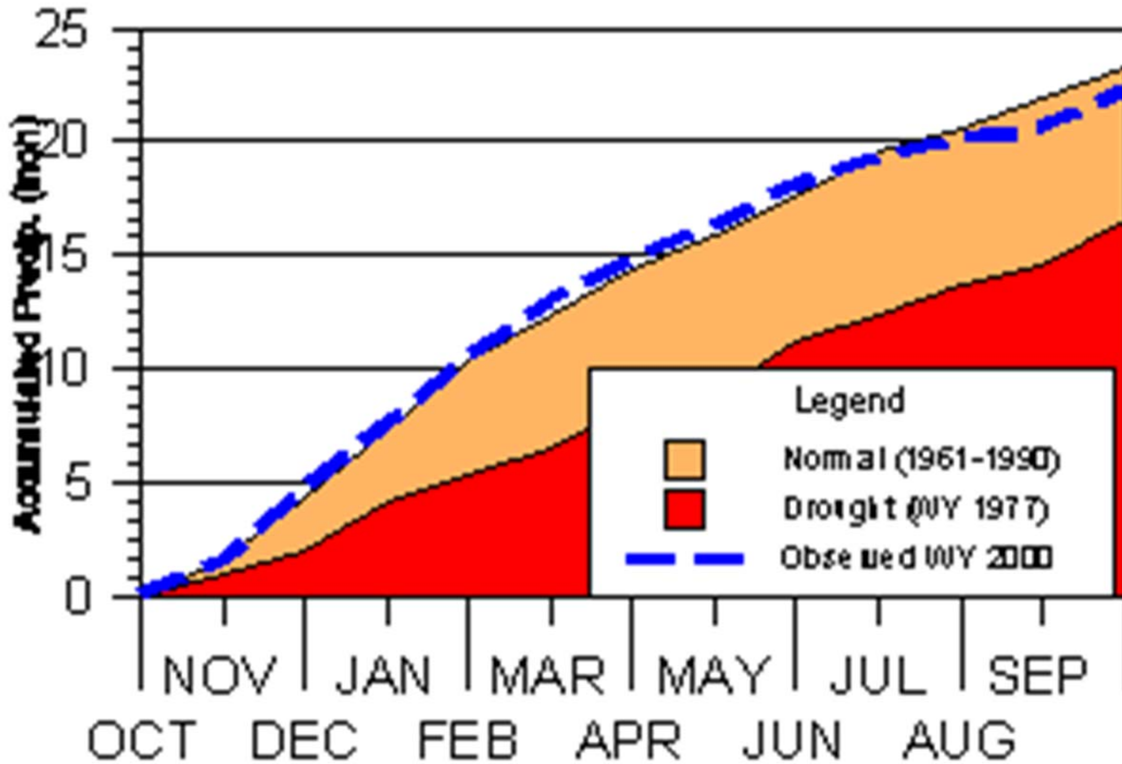
Professor Pierce's mistake is understandable. The Pacific Northwest did have a drought, however the drought was in 2001, the year that the crisis ended, not the year it began. The timing of the drought is exactly the opposite of the date given in the brief. While Professor Pierce's error might be understandable, it is not understandable for expert witnesses in proceedings where the error has been pointed out to them on previous occasions to continue to state the wrong date.

The Northwest River Forecast Center of the National Weather Service provides monthly summaries of precipitation by hydrological basin as well as indications whether the situation is normal or in drought conditions. The report for October 2000 shows that precipitation in the Columbia basin was significantly higher than drought – approximately equal to average for 2000:

[14] 10-Year Coordinated Plan Summary 2000-2009, WECC, October 2000, Table 28 – California-Mexico Power Area Estimated Peak Demands, Resources, and Reserves 2000-2009..

[15] 10-Year Coordinated Plan Summary 2001-2010, WECC, August 2001, Table 28 – California-Mexico Area Actual Loads and Resources for 2000.

[16] Bonneville Power Administration: Vulnerable to Western Power Crisis, But Protected by Federal Status, Will McNamara, Daily IssueAlert, 6/4/2001 and Who Turned Out The Lights? Competition And California's Power Crisis, Antitrust, American Bar Association, Vol. 15 No. 3, page 76, 2001.



The next sentence is also incorrect: "The drought in the Pacific Northwest in 2000 impeded the generation of hydroelectric power."[17] As above, the brief's authors have neglected to reference the primary authoritative source. In this case, the authoritative source is the Planning Coordination Handbook. [18] This is a common and repeated mistake in testimony filed by Hogan and Harvey. Reliability issues are determined by capacity. The capacity for the coordinated system is calculated on drought conditions, a point made on every page of the forecasts in WECC planning studies. By design, WECC planning is based on the assumption of drought. If a drought had occurred in 2000, which it did not, it would not have reduced the capacity available from the hydroelectric system. Again, their source for this incorrect assertion was a law review article, incorrectly citing a second law review article.[19]

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[17] Op. cit., page 3.

[18] Planning Coordination Committee Handbook, WECC Planning Coordination Committee, August 2005, Section XI, page XI-1.

[19] Hilke and Wise state that drought reduced "power" from hydroelectric plants. They did not mention capacity or the date 2000. See page 6.

High Natural Gas Prices

The issue of high natural gas prices has been litigated extensively in the context of the crisis, a fact that the authors of the brief fail to mention. In this case, four of the authors were expert witnesses on this issue, Hogan, Harvey, Kalt, and Cicchetti.[20] None of their arguments have been accepted by the Federal Energy Regulatory Commission.

For example, Dr. Cicchetti testified that this was not the case in his 2002 affidavit in the ELOO-95 proceeding.[21] Because wholesale gas prices had been manipulated, FERC decided to use prices from producer basins when calculating the MMCP. Dr. Cicchetti had also testified against using producer prices in the MMCP calculation, but FERC did not adopt his recommendations.[22]

As a proof that prices were not manipulated during the crisis, the use of fuel prices that were themselves manipulated is quite a reach. FERC's Order in EL00-95 states:

> 59. In light of the Staffs findings that the prices established in the California gas spot market were not solely the outcome of fundamental supply and demand forces, but were artificially high, the Commission finds that the Staff Final Report recommendation to modify the mitigated market-clearing price formula in the California refund proceeding to use producing-area prices plus a tariff rate transportation allowance (including a fuel compression charge allowance) instead of California spot gas prices has significant merit. Accordingly, because of these unique circumstances, we will adopt this Staff Final Report recommendation to calculate the mitigated market-clearing price in this proceeding.[23]

California's Poor Job of Adding Generating Capacity

This fact was also ascribed to Professor Pierce. Professor Pierce's citation was actually somewhat different, noting that new capacity was not needed in the early 1990s.[24]

A recent working paper by Paul Joskow makes similar comments:

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[20] Cicchetti provided an affidavit on behalf of Avista and BP on natural gas and MMCPs in EL0-95, Exhibit SEL-1. Hogan and Harvey wrote testimony on behalf of Morgan Stanley in EL02-26, Exhibit MSC-65. Kalt testified on behalf of El Paso in EL02-60, Exhibit EPME-1.

[21] Affidavit of Charles J. Cicchetti to Comment on FERC Staffs Recommendations Related To Natural Gas Prices In California's Electric Markets During the Refund Period, ELOO-95-045, ELOO-98-042, October 14, 2002.

[22] Order on Proposed Findings on Refund Liability, 102 FERC 61,317, March 26, 2003, page 23, paragraph 63.

[23] Ibid. page 22.

[24] How Will the California Debacle Affect Energy Deregulation?, 54 Admin. L. Rev. 397 (2002).

> The most frequent popular explanation is that there was a shortage of generating capacity in California and that this shortage was a result of poor investment incentives inherent in California's wholesale market design. This is not an accurate characterization of what actually happened. There was little investment in generating capacity anywhere in the U.S. during the time period when the California reforms were being designed and implemented (1994-98). This is because there was excess capacity in most regions of the U.S. during the early 1990s. Uncertainties about the future path of structuring, regulatory and competitive reforms that began to be discussed seriously at this time was also a deterrent to potential investors waiting until the rules of the game were specified more clearly. Indeed at the time of the crisis there was a long queue of developers that had applied for permits to build new generating plants in California after the market opened in April 1998. It is unrealistic to expect that even under the best of circumstances any significant amount of new generating capacity could have come out of the construction pipeline in two years. Moreover, California is a summer peaking system. The biggest problems, in terms of high prices, operating reserve emergencies and rolling blackouts did not occur until the winter of 2000-2001. The problem was not that there was inadequate physical generating capacity in place, but rather that a large fraction of the existing generating capacity was not available to generate electricity. This has led to debates about whether the generating capacity was being consciously withheld from the market (fake sick leave) to drive up prices or that the generating equipment broke down (real sick leave) [25]

As, above, instead of citing secondary (or this case tertiary) sources, the correct step would have been to address the authoritative primary source. The correct source for determining whether resources meet planning standards is the WSCC Summer Assessment:

> The California-Mexico subregion (CA-MX) projected reserve margins presented in the above table are based on the assumption that up to 1,642 megawatts of additional capacity from the other subregions will be available to control areas in this subregion during July and 776 megawatts will be available in August. Without additional capacity that may be available due to reduced peak demand or from other subregions (referred to as planned purchases/sales in the tables presented in Appendix A) the reserve margins would decrease to 14.7% in July and 16.0% in August. A number of local areas have constraints that may require area load management under certain conditions.[26]

[25] Lessons Learned From Electricity Market Liberalization, Paul Joskow, December 8, 2007, page 9.
[26] Western Systems Coordinating Council Assessment Of The Summer 2000 Operating Period, page 4.

The concern over the availability of imports is easily checked. Actual net imports were 7,975 megawatts in July and 7,978 megawatts in August.[27]

As Dr. Joskow points out in his working paper:

> It is true that California's wholesale market would have been stressed due to tight capacity during the second half of 2000 even if there had been no market power problems. Demand was unusually high throughout the Western Interconnection, natural gas prices and NOx permit prices rose significantly. However, even after taking account of these factors it is hard to explain what happened during the second half of 2000 only as the result of the interplay of supply and demand in a competitive market. The "shortage" of generating capacity may perhaps be explained by older plants breaking down and by their owners' reluctance to supply when it became unclear about January 2001 whether or not they would be paid. However, there is also abundant evidence that some suppliers exploited opportunities to engage in strategic behavior to jack up market prices. At least in the summer of 2000, some generators were taking advantage of a tight supply situation to exercise market power (Borenstein, Bushnell and Wolak (2002), Joskow and Kahn (2002)). The tapes of the conversations of traders for Enron and other companies that subsequently were released make it clear that they saw and took advantage of opportunities to withhold supplies and increase market prices during the crisis.[28]

Market Power

Finally, at the end of the list of causes of volatility, the authors list market power. Their only source is the Congressional Budget Office report that preceded the revelations in the spring of 2002 by the better part of a year, the Final Staff Report by almost two years, and the many settlements and sanctions that have occurred over the ensuing six years. Since these are too voluminous to list, I have added them to this as Attachment A.

