

Senate Democratic Policy Committee Hearing

**“Lessons from Enron:
An Oversight Hearing on Gas Prices and Energy Trading”**

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THE WESTERN POWER CRISIS OF 2000-01:

**HOW THE PUBLIC WAS EXPLOITED
AND
LEGAL PROTECTIONS FOR
ELECTRIC CONSUMERS FAILED**

Good afternoon and thank you for the opportunity to appear before you today. My name is Eric Christensen, Assistant General Counsel for the Public Utility District No. 1 of Snohomish County, Washington (“Snohomish PUD” or “the District”). In this testimony, I would like to explain how the electric ratepayers who I represent were devastated as wholesale electric prices spiraled out of control across the West during the power crisis of 2000-01. I would also like to summarize our efforts to obtain justice on behalf of our ratepayers, which has turned into a five-year legal odyssey and may continue for many more years. Our search for justice has encountered many legal and institutional barriers, which I would like to highlight, as they bear on the Committee’s work today.

Although the State of Washington wisely resisted the siren call of electric deregulation, electric consumers in our region, as in the rest of the West, nonetheless suffered extreme hardship as California’s newly-deregulated electric markets plunged into chaos from May 2000 until June 2001. Since that time, a huge volume of evidence has come to light demonstrating that the crisis was substantially driven by Enron and its imitators, who created complex schemes with colorful names like “Death Star,” “Fat Boy,” and “Project Big Tuna,” that were designed to exploit weaknesses in new market structures. These schemes resulted in a meteoric rise in prices beginning in May 2000 that lasted more than a year, until June 2001, when federal regulators enacted long-overdue price caps and prices quickly returned to pre-crisis levels.

Since that time, Snohomish County PUD has been engaged in a protracted legal battle to obtain justice for our ratepayers, who suffered rate increases of nearly 60% because of the crisis. We have encountered numerous obstacles in this effort, including difficulties

in applying a statute, the Federal Power Act, which was designed to comprehensively regulate electric power as a necessity, to a new model where electricity is treated as a commodity. These problems have been greatly compounded by the hesitancy of the Federal Energy Regulatory Commission (“FERC”) to fully deploy the tools available to it and the voluntary withdrawal of commodities regulators from significant portions of the field.

ABOUT SNOHOMISH COUNTY PUD

Snohomish County PUD was formed by a vote of the people of Snohomish County in 1936 based upon the promise of a cost-based, publicly-owned electric power system. The District is the second-largest publicly-owned utility in Washington State and the nation’s 12th largest publicly-owned utility. We serve approximately 300,000 homes, businesses, and schools over a system encompassing 5,797 miles of electric lines and a service area of 2,200 square miles in Snohomish County, Washington, and on neighboring Camano Island.

As a consumer-owned utility, the District is exempt from federal regulation. Nonetheless, the District is dependent upon effective federal regulation of interstate transmission and the wholesale power markets because it depends upon generation resources remote from the county for approximately 90% of its supply. Specifically, we must purchase power directly on the wholesale market to cover the difference between our loads, the power we receive from the Bonneville Power Administration (“BPA”), and our own generation located at the Henry M. Jackson Hydroelectric Project in Snohomish County. Currently, about 80% of our power supply comes from BPA, but we are indirectly dependent on the wholesale markets because BPA must purchase power on the markets to cover the difference between what it can generate from its own resources and its commitments to serve Northwest loads.

In the nearly six decades since the District has operated as an electric utility, the District has consistently delivered on the promise of cost-based, publicly-owned power, providing its citizens-owners with highly reliable service at rates among the lowest in the nation. Our ability to provide reliable and inexpensive service, however, was shattered by the disintegration of the Western wholesale power markets in 2000-01. In the absence of effective mechanisms to ensure effective competition in electricity markets, and to provide effective remedies to consumers when those markets fail, our ability to continue to meet the promise of reliable and inexpensive electric service in the future will continue to be compromised.

THE WESTERN POWER CRISIS AND THE ABUSE OF MARKET POWER

It is now obvious that, during 2000-01, a devil’s brew of Enron-style “gaming” of the market rules in California and withholding of generation, combined with ineffective or non-existent regulatory oversight, combined to drive electric prices across the West into the stratosphere. In the Pacific Northwest, during the “crisis period” from May 2000 to June 2001, prices on both the short-term and long-term markets were regularly five to ten, and at times 100 times above the long-term historical average in the region.

A. Prices Reach Historical Unprecedented Levels

Wholesale power prices in the Pacific Northwest historically have averaged about \$24 per MWh and since FERC's belated intervention in mid-2001, prices have generally returned to near the historical average. However, during the crisis period, prices for short-term power in the Pacific Northwest were regularly above \$100/MWh and at times reached \$500/MWh. In the first two weeks of December 2000, spot prices increased to stratospheric levels. For several days the price hovered around \$1000/MWh. Spot prices during that period as recorded by Dow Jones reached as high as \$3300/MWh. In fact, during much of late 2000 and early 2001, spot market prices in the Pacific Northwest were the highest in the country, turning the historical pattern on its head.¹ This would be like finding that the price of gasoline at your local service station went overnight from \$2 per gallon to \$8 per gallon, then to \$40 per gallon, with spikes reaching \$400 per gallon. As a load-serving entity, Snohomish is unlike an ordinary consumer of gasoline because we cannot simply choose to walk or ride a bike when prices get too high. We have a legal obligation to ensure an adequate power supply to serve our customers. Accordingly, we cannot simply say "no" even when the prices demanded by power marketers like Enron are outrageous, as they were during the 2000-01 crisis period.

B. Academic Economists Conclude Exercise of Market Power Is At The Core of The Crisis

Although for years power marketers such as Enron claim these enormous price increases were caused by rapid demand growth, a drought limiting hydropower capacity, and limited generation capacity in California, there is now a strong consensus among economists who have studied the crisis that it was caused in substantial part by the exercise of market power, gaming of market rules, and other Enron-style abuses. For example, Stanford energy economist Dr. Frank Wolak concluded that, during the crisis, "suppliers to California were able to exercise market power at unprecedented levels," resulting in "prices vastly in excess of competitive levels during the period May 2000 to June 2001."² Similarly, economists Paul Joskow and Edward Kahn examined each of the causes for high prices that have been identified – high natural gas costs, pollution control costs, etc. – and concludes that the huge run-up in prices during the summer of 2000 cannot be explained by these "market fundamentals." On the contrary, the study concludes, "The evidence that there was a significant market power effect reflected in market prices in California during Summer 2000 is overwhelming. Indeed, no comprehensive studies exist that come to a different conclusion."³

¹ Hal Bernton, "NW Utilities Get Socked the Hardest," *Seattle Times*, (Apr. 13, 2001).

² Frank A. Wolak, "Lessons from the California Electricity Crisis," Center for the Study of Energy Markets, CSEM WP 110 (April 2003) (available at www.ucei.org).

³ Paul Joskow & Edward Kahn, "A Quantitative Analysis of Pricing Behavior In California's Wholesale Electricity Market During Summer 2000: The Final Word," Feb. 4, 2002 (available at <http://econ-www.mit.edu/faculty/pjoskow/papers.htm>).

C. FERC's Staff Investigation Documents Rampant Abuses

FERC Commissioners have variously described the markets during the 2000-01 Western power crisis as “wildly dysfunctional”⁴ and in a “meltdown.”⁵ These conclusions are based upon an extensive study of what happened during 2000-01, and the accumulation of an enormous volume of materials related to the market crisis. The Commission’s expert staff, in cooperation with outside experts such as Dr. Robert Pindyck, who literally “wrote the book”⁶ on econometric analysis, investigated the root causes of the crisis for more than a year. On March 26, 2003, FERC issued a comprehensive report⁷ documenting the extensive abuses of market rules, exercise of market power, and fraudulent power transactions that took place during the crisis period, and demonstrating that Enron played a central role in all these abuses.