Volatility (Page 12)

The amici brief argues that forward contracts are a necessary response to increased volatility. Curiously, they fail to note that the conditions in 2000 and 2001 contributed to the failure of all three structured forward markets on the West Coast. The two NYMEX markets – Palo

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[27] 10-Year Coordinated Plan Summary 2001-2010, WECC, August 2001, Table 28 – California-Mexico Area Actual Loads and Resources for 2000.
[28] Lessons Learned From Electricity Market Liberalization, Paul Joskow, December 8, 2007, pages 9-10.

Verde and the California Oregon Border – effectively ceased operations by mid-November.[29] The California PX suspended market operations in January 2001 and declared bankruptcy in March 2001 due to credit support and cash flow issues.[30] The period without effective regulation of unjust and unreasonable prices eliminated the forward markets.

The use of the term "volatility" is curious. Most analysts have been concerned about the level of prices during the crisis, not the volatility. The focus on volatility is an undocumented belief that volatility will increase forward contracting. The experience during the crisis was the exact opposite. Transactions on the NYMEX COB and Palo Verde forward exchanges effectively ceased by the end of the summer of 2000. There has been little academic attention paid to this curious phenomena other than a paper by J.S. Moulton in 2005 published in Energy Economics concluded that:

> During the exchange-traded period, spot and futures prices tended to be volatile and seasonal for both the COB and PV markets. Although the futures markets began with the standard complement of hedgers and speculators, speculators left the market, leaving hedgers to meet hedgers, and generally providing a less active market. In addition, changes in CFTC reporting requirements left information concerning participants in this market at a much reduced level.
>
> Standard hedge ratio estimation indicates an erratic and sometimes counter-intuitive hedge position due to low correlations between spot and futures price changes. The inadequacy of stable hedging ability is another reason for lack of contract success.[31]

The thesis advanced in the Amici brief that high volatility needs forward contracts may, in fact, be wrong by 180 degrees. The presence of the high and erratic pricing effectively eliminated the forward markets that might have ameliorated the crisis.

Finally, the statement "properly functioning, fully-competitive electricity market is likely to yield market prices that vary by a factor of ten or twenty to one in a single day." is a quotation from a law review article by Pierce.[32] Pierce references the comment to his book on regulated industries where neither the justification, nor the reference, can be found. On its face, this is a difficult statement to take seriously. Absent scarcity pricing, the range of marginal costs in the United States is generally limited. Even assuming the use of coal off-peak

[29] The last transactions on these exchanges took place on November 15, 2000.
[30] California PX Files for Bankruptcy, Bulletin of the Northwest Public Power Association, April 1, 2001.
[31] California electricity futures: the NYMEX experience, Jonathan S. Moulton, Energy Economics 27 (2005) 181– 194, page 194.
[32] Pierce, page 395.

and natural gas on-peak, the differential is unlikely to be ten or twenty to one. Typical on-peak/off-peak price differentials are in the range of two to one.[33]

Hydroelectric Storage (Page 8 and 12)

On two occasions the Amici brief makes the assumption that electricity cannot be economically stored. They make this assumption since there is a vast literature concerning the relationship between spot and forward prices when the commodity can be stored. The assertion is first made, without evidence cited, on page eight. It is repeated on page 12 and the evidence cited is an article by Hany Shawky et al which states:

> However, as pointed out by Eydeland and Geman (1999) and Pirrong and Jermakyan (1999), the inability to store electricity means that the well known cost-of-carry relationship that links spot and forward prices cannot be used to price futures or establish optimal hedge ratios.[34]

These references are to theoretical articles where this assumption has been made, not statements of fact. The Amici brief made no effort to justify this assumption.

The facts are exactly the opposite. The Northwest Power Pool, comprising the four northwestern states as well as British Columbia and Alberta, is characterized by the ability to store electricity behind reservoirs in the Columbia River basin as well as in the Peace River and Williston reservoirs.[35,36] Storage of electricity is a central facet of system operations and forms the central theme in the Pacific Northwest Coordination Agreement and the Columbia River Treaty with Canada.[37,38] For a good narrative discussion of hydroelectric storage operations in the Pacific Northwest, see the February 1993 Power System Coordination - Guide to the Pacific Northwest Coordination Agreement.[39] Reservoir owners in the U.S. and Canada can store electricity on an hourly, daily, and seasonal basis. Storage between years is available primarily in reservoirs in Canada.

Operating data on the level of storage is freely available outside of California. The status of British Columbia's multiannual reservoirs can be found at

33 Platt's Energy Trader, December 17, 2007, page 4.
34 A First Look at the Empirical Relation Between Spot and Futures Electricity Prices in the United States, Hany Swaky et al., The Journal of Futures Markets, Vol. 23, page 932.
35 Federal Columbia River Power System, U.S. Army Corps of Engineers, Bonneville Power Administration, and the Bureau of Reclamation, August 2003.
36 BC Hydro 2006 Integrated Electricity Plan, pages 3-6.
37 1997 Pacific Northwest Coordination Agreement, June 18, 1997.
38 Columbia River Treaty, January 17, 1961,
39 Power System Coordination - Guide to the Pacific Northwest Coordination Agreement, BPA, Corps of Engineers, and the Burueau of Reclamation, February 1993.

http://www.bchydro.com/info/res_hydromet/res_hydromet836.html. Comparable data for the Columbia River reservoirs can be found at http://www.nwpp.org/weekly.html.

At least one analyst expressed surprise when his results showed results that were consistent with storage at the California Oregon Border even though he was (incorrectly) convinced there was no storage:

> Nevertheless, looking at the last four days before expiration, it appears that the California Oregon Border (COB) futures contract does have some risk-shifting capability. Weaker results are found for the Palo Verde (PV) contract. Despite the fact that electricity is not storable, these results are consistent with market participant's using the cost-of-carry relationship to price futures contracts with a short time to maturity. In other words, although electricity is not storable, co-movements between spot and futures prices in the last days of the futures contracts behaved as if electricity were storable.[40]

Since the California Oregon Border is in Bonneville Power's control area, market participants more experienced with transactions at COB would have been surprised if one the world's largest hydroelectric utilities would not have shown evidence of storage.

The situation is just the opposite of that stated in the brief. Not only can electricity be stored, but there is a strong relationship between spot and forward prices. It should be noted that given the arguments in the Amici brief, this should not be surprising:

> Where a commodity is storable, a close relationship generally exists between spot prices and forward prices because of arbitrage constraints. If forward prices are too high relative to spot prices, traders can purchase the commodity in the spot market while contracting to sell it in the forward market; they can then store the commodity purchased in the spot market and later use it to satisfy their obligations under the forward contract. That arbitrage by traders will tend to keep forward and spot prices in equilibrium.[41]

Not surprisingly, this is exactly the conclusion found by Dr. Robert Pindyck in the Final Staff Report:

> Our analysis shows that there is a statistically significant relationship between spot and forward power prices during the period from January 1, 2000 through June 30, 2001.[42]

[40] On the Risk-Shifting Capability of the Electricity Futures Market, Thomas W. Miller, Jr., April 2, 2004, page 14.
[41] Amici Brief, pages 29-30.
[42] Final Report On Price Manipulation In Western Markets, FERC Staff, March 2003, page V-18.

A more recent statistical study has been presented by Mount and Lee:

> The econometric analysis in this paper shows how forward prices for electricity responded in the winter of 2001, and concludes that uncertainty about the high prices for electricity and uncertainty about the supply of natural gas were both important. The relative effects of these two sources of uncertainty on forward prices vary by the date of delivery. The initial uncertainty about spot prices for electricity in the summer of 2000 increased the forward prices of electricity for summer deliveries more than for winter deliveries. In contrast, uncertainty about the spot prices of natural gas in the winter of 2001 increased the forward prices of electricity for all delivery months. Price shocks for electricity after the FERC intervened in the CAISO market had by far the largest effect on the forward prices for delivery in summer months.[43]

While the presence of hydroelectric storage is sufficient to establish a link between spot and forward prices, it is not necessary. By assuming that the transactions are based on the electrons rather than generators and end-users, Hogan and Harvey have made this error several times in previous testimony. At any point in time, generators are "long" for the expected lifetime of their resource. Similarly, end-users are "short" for the expected lifetime of their requirements. Either generators or end-users can choose between forward and spot markets on a daily basis – and often do.

A generator who perceives a significant difference between future spot prices and current forward prices need only shift from his planned sale of generation in the spot market to a forward contract. The key is how the generator (or end-user) will form his opinion concerning future prices. While an intelligent actor will use any long term data available to them, the evidence is that they will also condition their forecasts on current spot prices. This is especially true for markets, like those at the California PX and ISO, where the identity of bidders, the bids, and the calculations are not transparent. The impact of spot prices on forwards was one of the conclusions of the paper by Shawky cited by the Amici.[44]

A similar point of view is put forth in the 2002 Energy Information Administration monograph on energy derivatives:

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[43] The Effects of the Dysfunctional Spot Market for Electricity in California on the Cost of Forward Contracts, Timothy Mount and Yoo-soo Lee, June 25, 2003.

[44] Shawky et al, pages 951-952:

> The graph at the top of Figure 5 shows that a positive shock to the spot returns series dies out after eight days with a half-life of about 4 days. This shock results in a positive shock to the futures returns series, which peaks at 2 to 3 days, and dies out gradually over the next 9 to 10 days. Moreover, the shock causes both the spot and the futures returns series to move in the same direction as they reach their steady state, with a much smaller impact on the futures series during the first 2 days.