With respect to Enron, the Staff Report concluded that:

- “The preponderance of evidence reviewed by Staff during this investigation indicates that Enron and its affiliates intentionally engaged in a variety of market manipulation schemes that had profound adverse impacts on market outcomes.”⁸
- “[T]hese now infamous trading strategies have adversely affected the confidence of markets far beyond their dollar impact on spot prices. Even those trading strategies that are not anticompetitive have been viewed by customers as clever exploitations of overly complex rules by companies that do not account for the impact of their decisions on prices and customers.”⁹
- “Enron, as a corporate entity, displayed great eagerness to experiment with all aspects of market rules and protocols in an effort to ‘game the system’ or to simply provide false information.”¹⁰
- “Enron’s corporate culture fostered a disregard for the American energy customer.”¹¹
- “[A] fundamental aspect of some of the Enron trading strategies was the deliberate use of false information. A market cannot operate properly without accurate information.”¹²

⁴ *San Diego Gas & Electric Co., et al.*, 96 FERC ¶ 61,120 at p. 61,521_ (2001) (Massey, Comm’r, concurring in part).

⁵ *San Diego Gas & Electric Co., et al.*, 105 FERC ¶ 61,066 at P 42 (2003).

⁶ Robert S. Pindyck & Daniel L. Rubinfeld, *Econometric Models and Forecasts* (4th ed. 1998).

⁷ FERC Staff, *Fact-Finding Investigation of Potential Manipulation of Electric and Natural Gas Prices*, Docket No. PA02-2-000, Final Report on Price Manipulation in Western Markets (Mar. 2003) (“Final Staff Report”).

⁸ Final Staff Report at VI-1.

⁹ Final Staff Report at VI-3.

¹⁰ Final Staff Report at VI-3.

¹¹ Final Staff Report at VI-3.

¹² Final Staff Report at VI-3.

- Enron’s “load shift” strategy was “by Enron’s own admission . . . an explicit attempt to manipulate prices.”¹³
- Enron’s “ricochet” or “megawatt laundering” scheme, which was aimed at forcing the Cal-ISO to pay inflated spot market prices in order to avoid blackouts, “was not [a] legitimate [form of] arbitrage, but was an exercise of market power,” and constitutes “anomalous market behavior.”¹⁴
- Enron’s trading strategies using false information “are all attempts to fabricate transactions for profit and to change market outcomes.”¹⁵
- Staff uncovered documents indicating that Enron engaged in approximately 100 “Fat Boy” transactions, which involved “artificially increasing (‘inc-ing’) load on a schedule it submits to the Cal ISO” so that Enron could be paid “for the excess generation at the clearing price established in the real-time market.”¹⁶
- Fat Boy involved “the deliberate submission of false information and falls within the scope of the antigaming provision because it necessarily involves taking ‘unfair advantage’ of the Cal ISO’s rules and may otherwise have made the ‘ISO markets vulnerable to price manipulation to the detriment of their efficiency.’”¹⁷
- Enron engaged in strategies such as “Death Star” and “wheel out” that were “designed to generate payments for relieving congestion by fooling the Cal ISO’s computerized congestion management program” and involved receiving payments for congestion relief even though “no energy is actually put onto the grid or taken off of the grid.”¹⁸ These strategies “not only involve gaming, but also may fall into the category of anomalous market behavior because they are departures from normal behavior in competitive markets and lead to unusual or unexplained market outcomes.”¹⁹
- Enron engaged in the “Get Shorty” scheme, which involved “the deliberate submission of false information to the Cal ISO” concerning the supply of ancillary services and that Enron may have colluded with other entities to coordinate this scheme.²⁰ “Get Shorty” “makes the Cal ISO or Cal PX markets vulnerable to price manipulation.”²¹
- Enron sold non-firm energy as firm energy, a scheme involving “deception, the deliberate submission of false information, and actions that NERC expressly prohibited,” as well as “compromis[ing] reliability because non-firm energy

¹³ Final Staff Report at VI-12.

¹⁴ Final Staff Report at VI-18.

¹⁵ Final Staff Report at VI-19.

¹⁶ Final Staff Report at VI-20 & n. 26.

¹⁷ Final Staff Report at VI-24.

¹⁸ Final Staff Report at VI-26.

¹⁹ Final Staff Report at VI-30.

²⁰ Final Staff Report at VI-31-32.