> Electricity is typically "stored" in the form of spare generating capacity and fuel inventories at power stations. For existing plants, the "storage costs" are usually less than or equivalent to the costs of storing other energy fuels; however, the addition of new storage capacity (i.e., power stations) can be very capital intensive.[45]

It should be noted that this relationship between spot and forward prices is not simply a statistical artifact. Enron, for example, included the relationship in its training manuals and internal memoranda. Enron's draft risk assessment report, for example, states:

> Curve shift is often closely related to daily changes in the California (Cal) PX price. Even though the Cal PX closing price is a daily historical price, traders in the WSCC grid follow the prices closely and it influences forward prices, because it is a highly visible market indicator and is perceived to be an independent pricing source. Consequently, term traders will change their forward price curve to reflect a general shift upwards or downwards if a significant change is seen in the Cal PX price.[46]

The same logic is part of an internal memo named "How Do We Make Money Trading Term Power?":

> Depending on our determination of the cause of the cash market price change, we will adjust our prior day's term pricing accordingly (i.e., the longer the duration of the causal influence, the more our forward pricing will be adjusted). The typical influences that we consider on a day-to-day basis include: Real-time pricing, cash pricing, NW hydro flows and dam elevations, California hydro flows, temperature forecasts by region, resultant projected load change by region, west coast jet stream, Pacific Ocean water temperatures, NW and California snow water equivalents, western soil saturation by region, thermal generation off-line, transmission capacities, extra-regional market pricing, natural gas pricing, and other market news.[47]

Contract Certainty (Page 12)

The basic argument presumes that application of FERC's consumer protection powers will discourage long term contracts. On its face this is a dubious argument. Until very recently FERC reviewed all long term contracts. This did not discourage such contracts, nor should

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[45] Derivatives and Risk Management in the Petroleum, Natural Gas, and Electricity Industries, EIA, October 2002, page 33.
[46] Data Response 38-1, EL02-114, page 4.
[47] PGE's Response to FERC Data Request No. 38-2, FERC Docket No. EL02-114, pages 1-2.

it. The situation at its heart is whether a very small number of contracts signed under outlandish conditions are suitable for review. As Taylor and Van Doren said at the time:

> Remember, below-market prices in the short term can come only at the expense of above-market prices for years to come, and locking in long-term prices at the peak of a price spike is hardly the best way to minimize cost in the long run. Peter Navarro, a professor of economics at the University of California-Irvine, estimates that, by 2003 or so, wholesale electricity prices in California will average about 5 cents a kilowatt-hour, given the additional generating capacity under construction or in the planning stages. "By using huge sums of taxpayer money to lock in long-term power contracts, California is making a mistake that will haunt its economy for years."
>
> Second, long-term contracts do not offer a "better deal" than spot market purchases. Borenstein writes, "On average, a purchaser buying power in forward markets (or through long-term bilateral contracts) will not receive lower power costs than a purchaser buying in the spot market."[48] Long-term contracts simply reallocate the risk of price volatility from the consumer to the generator or marketer that provides the fixed-price guarantee. But the guarantee is not free. Sellers of such guarantees require a premium to accept this reallocation of risk. Generators (or marketers) do not offer fixed prices that result in lower returns than sales on the spot market. In fact, spot market prices for electric and gas utilities have historically been more favorable to consumers than contract prices. [49]

Unreasonably High Prices (Page 19)

On page 19, the brief begins by arguing that the reasonableness of long term prices cannot be evaluated on a retrospective basis. This is a rebuttal to a position that is unlikely to be taken. The standard of review is whether the price was reasonable at the time, not at some later date.

FERC addressed the reasonableness of long term prices on December 15, 2000 – roughly at the same time that the contracts in question were being negotiated. FERC's order stated:

> In November, Duke Energy reported that it had offered to supply SDG&E's entire 3.300 MWs of load for five years at a fixed price of $60/MWh (esca-

[48] The Trouble with Electricity Markets: Understanding California's Restructuring Disaster, Severin Borenstein, The Journal of Economic Perspectives, Volume 16, No. 1, Winter 2002, page 202.
[49] California's Electricity Crisis, What's Going On, Who's to Blame, and What to Do, Policy Analysis, July 3, 2001, Jerry Taylor and Peter VanDoren, page 22.

lated at three percent per year).36 Since that time, gas prices have hit the $50/MMBtu level and Duke Energy is now considering a price in the $80/MWh range. We note that even this higher figure is close to the $74/MWh level of the pre-restructuring rates and is but a fraction of the current spot electricity prices. While we do not have jurisdiction over retail rates, it is our view that five-year contracts for supply around-the-clock executed at or below S74/MWh can be deemed prudent. 37 .

Given the current market conditions and the rising cost of generation inputs, we believe that negotiated long-term prices that are below the levels of the pre-restructuring rates are just and reasonable. We expect that buyers may elect to negotiate above those levels to the extent they believe the particular contract or supplier brings value which suits their needs (u shorter-term contracts, favorable terms and conditions, assignment of the risk of variable cost exposure, the particular characteristics of the supplier or its resource portfolio, etc.). 38 Sellers of long-term service currently have market-based rate authorization. We are not establishing a new standard for market-based prices for longterm contracts. Rather, as discussed above, we are providing an advisory benchmark to assess potential complaints regarding long-term contracts. This will assist buyers and sellers over the next year when so many MWs will be entering the forward market at one time. This advisory benchmark should not be interpreted as establishing a price floor on forward contracts, which may justify a lower per MWh price. We also believe that concerns about the availability, pricing and prudence of forward contracts may be more quickly resolved if all affected parties - - buyers, sellers and state officials - - attempt to develop a mutually agreeable plan for the initial round of forward contracts.[50]

Market Manipulation and Prices (Page 23)

On page 23, Hogan and Harvey repeat their often stated claim that there is no evidence of market manipulation in California:

> Economists disagree about what role market power or manipulation played in spot markets during the California energy crisis. Compare, e.g., Scott M. Harvey & William W. Hogan, Market Power and Market Simulations (2002), available at http://ksghome.harvard.edu/~whogan, with Paul L. Joskow & Edward Kahn, A Quantitative Analysis of Pricing Behavior in California's Wholesale Electricity Market During Summer 2000, 23 Energy J. 1 (2002).

[50] Order Directing Remedies For California Wholesale Electric Markets, December 15, 2000, page 28.

> Yet contracting parties will inevitably allege these sorts of conditions as grounds for repudiating a contract that turns unfavorable.[51]

However, there is a broad consensus among experts and courts that market power and market manipulation played an important role in the crisis. The first section of the FERC Final Report in the PA02-2 docket is titled "Manipulations in the California Natural Gas Spot Markets Forced Upward Pressure on Wholesale Electric Prices." This authoritative report demonstrates how the evidence clearly shows that market power and market manipulation raised prices during the crisis.

The Ninth Circuit Court of appeals concurs with this report, writing

> FERC's staff later issued a report concluding that the spot market was dysfunctional, partially due to market manipulation by sellers; that conclusion is assumed by all parties here.[52]

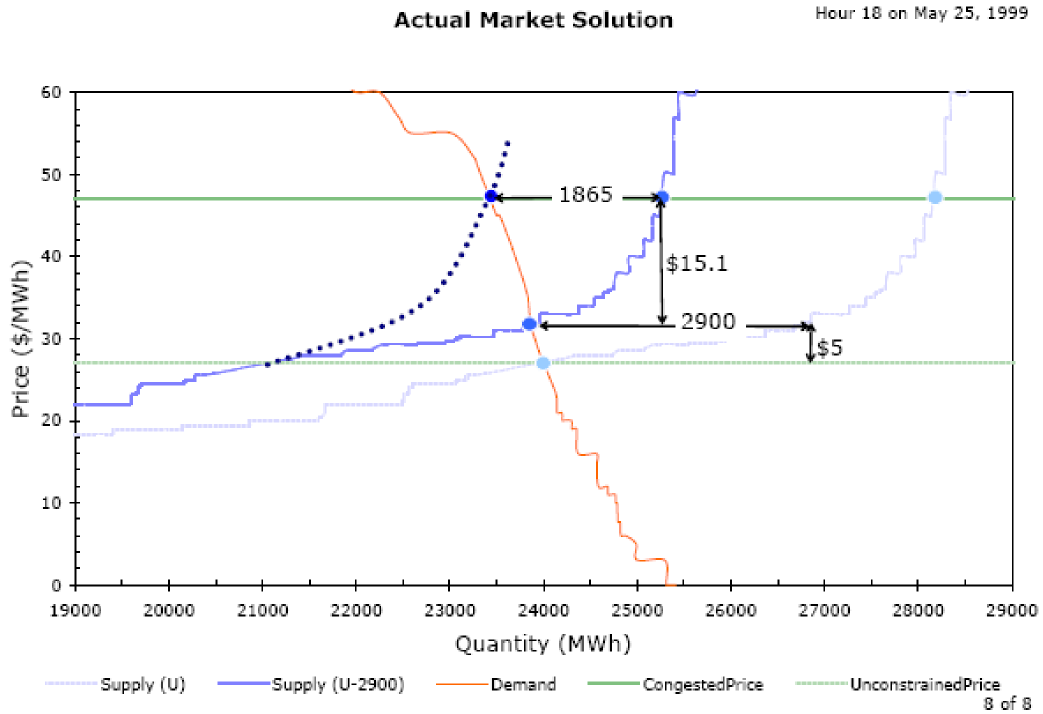
Secondly, in the Initial decision of the EL03-180/EL03-137 gaming and partnership case, Judge Carmen Cintron clearly states

> The argument [that fundamentals alone caused the crisis] is rejected as the record clearly demonstrates that Enron was able to manipulate the market…. Moreover, the Commission has already stated that the 'fraudulent schemes in California markets' resulted in manipulated prices in California.[53]

These citations clearly show that the question of whether market manipulation raised prices during the crisis is settled. The Hogan article dates from before significant evidence was discovered concerning market manipulation activities by Enron and other market participants. EL03-137/180 documented hundreds of cases where Enron's activities affected prices including analyses conducted by Enron itself. Two examples are especially significant – Silver Peak and Project Stanley.

In Silver Peak, Enron filed an imaginary 2,900 megawatt power supply in California with a massive impact on prices. Timothy Belden, Enron's west coast executive, conducted his own analysis of the impact of the scheme.

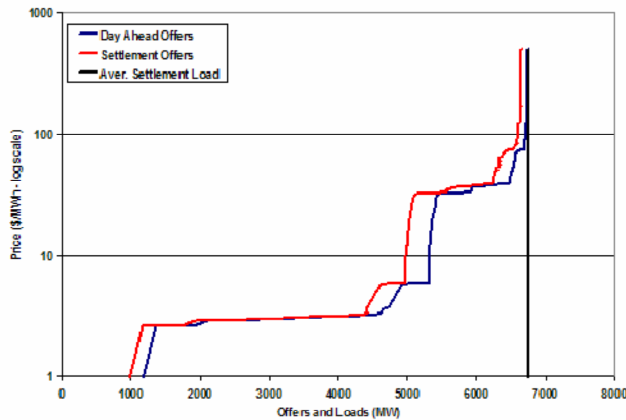
[51] Final Report on Price Manipulation in Western Markets: Fact-Finding Investigation of Potential Manipulation of Electric and Natural Gas Prices, FERC, March 26, 2003, p. I-1
[52] Public Utility Dis. No. 1 v. F.E.R.C., 471 F.3d 1053, 1068 (9th Cir. 2006)
[53] EL03-180 et al. Initial Decision, June 21, 2007, page 51



This analysis was filed in EL03-137/180 as SNO-725.

Project Stanley also had an extensive post-play analysis. The following chart was developed for a briefing for Enron's counsel tasked with defending against the ensuing criminal investigation.

Illustrative transaction - June 18th HE16



- **Pool price set at $998/MWh from Enron bid**
- **Very tight supply-demand balance - only 56 MW shift in day ahead supply will increase price from $80/MWh to $500/MWh**
- **Substantial contraction in supply at $0/MWh and at $3-5/MWh (TAU or EPCOR coal most likely) as well**

8

Privileged and Confidential - Communication with Counsel

This Enron analysis was filed as SNO-765.

A listing of judgments, settlements, and sanctions is attached as Attachment A.

Attachment A:Sanctions, Sentences, and Settlements

On March 26, 2003, FERC staff issued a Final Report on Price Manipulation in Western Markets and Show Cause orders concerning market manipulation and the refund methodology in EL00-95. The date marks a watershed in the history of the Western Market Crisis. Since then, the thousands of pages of testimony filed, billions of dollars in settlements and fines incurred, and numerous pleas of guilt are proof positive that state and federal regulators finally grasped the economic and geographic enormity of Enron's fraudulent behavior, aided and abetted by other market participants. This chronology, by no means complete, spans the U.S. government's regulatory and legal arenas, including FERC's website, which lists the actions it has undertaken under the rubric, "Addressing the 2000–2001 Western Energy Crisis: Settlements;"[54] the "Enforcement Press"[55] section on the CFTC's website, the "Spotlight on Enron"[56] section on the SEC's website, and the website of the DOJ.[57] The intensity of public interest in the Lay-Skilling trial in 2006 encouraged the latter to post the exhibits entered into evidence by the federal government on a daily basis.[58]

2007

Settlement, Deutsche Bank, December 18: $25 million
Deutsche Bank agreed to pay $25 million in cash and relinquish claims to $416 million against the Enron estate; entities of the bank will receive approximately $35 million for their remaining interests in three complex transactions, allowing Enron to dissolve them and distribute the proceeds to creditors. (subject to U.S. Bankruptcy Court approval)

Denial of Appeal by the United States District Court for the Southern District: November 13
A side note of interest is Civil Action No. H-06-3335, in which Ken Lay's widow asked that the claims against his estate should be dismissed.

Brief for the United States as Appellee to United States Court of Appeals: November 11
The brief asked that Skilling's prior conviction stand and stated that "The district court did not rely on improper reasons for imposing sentence, and the sentence is reasonable."

[54] http://www.ferc.gov/industries/electric/indus-act/wec/settlements.asp
[55] http://www.cftc.gov/opa/opaenf2006.htm
[56] http://www.sec.gov/spotlight/enron.htm
[57] http://www.usdoj.gov/dag/cftf/cases_d_g.htm
[58] http://www.usdoj.gov/enron/index.html

Appeal to United States Court of Appeals for the Fifth Circuit: September 7
Jeffrey Skilling appealed his October 25, 2006 conviction, asking for a reversal and remand.

Initial Order, EL03-137/180, June 21

In the landmark Enron market manipulation case, the initial order assessed $1.6 billion dollars against Enron for a variety of market manipulation activities from 1997 through 2002:

> Enron violated its MBRA and the PX and Cal ISO tariffs throughout the Relevant Period by engaging in various gaming and market manipulation schemes throughout the Western interconnect. As a result, this Initial Decision orders Enron to disgorge $1,617,454,868.50 in unjust profits earned during the Relevant Period. Enron's MBRA is also revoked beginning January 16, 1997. Finally, it is found that Enron must disgorge the Termination Payment from Snohomish as such a payment is unjust profits.[59]

Judge Carmen Cintron also stated

> The argument [that fundamentals alone caused the crisis] is rejected as the record clearly demonstrates that Enron was able to manipulate the market…. Moreover, the Commission has already stated that the 'fraudulent schemes in California markets' resulted in manipulated prices in California.[60]

This case was one of the largest in FERC's history, comprising millions of documents and four years of litigation.

Decision and award, Connecticut Superior Court: June 19
Superior Court Judge Dennis Eveleigh awarded 35.9 million dollars to seventy municipalities served by the Connecticut Resources Recovery Authority. CRRA had agreed to lend 220 million dollars to Enron in a purchase and sale of steam and electricity; prior to filing for bankruptcy in December 2001, Enron had repaid 17.6 million dollars, but then stopped making payments. A lawsuit filed against the authority by the cities and towns contended that they were forced to cover the loan (via paying higher tipping fees for trash delivered to CRRA's Hartford steam plant and landfill). Judge Eveleigh's decision stating that "CRRA violated both State and Federal law in its conduct in the Enron Transaction"

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[59] EL03-180 et al. Initial Decision, June 21, 2007, page 82
[60] EL03-180 et al. Initial Decision, June 21, 2007, page 51

concurred with an opinion in 2002 by state Attorney General Richard Blumenthal that the energy transaction was an illegal and unsecured loan.[61]

U.S. Supreme Court refusal without comment, Coral Power v. California, 06-888, June 18

The U.S. Supreme Court, without comment, refused to consider a case brought by several energy marketers that FERC lacked authority to order retroactive refunds. In September 2004, the Ninth U.S. Circuit Court of Appeals had ruled that the commission had the power to refund the overcharges and had failed to enforce its own rules (by not requiring energy suppliers to report all sales to California utilities, FERC effectively eliminated government oversight and regulation).[62]

Sentencing, Kenneth Rice, June 18: $13.7 million

The former CEO of Enron's broadband unit was sentenced to twenty-seven months in prison and must forfeit 13.7 million dollars in cash and assets.

Settlement, Avista Corporation, June 11: $9.5 Million

Avista agreed to pay 9.5 million dollars to settle a lawsuit filed in September 2002[63] on behalf of shareholders who purchased stock from 1999–2002 (the suit alleged that the company and its senior executives had artificially inflated the company's stock price). Subject to a federal district judge's approval, the settlement also eliminates claims against the company and its former CEO Tom Matthews, and removes the names of its current CEO, Gary Ely, and a former CFO, Jon Eliassen.

Settlement, UBS, June 7: $115 Million

UBS agreed to pay 115 million dollars and withdraw its 5.5 million-dollar claim against Enron.[64]

Sentencing, Kevin Hannon, June 4: $125,000

The former COO of Enron's broadband unit was sentenced to two years in prison, two years of probation and fined 125,000 dollars.

Order Approving Settlement, May 17: $59,265,081

[61] In 2004, a settlement agreement reached in the Enron bankruptcy proceeding returns 80 million dollars to the CRRA. The state AG and CRRA also filed three lawsuits "against 101individuals they believe are responsible for Enron's financial collapse and failed deal with CRRA." http://www.ct.gov/ag/cwp/view.asp?A=1779&Q=284432

[62] The Ninth U.S. Circuit Court's 2004 decision arose from a complaint filed with federal regulators by Bill Lockyer, California Attorney General at the time of the Western Market Crisis.

[63] Dismissed but refiled in 2005.

[64] In 2003, Enron sued UBS for 418.3 million dollars over payments made in 1999 prior to bankruptcy.

"The Settlement resolves matters and claims…related to PGE and arising from events and transactions in the Western Energy Markets during the period January 1, 2000 through June 20, 2001 (Settlement Period)." PGE "will provide Settlement proceeds in the amount of $65,365,081" including "a principal settlement amount of $48,400,000 plus estimated interest on refunds of $16,965,081." It receives a credit of $6,100,000 for a payment it made to certain of the California Parties pursuant to a settlement in the Gaming/Partnership Proceeding, thus reducing the funds to be paid to the California Parties under the Settlement by the same amount. As of the Settlement's effective date, PGE will assign to the California Parties $59,265,081 (*i.e.*, $65,365,081 – $6,100,000), which the CalPX will pay out of its Settlement Clearing Account and into the Settling Supplier Refund Escrow (an account to be established by the California Parties pursuant to Settlement section 4.1.4). The total amount that the CalPX will actually transfer to the Settling Supplier Refund Escrow is $59,265,081 minus all Deemed Distributions under the Settlement, minus the total estimated interest shortfall on refunds, and plus the amounts owed by Participants with negative allocations under the Settlement."

U.S. Supreme Court refusal, Brown v. U.S., 06-975, May 14
The U.S. Supreme Court refused to review James A. Brown's convictions for perjury and obstruction of justice in connection with fraud by Enron[65]. In 1999, Brown and other Merrill Lynch defendants were prosecuted for their involvement in a fraudulent sale of barges off the Nigerian coast.

Settlement, PacifiCorp, April 12: $28 Million
The California parties reached a settlement with PacifiCorp for 28 million dollars.

Erasure of guilty plea, Christopher Calger, April 2
U.S. District Judge Lee Rosenthal approved a request by former Enron executive Calger to withdraw his July 2005 guilty plea to wire fraud in connection with an asset sale in 1999 and 2000, following a decision in August 2006 by an appeals panel of the Fifth U.S. Circuit Court of Appeals that reversed fraud and conspiracy convictions in a separate 2004 Enron case.[66] Calger became the second defendant to withdrawal a guilty plea.[67]

SEC v. Jordan H. Mintz and Rex R. Rogers, March 28
The Securities and Exchange Commission charged Mintz (former general counsel for Enron's global finance group) and Rogers (former associate general counsel) with civil securities fraud, and cited the sham sale of a Cuiba, Brazil, energy project. Rogers was

[65] Federal prosecutors have indicated plans to retry Brown, et. al. for counts overturned earlier by the Fifth U.S. Circuit Court of Appeals.
[66] However, the government retained the right to again prosecute Calger.
[67] In 2005, former Arthur Andersen employee David Duncan was permitted to erase his 2002 guilty plea to obstruction of justice soon after the U.S. Supreme Court overturned Arthur Andersen's conviction of obstruction for destroying Enron-related audit documents in 2001.

also cited for assisting Kenneth Lay in hiding the sale of stock prior to Enron's bankruptcy. The commission seeks to ban them from serving as officers or directors of any public company.

Dismissal, JP Morgan Chase & Company, March 29

U.S. District Court Judge Sidney Stein dismissed a class-action lawsuit refiled by investors of JPMorgan Chase & Company which alleged that by assisting Enron to hide billions of dollars of debt, investors were defrauded from November 1999 to July 2002.[68]

Approval of two settlements, Nevada Power Company, March 22

The Public Utilities Commission of Nevada approved two settlement agreements[69] that: allow Nevada Power Company to collect (over three years) approximately 83 million dollars in costs incurred to resolve claims associated with terminated power contracts emanating from the Western Market Crisis, and to recover 180 million dollars (over 10 years) and several carrying charges from a previous regulatory disallowance.

Sentencing, John M. Forney, March 22: $4,000

U.S. District Judge Martin Jenkins sentenced the former trader to probation for two years and to pay a fine of four thousand dollars. The sentence is considered "light" despite the fact that Forney created several of the trading schemes (Death Star, Get Shorty, and Ricochet) used to manipulate western markets. In August 2004, when Forney pleaded guilty to conspiracy to commit wire fraud; his sentence was to have consisted of:: "a. Maximum prison sentence 5 years; b. Maximum fine $250,000 or twice the gross gain or loss, whichever is greater; c. Maximum supervised release term 3 years; d. Mandatory special assessment $100; and e. Restitution As ordered by the Court."