²¹ Final Staff Report at VI-34.

improperly represented to be firm energy is not backed up with reserve generation by the supplying party.”²²

- Enron employed a strategy of “partnerships or alliances” with which it “gained market share, acquired commercially sensitive data, shared decisionmaking authority, and promoted reciprocal dealings and equity sharing of profits.”²³ The aim of this strategy was, according to internal Enron documents, to “gain[] control of a variety of small resources or capabilities around the west.”²⁴ Enron then used its control of these assets to carry out its market manipulation strategies, such as “Fat Boy,” where it instructed its partners to “generate or import and fake, or increase, load,” or, in different market circumstances, to implement “Thin Man,” where the partner was instructed to “artificially reduce load and export.”²⁵ This collusive strategy involved trades “based on fictitious information” and allowed Enron to significantly increase its market share of generation without the required disclosure of this control to the Commission.²⁶
- “The preponderance of evidence reviewed by Staff during this investigation indicates the Enron and its affiliates intentionally engaged in a variety of market manipulation schemes that had profound adverse impacts on market outcomes.”²⁷
- Enron devised the EnronOnline (“EOL”) market platform, which operated on “no fixed rules” and allowed Enron “an infinite ability to manipulate what was posted,” so that Enron could “post any price it wanted.”²⁸ Wash trading was “commonplace on the EOL trading platform between January 2000 and November 2001” and Enron with “relative ease” used EOL to manipulate the market and deceive EOL users.²⁹ EOL allowed Enron to “earn monopoly profits . . . at the expense of counterparties” allowing Enron to accumulate enormous trading profits.³⁰
- In addition, Enron’s gas traders “successfully manipulated the physical natural gas markets,”³¹ a critical factor in this case because “markets for natural gas and electricity in California are inextricably linked,” and “dysfunctions in each fed off one another during the crisis.”³²
- These manipulations produced market prices that “are not the result of competitive conditions and would not produce just and reasonable electric

²² Final Staff Report at VI-34.

²³ Final Staff Report at VI-37.

²⁴ Final Staff Report at VI-40 (*citation omitted*).

²⁵ Final Staff Report at VI-40-41.

²⁶ Final Staff Report at VI-42-43.

²⁷ Final Staff Report at VI-43.

²⁸ Final Staff Report at VII-14.

²⁹ Final Staff Report at VII-14-15.

³⁰ Final Staff Report at VIII-1.

³¹ Final Staff Report at IX-2.

³² *Id.* at ES-1.

prices.”³³ Furthermore, these dysfunctional prices affected both forward prices³⁴ and prices across the Western Interconnection.³⁵

After reviewing these findings, FERC concluded that Enron “engaged in a range of unjust and unreasonable practices,”³⁶ including “gaming in the form of inappropriate trading strategies in the electric markets”³⁷ which resulted in “unjust and unreasonable rates,”³⁸ and “not only exploitation, but also abuse, overreaching, and gouging.”³⁹

D. Enron Trader Tapes Document The Abuses

The release of taped conversations of energy traders during the crisis strongly corroborate the findings of academic economists. To hear Enron traders laughing about ripping off “Grandma Millie” or “stealing” from California “to the tune of a million or two a day” leaves little doubt that Enron traders knowingly and intentionally conspired to bilk consumers across the West. Similarly, taped conversations of Reliant energy traders catch them in the act of withholding generation from the market in order to drive up forward prices.

E. Criminal Guilty Pleas of Enron Traders Corroborate These Findings

These findings are also corroborated by the criminal guilty pleas of Enron’s top energy traders. In his plea agreement, Timothy Belden, the former head of Enron’s Western power trading operation, admits that “Beginning in approximately 1998. . . I and other individuals at Enron agreed to devise and implement a series of fraudulent schemes through these [Western] markets.”⁴⁰ He also admits that Enron received inflated payments from the ISO “monthly during the course of the conspiracy, from 1998 to 2001.”⁴¹

Mr. Belden’s plea leaves no doubt that the schemes involved fraud, misrepresentation and abuse of market rules:

The schemes required us to submit false information to the PX and ISO . . .
Among other things, we knowingly and intentionally filed energy schedules that

³³ Final Staff Report at II-1.

³⁴ Final Staff Report at Chapter V.

³⁵ *Id.* at ES-10.

³⁶ 106 FERC ¶ 61,024 at P 2.

³⁷ 106 FERC at P 2.

³⁸ 106 FERC at P 9.

³⁹ 106 FERC at P 29.