Reversal of ruling, Fifth U.S. Circuit Court of Appeals, March 19

An opinion by the Fifth U.S. Circuit Court of Appeals reversed the ruling by U.S. District Judge Melinda Harmon stating that shareholders could proceed with a 40-billion-dollar class-action lawsuit against Enron.

Settlement in class-action suit (University of California, et.al. vs. Arthur Andersen), March 9: $72.5 million

U.S. District Court Judge Melinda Harmon approved the settlement of the lawsuit filed by shareholders claiming that the company's assistance to Enron's senior management played a role in Enron's collapse.

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[68] In March 2005, the judge dismissed a similar complaint.

[69] One settlement concerned the disallowance of 179 million dollars by state regulators in 2002 when the PUC decided that the company had acted imprudently by not purchasing power from Merrill Lynch or another supplier prior to the onset of the Western Market Crisis. The other related to El Paso Corporation, Enron, Morgan Stanley, and Reliant Energy which sued over supply contracts terminated when credit rating agencies downgraded Nevada Power's debt to junk status.

Agreement between Reliant Energy Services, Inc. and U.S. Attorney, San Francisco, to dismiss pending indictment, March 6: $22.2 Million
The government agreed to dismiss a pending indictment against Reliant Energy Services, Inc. pertaining to a trading incident that occurred on two days in June 2000, if the company complies with the terms of the agreement for the next two years. The company agreed to pay a penalty of 22.2 million dollars in addition to a 13.8-million-dollar credit for a January 2003 settlement with FERC pertaining to the same incident.

Order Approving Settlement Agreement and Ruling on Motion, March 1
"The Settlement resolves certain matters and claims raised in the captioned proceedings relating to APX's participation in the markets of the California Power Exchange Corporation (CalPX) and the California Independent System Operator Corporation (CAISO) during the period from May 1, 2000 through June 20, 2001 (Settlement Period)." APX was a scheduling coordinator. The settlement provides that "APX Participants designated as Net Buyers are entitled to refunds, collectively totaling nearly $63 million" and "that approximately $17.3 million will be set aside by Enron for the Enron Settlement Reserve -- an account available to settle the claims of Enron Non-Settling Parties."

Settlement, Kirkland & Ellis, February: $13.5 Million
U.S. District Court Judge Melinda Harmon approved the settlement.

Sentencing, Timothy Belden and Jeffrey Richter, February 14: $410,000
Belden, former head of trading in Enron's Portland, Oregon office, was sentenced to one count of conspiracy to commit wire fraud, and to forfeit 2.1 million dollars. Richter, former head of the "short-term desk," was fined 410,000 dollars.

SEC's Settlement of Civil Fraud Charges Filed against Richard A. Causey, February 8
The SEC announced that "the U.S. District Court in Houston entered a final judgment in the Commission's civil action against Richard A. Causey, Enron's former Chief Accounting Officer. In its complaint filed on January 22, 2004, the Commission alleged that Causey, along with others, engaged in a wide-ranging scheme to manipulate Enron's publicly-reported earnings through a variety of devices designed to produce materially false and misleading financial results."

Settlement Agreement between Andrews Kurth and Enron's Bankruptcy Estate, January 19: $18.5 Million

The law firm agreed to pay 18.5 million dollars to settle potential malpractice claims arising from its legal advice in approving twenty-eight asset transactions that were designed to improve Enron's cash flow.[70]

2006

Forfeiture, Timothy Belden, December 12: $2.1 Million
Former Enron trader Belden agreed to forfeit 2.1 million dollars to former Enron employees financially harmed in the company's collapse under a plea agreement. In 2002, Belden pleaded guilty to federal charges that he manipulated California's energy market.

Appeals to dismiss, Fifth U.S. Circuit Court of Appeals, November 22
Former Enron broadband unit executives Joe Hirko, Rex Shelby, and Scott Yeager filed appeals to dismiss the counts remaining from their trial in 2005 in which the federal government contended that the three overstated the broadband unit's capabilities to improve Enron's stock price. Their indictment in 2003 included four additional defendants (Kevin Hannon, Kevin Howard, Michael Krautz, and Kenneth Rice), some of whom were convicted while other counts were dismissed.

Sentencing, Richard Causey, November 15: $1.25 Million
Former chief accounting officer Causey was sentenced to five and one-half years in prison and forfeited 1.25 million dollars under a plea agreement in which he admitted conspiring with senior managers to mislead investors about Enron's financial health. In December 2005, he pleaded guilty to securities fraud.

Settlement, Barclays Plc, November 3: $144 Million
Barclays Plc agreed to pay 144 million dollars in a negotiated settlement because 'it was preferable to the time, expense and unpredictability of litigation" and allowed it to continue to seek claims filed in the bankruptcy totalling 310 million dollars.

Settlement, Fleet Bank Financial Corporation, October 6: $19.75 Million
FleetBoston Financial Corporation agreed to pay Enron 10.4 million dollars in the "Megaclaims" case and 9.35 million dollars in a lawsuit concerning Enron's commercial paper.

Sentencing, Paula Rieker, October 6
Enron's former corporate secretary received two years' probation following her guilty plea in 2004 to charges of insider trading (July 2001). Her sentence was "light" because

[70] The estate never sued the law firm for allegedly signing off on the deals.

she cooperated with federal prosecutors in the Lay-Skilling trial (she told its jury that Skilling twice ordered altering reported earnings-per-share figures and that Lay falsely depicted Enron's financial health).

Sentencing, United States of America vs. Andrew S. Fastow: September 26
Fastow was sentenced to six years in prison. The declaration he submitted to the court outlined his many fiduciary responsibilities at Enron, and his prior and continued willingness to cooperate with federal prosecutors. For example: "I believe that my work made the Company look more healthy and profitable than it actually was. I worked with certain banks to accomplish this goal and I viewed certain banks as problem solvers. In many instances, the banks primarily devised the financial structures, which contributed to Enron achieving its financial reporting objectives. I believe that based on conversations with certain bankers, they knew that the prepays and some of the share-trust transactions created the false appearance of funds flow from operations and that some of the FAS 125 and 140 transactions and LJM partnerships' transactions created the false appearance of earnings and funds flow from operations, and reduced reported debt."[71]

Sentencing, United States of America vs. David Delainey: September 18
Delainey was sentenced to two and a half years in prison related to his insider trading guilty plea in 2003. He had already paid 4.2 million dollars to the Department of Justice and 3 million dollars to the SEC to settle fraud charges.

Order Approving Settlement Agreement, August 9: $432,042
Resolved "all pending civil proceedings initiated by the three major California utilities and the California Electricity Oversight Board" against Eugene (Oregon) Water & Electric Board "arising from events and transactions in western electricity markets from Jan. 1, 2000 through June 20, 2001" and "claims raised in various relevant Commission dockets as they may relate to EWEB."

U.S. Court of Appeals for the Fifth Circuit, August 1
"Jim Brown, the head of Merrill's Strategic Asset and Lease Finance Group in New York City; William Fuhs, a Vice President under Brown in the New York office; Daniel Bayly, the head of Merrill's Global Investment Banking division; and Robert Furst, a Merrill executive answering directly to Bayly" were "responsible for generating business from Enron." The "Government charged that Enron and Merrill Lynch employees of engaged in a conspiracy and scheme to defraud Enron and its shareholders by 'parking' an Enron asset – an equity interest in three power-generating barges moored off the coast of Nigeria – with Merrill for six months for the purpose of artificially enhancing Enron's 1999 end-of-year earnings report. Merrill agreed to invest $7 million to purchase equity in the

[71] "Notice of the Filing of the Declaration of Andrew S. Fastow in Support of Lead Plaintiff the Regents of the University of California's Request for Reduction of Sentence," September 26, 2006.

barges so that Enron could record $12 million in earnings and meet its forecasts. The appeals court reversed "the conspiracy and wire-fraud convictions of each of the Defendants on the legal ground that the government's theory of fraud relating to the deprivation of honest services –- one of three theories of fraud charged in the Indictment – is flawed....We further vacate appellant Fuhs's conviction on the ground that the evidence is insufficient to support his conviction. Finally, we affirm appellant Brown's convictions of perjury and obstruction of justice."

Verdicts, United States of America vs. Lay and Skilling, May 25; Lay's Indictment and Verdict Vacated, October 17

The four-month criminal trial of former CEOs Kenneth Lay and Jeffrey Skilling found Lay guilty of one count to commit securities and wire fraud; two counts of wire fraud; and three counts of securities fraud;[72] and Skilling guilty of one count to commit securities and wire fraud; twelve counts of securities fraud; five counts of making false statements to auditors; and one count of insider trading. In a separate bench trial, Lay was found guilty of one charge of bank fraud and three charges of making false statements to banks.[73]

Order Approving Settlement Agreement, June 28: $433,000,000

Resolved "pending matters stemming from Enron's activities during the 2000-2001 Western energy crisis, and approved three other settlements involving contract-termination disputes between Enron and the Valley Electric Association of Nevada, the City of Santa Clara, California, and the Metropolitan Water District of Southern California." FERC also "exercised its exclusive jurisdiction under section 1290 of the Energy Policy Act of 2005 and found that the Snohomish Public Utility District of Everett, Washington, is not obligated to pay a contract termination fee to Enron. The Commission denied Enron's termination claim upon a finding that Enron's financial fraud induced Snohomish to enter into the contract." Valley Electric, the City of Santa Clara, and the Metropolitan Water District agreed to pay $44,816,000 in contact terminations.

Order Approving Settlement Agreement, May 22: $24,250,000

Resolved "all claims against IDACORP by the Settling Participants, and all claims against the Settling Participants by IDACORP, for damages, refunds, disgorgement of profits, or other monetary or non-monetary remedies, in the Commission's Refund Proceeding (Docket Nos. EL00-95-000 and EL00-98-000), the Pacific Northwest proceeding (Docket No. EL01-10-000), the Gaming Proceeding (Docket No. EL03-156-000), the

[72] http://www.usdoj.gov/enron/pdf/verdictsliplay.pdf

[73] When he died of heart disease on July 5, 2006, Lay's attorneys then sought to vacate the convictions by substituting his estate for his person. U.S. District Judge Sim Lake later agreed, citing a 2004 ruling by the Fifth U.S. Circuit Court of Appeals that found that a defendant's death pending appeal extinguished his entire case because he did not have a full opportunity to challenge the conviction, and that the government should punish neither a dead defendant nor his estate.

Partnership Proceeding (Docket No. EL03-189-000), and the Commission's enforcement proceedings (Docket Nos. PA02-2-000 and IN03-10-000), except that the Settlement does not resolve claims that IDACORP may have against Additional Settling Participants in Docket Nos. EL00-95-000 and EL01-10-000 as discussed below. The Settlement also resolves claims by the California Parties against IDACORP arising from the Lockyer v. FERC Remand."

Order on Settlement Agreement, January 25: $129 million
Resolved "myriad legal disputes between the Nevada companies and Enron that are the outgrowth of commercial dealings between the companies during the Settlement Period. From 1997 to May 7, 2002, Enron sold power to the Nevada Companies in both spot and forward market transactions. Under the terms of the Settlement, Enron will allow, in favor of the Nevada Companies, a Class 6 general unsecured claim under the Enron Debtors' Plan of Reorganization of $126.5 million in the bankruptcy proceeding of Enron Power Marketing Inc. The Nevada Companies will pay Enron $129 million as termination payments arising from Enron's termination of certain forward power contracts with Nevada Power and Sierra Pacific Power in May 2002. The Settlement provides that Nevada Power's payment allocation of this total will be $89.784 million and Sierra Pacific Power's payment allocation will be $39.216 million."

2005

Order on Settlement Agreement, December 22: $512 million
Resolved and approved (with conditions) "matters and claims" "arising from events in the California Independent System Operator (CAISO) and California Power Exchange (CalPX) energy and ancillary services markets during the period of January 1, 2000 through June 20, 2001 as they relate to Reliant. In addition, the Settlement contained mutual releases of claims between Reliant and certain class action parties and certain local governmental parties" and stipulated "that Reliant will provide at least $512,000,000 in monetary consideration."

Order on Settlement Agreement, November 15: $1.5 billion
Resolved "claims by the California Parties and other Settling Participants against the Enron Debtors for refunds, disgorgement of profits, and other monetary and non-monetary remedies in the following Commission proceedings: the Refund Proceeding in Commission Docket Nos. EL00-95-000 and EL00-98-000, the Partnership/Gaming Proceeding in Docket Nos. EL03-180-000, EL03-154-000, EL02-114-007, EL02-115-008, and EL02-113-000, and the Refund Related Proceedings, including Docket Nos. PA02-2-000 and IN03-10-000 for the Settlement Period. The Parties also have agreed to mutual releases of past, existing and future claims arising at the Commission and/or under the

Federal Power Act with respect to rates, prices, and terms or conditions for energy, ancillary services, or transmission congestion in the western electricity or western natural gas markets during the settlement period." It also provided "for cash payments totaling up to $47.4 million from accounts that are currently held by the CAISO and the CalPX. The Settlement provides a Class 6 unsecured claim of $875 million against EPMI in Enron's bankruptcy proceeding in accordance with the Enron Debtors' Plan of Reorganization (Plan). Enron has also agreed to a $600 million civil penalty in the form of a subordinated Class 380 penalty claim allowed against EPMI in accordance with the Plan in favor of the Attorneys General of California, Oregon and Washington, the CPUC and the CEOB."

Order of Chief Judge Designating Settlement Judge and Scheduling Conference, September 6

Approved the selection of the settlement judge sought by "counsel for Nevada Power Company and Sierra Pacific Power Company; Public Utility District No. 1 of Snohomish County, Washington; the City of Santa Clara, California; Valley Electric Association, Metropolitan Water District of Southern California; Enron Power Marketing, Inc., Enron Energy Services Inc., and Enron North America Corp.; and the Commission Trial Staff" and set September 15, 2005 for settlement negotiations.

Joint Offer of Settlement, August 24

"Enron, the California Parties, the Additional Claimants, and the Federal Energy Regulatory Commission's ('FERC' or Commission') Office of Market Oversight and Investigations ('OMOI') (collectively the 'Parties') asked "to resolve matters and claims raised in the above-captioned proceedings ('FERC Proceedings') arising from events and transactions in western energy markets – including especially the markets of the California Independent System Operator Corporation ('ISO') and the California Power Exchange Corporation ('PX') – during the period January 16, 1997 through June 25, 2003 (the 'Settlement Period') as they relate to Enron (the 'Settlement')."

"Agreement reached with Reliant Energy; last of 'big five' generators to pay $460 million to settle California claims," August 15

Reliant Energy Services agreed to allow an independent audit of outages for one year after FERC approved the agreement, a cash payment of 460 million dollars, and to continue for two more years its "must offer" obligations under provisions of a 2003 settlement. Prior to an expected September filing, on July 15, FERC's chair announced that "parties will forego all claims relating to monetary damages for Reliant's sale of electricity during January 2000 through June 2001."[74]

[74] "This settlement agreement is a result of FERC's strong enforcement actions. With today's announcement, the tally of settlements stemming from the 2000-2001 Western energy crisis that has either accepted or helped realize is now nearly $6 billion."…"The dark cloud of litigation and regulatory uncertainty has been hanging over California for five years now. That's too long. It's time for all of us to step up to the plate and resolve these remaining issues."

Plea Agreement in United States of America vs. Christopher Calger, July 14
"Defendant will waive indictment and plead guilty to an Information to be filed in this district charging a violation of 18 U.S.C. 5 371, conspiracy to commit wire fraud. Defendant agrees that he is pleading guilty because he is guilty and that the facts contained in Exhibit A (attached and incorporated herein) are true and supply a factual basis for his plea." Calger's sentence consisted of the following: maximum term of imprisonment for pleading guilty to one-count Information 5 years, followed by supervised release (for any length of imprisonment), and a maximum fine of $250,000.

Settlement, Royal Bank of Scotland: $42 Million
In addition to the settlement, 20 million dollars was returned to the bank for dropping its claims against Enron.

Order on Settlement Agreement, April 13: $500 Million
Resolved "matters and claims" against Mirant "raised in proceedings that were initiated with respect to events in the California Independent System Operator Corporation (CAISO) and California Power Exchange (CalPX) energy and ancillary services markets during the period from January 1, 2000 through June 20, 2001 as they relate to Mirant" and also addressed "a number of other dockets pending before the Commission." The settlement "consisted of: a Joint Offer of Settlement; a Joint Explanatory Statement; a Settlement and Release of Claims Agreement; two 'wraparound' Power Purchase and Sale Agreements; an Offer of Settlement involving two Reliability Must-Run Service Agreements (RMR Agreements) affecting certain Mirant Delta and Mirant Potrero generating units; and, numerous supporting documents. It "authorized and directed" CalPX and CAISO "to implement the Settlement." "Mirant will assign to the California Parties approximately $283 million in receivables claimed by Mirant to be due to it from the CAISO and CalPX, plus an additional $37 million associated with the reversal of the CalPX soft cap adjustment, for a total assignment by Mirant of approximately $320 million. Mirant will also assign to the California Parties any interest due on these assigned funds."

Settlement Agreement, CFTC vs. AEP and AEP Energy Services Inc., January 26: $60 Million
In addition to settling charges of false reporting and attempted manipulation charges for $30 million, AEP's subsidiary (AEPES) "entered into a deferred prosecution Agreement with the U.S. Department of Justice and the U.S. Attorney's Office for the Southern District of Ohio to avoid federal criminal charges. The Agreement requires AEPES to pay an additional $30 million criminal penalty to resolve an investigation into AEPES' false reporting of natural gas trades. "

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Order on Settlement Agreement, December 7: $207,500,000
Resolved "matters and claims" "arising from events in the California Independent System Operator (CAISO) and California Power Exchange (CalPX) energy and ancillary services markets during the period of January 1, 2000 through June 23, 2001 as they relate to Duke." Duke agreed to provide "$207,500,000 in monetary consideration."

Order Approving Uncontested Settlement, October 27: $996,145
Resolved "charges" against the Colorado River Commission of Nevada "that were set for hearing in the Partnership Order. In this regard, CRC will be returning $996,145, the total revenues (and not merely the profits – and thus more than would be achieved in litigation) from CRC's alleged participation in gaming practices."

Order on Settlement Agreement, October 25: $281 Million
Resolved "claims against the Dynegy Parties for refunds, price adjustments or other remedies for actions arising out of the Dynegy Parties' sale of electricity and natural gas into California during the period defined in the Settlement Agreement. Approval will avoid further costly litigation, eliminate regulatory uncertainty and bring to a close a number of disputes stemming from the California market disruptions during 2000 and 2001 as they relate to the Dynegy Parties."

Order Granting Request for Partial Waiver and Modification of Stipulation and Consent Agreement, September 22: up to $30 Million
Granted a "request for partial waiver and modification of Article IV, section 4 of the Agreement" to Reliant Energy Services, Inc., Reliant Energy Coolwater, Inc., Reliant Energy Ellwood, Inc., Reliant Energy Etiwanda, Inc., Reliant Energy Mandalay, Inc., and Reliant Energy Ormond Beach, Inc. (collectively, Reliant). Reliant explained "that the partial waiver is necessary because it cannot commit the capacity from the Etiwanda Units to SCE while still obligated to auction the same capacity over the same period of time pursuant to the Agreement. In support of its request, Reliant states that the consideration contained in the contract with SCE will enable Reliant to pay into the Deposit Fund up to $25 million in Net Value, contemplated under the Agreement. Further, it claims that granting the partial waiver will ensure that the output of the Etiwanda Units is not contracted to an out-of-state purchaser, thus helping to ensure reliability in California. The requested modification of the Agreement to postpone the auction for the Mandalay and Ellwood Units would provide Reliant the opportunity to secure a bilateral contract and avoid the risk of having another auction with no bidders."

Order Approving Contested Settlement, September 21: $14,034
"Reasonably" addressed and resolved charges against Modesto Irrigation District "that were set for hearing in the Gaming Order. In this regard, Modesto will be returning

$14,304, the total revenues (and not merely the profits – and thus more than would be achieved in litigation) from Modesto's alleged participation in gaming practices."

Order Approving Contested Settlement, September 21: $549,973
"Reasonably" addressed and resolved charges against Duke Energy Trading and Marketing Company (Duke) that were set for hearing in the Gaming and Partnership Orders. In this regard, Duke will be returning $549,973, the total revenues (and not merely the profits – and thus more than would be achieved in litigation) from Duke's participation in alleged gaming practices. Furthermore, given our determination in our order on rehearing not to expand the scope of this proceeding, the release provisions in Articles IV and V, sections 4.5 and 5.2, of the Settlement Agreement, releasing Duke from further scrutiny of its trading activities in California during the period January 1, 2000 through June 20, 2001 (with the exception of the ongoing proceedings in Docket Nos. IN03-10- 000 and EL00-95-000, et al.) is reasonable."

Plea Agreement in United States of America vs. John M. Forney, August 5
"I agree to plead guilty to count one of the captioned Superseding Indictment charging me with conspiracy to commit wire fraud, in violation of 18 U.S.C. § 371. I agree that the elements of the offense of conspiracy and the maximum penalties are as follows: (1) There was an agreement between two or more persons to commit the crime of wire fraud in violation of 18 U.S.C. § 1343; (2) I became a member of the conspiracy knowing of at least one of its objects and intending to help accomplish it; and (3) One of the members of the conspiracy performed at least one overt act for the purpose of carrying out the conspiracy."