⁴⁰ Plea Agreement, United States v. Belden, No. CR-02-0313 MJJ at 3 (U.S. Dist. Ct., N.D. Cal., issued Oct. 17, 2002).

⁴¹ *Id.* at 4.

misrepresented the nature of electricity we proposed to supply, as well as the load we intended to serve. We intentionally filed schedules designed to artificially increase congestion on California transmission lines. We were paid to "relieve" congestion when, in fact, we did not relieve it. We exported and then imported amounts of electricity generated within California in order to receive higher, out-of-state prices from the ISO when it purchased "out-of market." We scheduled energy that we did not have, or did not intend to supply.⁴²

Jeffrey Richter, who became manager of Enron's California Short Term trading desk in January 2000, similarly admits that, upon assuming his duties at the California desk:

In 2000, I and other individuals at Enron agreed to devise and implement fraudulent schemes through these markets. . . . The schemes required us to submit false information to the ISO Among other things, we knowingly and intentionally filed energy schedules and bids that misrepresented the amount and geographic location of the load we intended to serve. . . . We also submitted bids to supply ancillary services that we did not have, or did not intend to supply, in the ISO's day-ahead ancillary services market. The bids we submitted contained fabricated information regarding the source and nature of the ancillary services we proposed to supply to the ISO.⁴³

Finally, John Forney, who was an Enron power trader from 1997 to 2000, and who managed the West Power Real Time Trading Desk beginning in June 1999, admitted in his guilty plea to submitting fraudulent schedules, bids, and other information, and identified six specific schemes he had participated in: Selling Firm as Non-Firm, Non-Firm Export, Get Shorty, Death Star, Ricochet, and scheduling energy over off-line interties.⁴⁴ Forney then admitted to participating in a number of specific fraudulent schemes in 2000 and 2001.⁴⁵

THE ELECTRICITY CRISIS PRODUCES AN ECONOMIC CRISIS

Not surprisingly, the historically unprecedented increase in wholesale electric power prices caused substantial increases in electric rates for businesses, industries, and ordinary residential consumers all across the West. The evidence shows that the electricity crisis, combined with the terrorist attacks on September 11, 2001, pushed the economy of the Western states from robust growth to deep recession. In this regard, Snohomish PUD's experience is typical. Although Snohomish has held its non-power costs steady, below the rate of inflation, for several years, the rapid rise in wholesale

⁴² *Id.* at 3.

⁴³ Plea Agreement, United States v. Richter, No. CR-03-0026 MJJ at 3-4 (U.S. Dist. Ct., N.D. Cal., issued Feb. 4, 2003).

⁴⁴ Plea Agreement, United States v. Forney, No. CR-03-0178 MJJ at 2-5 (U.S. Dist. Ct., N.D. Cal., issued Aug. 4, 2005).

⁴⁵ *Id.* at 5-6.

power costs during the crisis forced it to raise its rates by an aggregate of nearly 60%. Despite Snohomish's legal battle on their behalf, now well into its fourth year, Snohomish's ratepayers have seen only a single five percent rate reduction.

Rate increases of this magnitude inevitably and seriously affect the economy and the lives of individuals. Snohomish County businesses, ranging from the smallest to the largest on our system, have been forced to lay off employees, curtail production, and raise prices in order to cope with spiraling electric rates. Schools, hospitals, and other agencies providing essential public services have been forced to cut budgets in other areas in order to pay rapidly increasing power bills. The District's residential customer-owners will see their disposable income cut by hundreds of dollars per year.

Snohomish's poorest customers have been forced to live with inadequate heat and light, and required to dip into savings and forego essentials such as health insurance and day care in order to pay rapidly escalating electric bills. I personally spoke to one residential customer who received a bill of more than \$600 in February 2001, more than double her highest previous bill. Only a few days later, her husband was laid off after twelve years at Boeing. The same customer is caring for her elderly and ailing mother, and on that same February day her mother received a bill for nearly \$750. Because her mother lives on a Social Security check of approximately \$1400 per month, and pays nearly \$500 per month for medications, these enormous bills have forced the family to forego necessities such as health insurance and new dentures.

One indication of the strain the crisis has placed on ordinary electric consumers is our rate of disconnects – that is, households that are disconnected because they are unable to pay their power bills. As rate increases caused by the crisis hit Snohomish County, we saw our disconnect rate increase by approximately 50% over the year before, reaching by far the highest rate ever experienced in the nearly six decades we have operated as an electric utility.