Order Approving Contested Settlement, August 5: $3,014,942.59
"Reasonably" addressed and resolved charges against Dynegy Power Marketing, Inc.; Dynegy Power Corp.; El Segundo Power LLC; Long Beach Generation LLC; Cabrillo Power I LLC; and Cabrillo Power II LLC (collectively Dynegy) "that were set for hearing in the Gaming Order. In this regard, Dynegy will be returning $3,017,416, the total revenues (and not merely the profits – and thus more than would be achieved in litigation) from Dynegy's alleged participation in gaming practices. Furthermore, given our determination in the Gaming Order on Rehearing not to expand the scope of this proceeding, the release provision in Article IV, section 4.5, of the Settlement Agreement, releasing Dynegy from further scrutiny of its trading activities in California during the period January 1, 2000 through June 20, 2001 (with the exception of the ongoing proceedings in Docket Nos. IN03-10-000 and EL00-95-000, et al. or any investigation regarding physical withholding), is reasonable."

Order Approving Contested Settlement, August 2: $7,787,055
"Reasonably" addressed and resolved charges against Coral Power L.L.C. "that were set for hearing in the Gaming and Partnership Orders. In this regard, Coral will be returning

$7,787,055, the total revenues (and not merely the profits -- and thus more than would be achieved in litigation) from Coral's alleged participation in gaming practices. Furthermore, given our determination in our order on rehearing not to expand the scope of this proceeding, the release provision in Article IV, section 4.8, of the Settlement Agreement, releasing Coral from further scrutiny of its trading activities in California during the period January 1, 2000 through June 20, 2001 (with the exception of the ongoing proceedings in Docket Nos. IN03-10-000 and EL00-95-000, et al.), is reasonable."

Order Approving Contested Settlement, August 2: $25,000
"Reasonably" addressed and resolved charges against the City of Glendale, California, "that were set for hearing in the Gaming and Partnership Orders. In this regard, Glendale will be returning $25,000, more than the total revenues (and more than the profits – and thus more than would be achieved in litigation) from Glendale's alleged participation in gaming practices."

Order Approving Contested Settlement, August 2: $22,448
"Reasonably" addressed and resolved charges against the Northern California Power Agency" that were set for hearing in the Partnership Order. In this regard, NCPA will be returning $22,448, the total revenues (and not merely the profits – and thus more than would be achieved in litigation) from NCPA's alleged participation in gaming practices. Furthermore, given our determination in the Partnership Order on Rehearing not to expand the scope of this proceeding, the release provision in Article IV, section 4.3, of the Settlement Agreement, releasing NCPA from further scrutiny of its trading activities in California during the period January 1, 2000 through June 20, 2001 (with the exception of the ongoing proceedings in Docket Nos. IN03-10-000 and EL00-95-000, et al. or any investigation regarding physical withholding), is reasonable."

Order Approving Contested Settlement, August 2: $3,014,942.59
"Reasonably" addressed and resolved charges against Sempra Energy Trading Corporation (Sempra) "that were set for hearing in the Gaming and Partnership Orders. In this regard, Sempra will be returning $7,238,516, the total revenues (and not merely the profits – and thus more than would be achieved in litigation) from Sempra's participation in alleged gaming practices. Furthermore, given our determination in the Gaming and Partnership Orders on Rehearing not to expand the scope of these proceedings, the release provision in Article IV, section 4.8, of the Settlement Agreement, releasing Sempra from further scrutiny of its trading activities in California during the period January 1, 2000 through June 20, 2001 (with the exception of the ongoing proceedings in Docket Nos. IN03-10-000 and EL00-95-000, et al.), is reasonable."

Order on Settlement Agreement, July 2: $1.4 Billion
Resolved the issues "concerning Williams in Docket Nos. EL00-95, et al., EL00-98, et al. (the Refund Proceeding) and EL03-179- 000 (the Show Cause Proceeding); all issues as

to Williams in Docket Nos. IN01-3-000, IN03-10-000, and PA02-2-000; and, as between Williams and the Commission's Office of Market Oversight and Investigation (OMOI) staff, all issues under Docket No. PA03-11-000. The Settlement provides an opportunity to other parties to the Refund Proceeding to join or 'opt into' the Settlement and become 'Settling Participants.' The Settlement also seeks to resolve any other claims and issues that the Settling Parties, and those parties that become Settling Participants, may have against Williams for refunds, price adjustments, or other remedies arising from Williams' sales of electricity and natural gas into California during the periods defined in the Settlement Agreement. The Settlement is based upon a calculation and allocation of Williams' total refund amounts associated with its spot sales into markets operated by the California Independent System Operator Corporation (CAISO) and the California Power Exchange (CalPX) for the period from October 2, 2000 to June 20, 2001 (the Refund Period). It also resolves all claims among the Settling Parties against Williams for the May 1, 2000–October 1, 2000 'Pre-refund Period.' "The three payments covered October 2, 2000–January 17, 2001 ($107.2 million); January 18–June 20, 2001 ($10.5 million); May 1-October 1, 2000 ($8 million). The agreement also "provides for the payment of $11.5 million to PG&E, SCE and SDG&E for the release of certain existing and potential civil and regulatory claims against Williams. Finally, the Settlement Agreement creates a 'Surplus Account' of $10 million funded by Williams and held in escrow until the refund claims of all non-settling participants are finally resolved and refunds to them, if any, are paid, or until such time as the Commission issues an order allowing Williams to terminate the account and withdraw any remaining funds."

Consent Order of Permanent Injunction and Other Relief against Defendant Enron Corp., May 28: $35 Million

"1: Enron is permanently restrained, enjoined and prohibited from directly or indirectly: manipulating or attempting to manipulate the market price of any commodity, in interstate commerce, or for future delivery on or subject to the rules of any registered entity, including any contract market in violation of Sections 6(c), 6(d), and 9(a)(2) of the Act, 7 U.S.C. $5 9, 13b, and 13(a)(2); 2. violating Section 4(a) of the Act, 7 U.S.C. 5 6(a), by offering to enter into, entering into, executing, confirming the execution of any transaction in, or conducting any office or business anywhere in the United States, its territories or possessions, for the purpose of soliciting or accepting any funds from any person in connection with a contract for purchase or sale of a commodity for future delivery (other than a contract made on or subject to the rules of a board of trade, exchange, or market located outside the United States, its territories, or possessions) unless: a) such transaction is conducted on or subject to the rules of a board of trade which the Commission has designated "a contract market;" b) such contract is executed or consummated by or through a member of such contract market; and c) such contract is evidenced by a written record showing the date, the parties to the contract and their addresses, the property covered and its price, and the delivery terms. C. A civil monetary penalty of $35 million is hereby imposed on Enron."

Order Instituting Proceeding Pursuant to Sections 6(c) and 6(d) of the Commodity Exchange Act, Making Findings and Imposing Remedial Sanctions, May 10: $25,000
"1. Knauth shall cease and desist from violating Section 4c(a)(A) and (B) of the Act, 7 U.S.C. $6c(a)(A) and (B) (1 994); 2. Knauth, beginning on the second Monday after the date of the Order accepting this Offer, shall be prohibited for one year from trading for his own account, for any account in which he has a direct or indirect interest, or for any other account, on any registered entity, as that term is defined in Section 1 a(29) of the Act, 7 U.S.C. 5 la(29), and all registered entities shall refuse Knauth all privileges thereon for that period; 3. Knauth shall liquidate all futures and options positions held by him or on his behalf, or in which he has any beneficial interest, before the commencement of the denial of his trading privileges; 4. Knauth shall pay a civil monetary penalty of Twenty-five Thousand Dollars ($25,000) within ten (10) days of the date of the Order."

Order Approving Settlement Agreement, May 6: $60,000
Resolved "the matters at issue related only to Modesto Irrigation District in Enron Power Marketing, Inc. and Enron Energy Services Inc., et al., 103 FERC ¶ 61,346 (2003) (Enron)."

Order Approving Contested Settlement Agreement, April 19
This settlement "represents a reasonable resolution of the proceeding insofar as Avista is concerned and should be approved. The record in this proceeding indicates that: (1) Avista Utilities and Avista Energy did not knowingly engage in or facilitate the improper trading strategies at issue here; (2) there was no evidence that Avista Utilities or Avista Energy engaged in efforts to manipulate Western energy markets during 2000 and 2001; and (3) there was no indication that Avista Utilities or Avista Energy withheld relevant information from the Commission's inquiry into Western energy markets from 2000 and 2001 in Docket No. PA02-2-000. Moreover, the remedies agreed to in the Settlement represent a reasonable resolution of any concerns raised in this proceeding as to Avista's conduct."

Order Approving Contested Settlement Agreement, March 26: $1,300,000
"Reasonably" addressed and resolved charges against Powerex Corporation (Powerex) "that were set for hearing in the Gaming and Partnership Orders. In this regard, Powerex will be returning $1,300,000.00, the total revenues (and not merely the profits - - and thus more than could be achieved in litigation) from Powerex's participation in alleged gaming practices."

Order Approving Contested Settlement Agreement, March 8: $75,975
"Reasonably" addressed and resolved charges against Aquila Merchant Services, Inc. (Aquila) "that were set for hearing in the Gaming and Partnership Orders. In this regard, Aquila will be returning $75,975.42, the total revenues (and not merely the profits -- and

thus more than would be achieved in litigation) from Aquila's participation in alleged gaming practices."

Order Approving Contested Settlement Agreement, March 8: $857,089
"Reasonably" addressed and resolved charges against Morgan Stanley Capital Group Inc. "that were set for hearing in the Gaming and Partnership Orders. In this regard, MSCG will be returning $857,089.00, the total revenues (and not merely the profits—and thus more than could be achieved in litigation) pertaining to MSCG's alleged participation in the gaming practices of Cutting Non-Firm and Circular Scheduling."

Order Approving Contested Settlement Agreement, March 8: $67,745
"Reasonably" addressed and resolved charges against PacifiCorp "that were set for hearing in the Gaming Order. In this regard, PacifiCorp will be returning $67,745.00, which is the total revenues (and not merely the profits—and thus more than could be achieved in litigation) associated with PacifiCorp's alleged participation in the gaming practice of Wheel Out. Furthermore, given our determination in our order on rehearing not to expand the scope of this proceeding, the release provision in Article IV, section 4.3, of the Settlement Agreement, releasing PacifiCorp from further scrutiny of it trading activities in California during the period January 1, 2000 through June 20, 2001, is reasonable."

Order Approving Contested Settlement Agreement, March 8: $12,730
"Reasonably" addressed and resolved charges against Portland General Electric Company "that were set for hearing in the Gaming Order. In this regard, Portland will be returning $12,730.00, the total revenues (and not merely the profits—and thus more than could be achieved in litigation) associated with Portland's alleged participation in the gaming practice of Cutting Non-Firm."

Order Approving Contested Settlement Agreement, March 4: $83,373
"Reasonably" addressed and resolved charges against Idaho Power "that were set for hearing in the Gaming Order. In this regard, Idaho Power will be returning $83,373.00, the total revenues (and not merely the profits—and thus more than could be achieved in litigation) associated with Idaho Power's alleged participation in the gaming practice of Circular Scheduling. Furthermore, given our determination in our order on rehearing not to expand the scope of this proceeding, the release provision in Article IV, section 5, of the Settlement Agreement, releasing Idaho Power from further scrutiny of its trading activities in California during the period January 1, 2000 through June 20, 2001 (with the exception of the ongoing proceedings in Docket Nos. IN03-10-000, EL03-180-000, et al., and EL00-95-000, et al.) is reasonable."

Order Approving Contested Settlement Agreement, March 4: $836,000
"Reasonably" addressed and resolved charges against Reliant that were set for hearing in the Gaming Order. In this regard, Reliant will be returning $836,000.16, the total reve-

nues (and not merely the profits—and thus more than could be achieved in litigation) associated with Reliant's alleged participation in the gaming practice of Double Selling. Furthermore, given our determination in our order on rehearing not to expand the scope of this proceeding, the release provision in Article IV, section 4.5, of the Settlement Agreement, releasing Reliant from further scrutiny of its trading activities in California during the period January 1, 2000 through June 20, 2001 (with the exception of the ongoing proceeding in Docket No. IN03-10-000) is reasonable."

Order Approving Contested Settlement Agreement, January 22: $6,300
"Reasonably" addressed and resolved charges against the City of Redding, California, "that were set for hearing in the Gaming and Partnership Orders. In this regard, Redding will be returning $6,300.00, the total revenues (and not merely the profits—and thus more than could be achieved in litigation) from Redding's participation in alleged gaming practices."

Order Approving Uncontested Settlement, January 22: $45,240
Resolved "all issues related to AEPSC that were set for hearing in Docket No. EL03-137-000 in the Commission's Order to Show Cause Concerning Gaming and/or Anomalous Market Behavior."

Order Approving Contested Settlement Agreement, January 22: $17,092
"Reasonably" addressed and resolved charges against Puget Sound Energy, Inc. "that were set for hearing in the Show Cause Order. In this regard, Puget will be returning $17,092, the total revenues (and not merely the profits – and thus more than could be achieved in litigation) from Puget's participation in alleged gaming practices."

Order Approving Contested Settlement, January 22: $45,230
"Reasonably" addressed and resolved charges against Williams Energy Marketing & Trading Company (Williams Power Company, Inc.) "that were set for hearing in the Gaming Order. In this regard, Williams will be returning $45,230.00, the total revenues (and not merely the profits - - and thus more than could be achieved in litigation) from Williams's participation in alleged gaming activities."

Order Approving Uncontested Settlement, January 22: $27,972
Resolved "the matters at issue" with San Diego Gas & Electric Company in Docket No. EL03-172-000.

SEC v. Richard A. Causey, Civil Action No. H-04-0284, January 22
"The defendant, Richard A. Causey, the former Chief Accounting Officer of Enron, together with other Enron executives and senior managers, engaged in a wide-ranging scheme to defraud in violation of the federal securities laws by manipulating Enron's pub-

licly reported financial results and making false and misleading statements about Enron's businesses."[75]

Plea Agreement in United States of America vs. Andrew S. Fastow, January 14
"Defendant will plead guilty to count two of the above-captioned Superseding Indictment, charging a violation of 18 U.S.C. § 371, conspiracy to commit wire fraud. Defendant also will plead guilty to count five of the above captioned Superseding Indictment, charging a violation of 18 U.S.C. § 371." Mr. Fastow's sentence consisted of the following "a. Maximum term of imprisonment: 5 years (18 U.S.C. § 371); b. Minimum term of imprisonment: 0 years (18 U.S.C. § 371); c. Maximum term of supervised release: 3 years, to follow any term of imprisonment; if a condition of release is violated, Defendant may be sentenced to up to two years without credit for pre-release imprisonment or time previously served on post release supervision (18 U.S.C. §§ 3583 (b) & (e)); and d. Maximum fine: $250,000 or twice the gain/loss (18 U.S.C. § 3571(b)(3))."

2003

Order Approving Stipulation and Consent Agreement, December 19: $2.5 Million
Addressed "allegations" with Duke Energy Trading and Marketing, L.L.C. and Duke Energy North America, LLC (collectively, "Duke Energy") "regarding potentially manipulative bidding practices in the California markets, known as economic withholding, as well as physical withholding of generation supplies. It also terminates and resolves any issues before the Commission involving Duke's 'wash' trading of natural gas." In addition, OMOI affirmed "its initial finding in August and finds no credible evidence that Duke intentionally withheld generation to influence prices in California's power market."

Order Approving Uncontested Partial Settlement, December 18: $8.5 Million
FERC retained "the right to investigate" Portland General Electric's "rates, terms, and conditions under the just and reasonable and not unduly discriminatory or preferential standard of Section 206 of the Federal Power Act."

Order on Contested Settlement, November 14: $1.7 Billion
Addressed market power issues raised by the Public Utilities Commission of the State of California which alleged "that El Paso Pipeline and El Paso Merchant, acting individually or in concert, manipulated California energy markets by withholding pipeline transportation capacity to drive up natural gas prices in the periods immediately before and during the California energy crisis of 2000-2001. In addition, the complaint alleged that the

[75] http://www.sec.gov/litigation/complaints/comp18551.htm

award of three transportation contracts (El Paso Contracts) by El Paso Pipeline to its marketing affiliate, El Paso Merchant, was unduly preferential as the result of an intra-corporate sharing of information, in violation of the Commission's Standards of Conduct for Pipelines With Marketing Affiliates (Standards of Conduct or Affiliate Standards)."

Order Approving Stipulation and Consent Agreement, October 2: "could total $50 million"
Addressed "allegations regarding potentially manipulative bidding practices in the California markets, including economic withholding, physical withholding of generation, and a FERC staff finding that Reliant attempted to manipulate prices at an electricity trading hub near the California border." Reliant agreed to pay $15 million into a deposit fund account established by the United States Treasury on behalf of the Commission for ultimate distribution for the benefit of California and western electricity consumers ("Deposit Fund"); $5 million into the Deposit Fund on September 30, 2005 and an additional $5 million into the Deposit Fund on September 30, 2006." It agreed to subject its electricity sales "in the United States portion of the Western Electricity Coordinating Council (WECC)" to review. FERC's press release stated: "The proceeds of the settlement to resolve pending cases stemming from a FERC staff investigation of the West's energy problems could total $50 million. The settlement agreement, FERC's largest ever, addresses allegations regarding potentially manipulative bidding practices in the California markets, including economic withholding, physical withholding of generation, and a FERC staff finding that Reliant attempted to manipulate prices at an electricity trading hub near the California border."

Order Approving Contested Settlement, July 23: $15.5 Million
Resolved "the contested issue of whether certain parties were improperly excluded from the distribution of the $15.5 million El Paso Electric has agreed to refund. This order benefits customers because it provides for refunds, and ensures the distribution of the refunds to California ratepayers who on the record before us are entitled to the refunds."

Order Approving Stipulation and Consent Agreement, July 18: $3 Million
Required "that for a period of six months following the date of issuance of this order, BP Energy's sales of electricity in the United States portion of the Western Electricity Coordinating Council (WECC) will be subject to review by the Commission and potential refunds. Specifically, BP Energy agrees to provide monthly reports to the Commission's Office of Market Oversight and Investigation (OMOI), providing data on all completed electricity trades in the WECC on a transaction-by transaction basis. It also agreed that OMOI "may investigate BP Energy's trading policies." BP contributed "$3,000,000 to fund low-income home energy assistance programs for customers in California and Arizona."

Arrest of John M. Forney, June 3

The FBI arrested former trader Forney; he was charged with eleven counts of fraud and conspiracy.

Plea Agreement in United States of America vs. Jeffrey S. Richter, February 4
"I agree to waive indictment and plead guilty to both counts of the above-captioned information, charging me in count one with conspiracy to commit wire fraud in violation of 18 U.S.C. 5 371, and in count two with making a false statement to a government agency in violation of 18 U.S.C. 9 1 001. As to count one, 1 agree that the elements of the offense and the maximum penalties are as follows: (1) there was an agreement between two or more persons to commit the crime of wire fraud, in violation of 18 U.S.C. 9 1343; (2) I became a member of the conspiracy knowing of at least one of its objects and intending to help accomplish it; and (3) one of the members of the conspiracy performed at least one overt act for the purpose of carrying out the conspiracy." Mr. Richter's sentence consisted of the following: "a. Maximum prison sentence 5 years; b. Maximum fine $250,000; c. Maximum supervised release term 3 years; d. Mandatory special assessment $100; and e. Restitution Up to the amount of the loss."

Order Approving Stipulation and Consent Agreement, January 31: $13.8 Million
Reliant Energy agreed "to pay $13.8 million for limiting the amount of power it offered to the California Power Exchange (CalPX) for delivery on June 21 and 22, 2000. The payment will go directly to CalPX customers for those two days."

2002

Dismissal of claims against Kirkland & Ellis, December 23
U.S. District Court Judge Melinda Harmon dismissed claims in the class-action lawsuit filed by Enron shareholders. The law firm represented limited partnerships used by Andrew Fastow.

Plea Agreement in United States of America vs. Timothy N. Belden, October 17
"Defendant will plead guilty to count two of the above-captioned Superseding Indictment, charging a violation of 18 U.S.C. § 371, conspiracy to commit wire fraud. Defendant also will plead guilty to count five of the above captioned Superseding Indictment, charging a violation of 18 U.S.C. § 371, conspiracy to commit wire and securities fraud. Defendant agrees that he is pleading guilty because he is guilty, and that the facts contained in Exhibit A (attached and incorporated herein) are true and supply a factual basis for his pleas. Counts two and five each carry the following statutory penalties, which Defendant understands will be imposed consecutively: a. Maximum term of imprisonment: 5 years (18 U.S.C. § 371); b. Minimum term of imprisonment: 0 years (18 U.S.C. § 371); c. Maximum term of supervised release: 3 years, to follow any term of imprisonment; if a

condition of release is violated, Defendant may be sentenced to up to two years without credit for pre-release imprisonment or time previously served on post release supervision (18 U.S.C. §§ 3583 (b) & (e)); and d. Maximum fine: $250,000 or twice the gain/loss (18 U.S.C. § 3571(b)(3)).”

2001

Order Approving Stipulation and Consent Agreement, April 30: $8 Million
Market Oversight and Enforcement, Williams and AES Southland agreed to this “compromise and settlement of disputed claims” for RMR and Tolling Agreement violations of Section 205 of the Federal Power Act. Williams refunded 8 million dollars.