These rapid rate increases have also imposed huge burdens on public services such as education. For example, the Everett (Washington) School District's bills increased by nearly 100%, despite the fact that its electricity use has actually declined, forcing it to institute serious cuts in budgets for, for example, learning materials, staffing, and facilities maintenance, amounting to approximately \$900,000.

Similarly, that rapidly increasing power bills borne by Snohomish's business customers have resulted in the permanent job losses in long-established industries and small businesses, and substantial reductions in business profitability. The impact to these businesses is borne not just by their employees or owners, but also by the public for whom these industries provide important goods and services. For example, Snohomish County is home to a number of biotechnology companies in the business of developing new drug therapies to treat human disease. Because the process to develop a drug is extremely long, often taking more than a decade from the time a promising drug is identified to the time it has obtained FDA approval and can be marketed, these businesses must operate under strict budgets, and the large, unanticipated rate increases imposed on

them because of the crisis caused great disruption. For example, one Snohomish County company is developing a promising drug treatment for severe sepsis, a disease that kills up to 200,000 people every year in the United States alone. The rapid electric rate increases faced by that company as a result of the 2000-01 energy crisis have substantially delayed the development of this and many other promising therapies. I have collected here a few accounts from newspapers over the last few years that document how consumers in the Puget Sound region have felt the sting of rapidly increasing electricity rates.

Snohomish Co. utility discusses lowering rates,
Seattle Post – Intelligence Reporter (March 6, 2002)

Like a lot of people north of Seattle this year, Linda Harrison and her family are having a rough go. Her husband, a computer technician at the Everett Boeing plant, was laid off last Friday. Her 84-year-old mother is entering the early stages of Alzheimer's. Then came the blow she didn't expect – the power bills. The two-month tab for her mother's modest, doublewide home in south Everett shot up to \$747 this winter. That's three-quarters of the woman's monthly Social Security check and 66 percent more than her normal bill from last winter.

The "immoral" cost of energy,
Everett Herald, Local News (April 20, 2001)

The Edmonds School District's Energy costs have climbed from \$400,000 last year to \$600,000 this year. That \$600,000 would pay for 10 or 12 teachers, says district budget and finance chief Bill McKeighen. Or 28 teachers aids. Or half of the district's interscholastic sports program. Or all of this year's textbook allotment. So how do you choose between books and heat? Asked William Massey, a member of the Federal Energy Regulatory Commission. "That's an impossible choice," he added. It's probably going to mean staff cuts, McKeighen replied. "We could not just not buy textbooks." The exchange came Thursday at a forum on federal power policy sponsored by U.S. Rep. Jay Inslee at the Snohomish County PUD auditorium in Everett.

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Most, including Inslee and Gov. Gary Locke, called for some sort of power price cap. "This is not an abstraction, some kind of economic theory or bar graph," Locke said. "These people are living the energy crisis every day." Massey agreed.

* * *

"I see no reason to protect a dysfunctional market when this dysfunctional market is putting people out of work," [Massey] said following the forum. "I was moved by the testimony I heard from real people, real businesses."

* * *

One of the real people to speak Thursday was Don Paterson of Bellingham,

who lost his job when Georgia Pacific closed its pulp and chemical mill there. Georgia Pacific historically had paid 4 to 5 cents a kilowatt-hour for electricity, he said. "When it jumped up to 4 to 5 dollars, they shut the door."

* * *

Soaring power costs cut into first-quarter profits by 20 percent, said Diane Symms, owner of the Lombardi's Cucina restaurant in Everett – even though the staff has cut energy use as much as 15 percent. They've done all they can do to conserve power, Symms told a forum on federal energy policy Thursday. But a restaurant has to cook and boil water, and that requires natural gas. And food has to be refrigerated, and that requires electricity. So in response, Symms said, she's cut her restaurant hours, and cut back on staff. "We suspect we're going to have to do more of that to keep the business open."

Struggling to keep heat, lights on: Calls swamp energy assistance offices, Seattle Times, Local News (December 21, 2001)

Caseworkers say they're hearing from people who are returning Christmas presents, borrowing money from relatives and selling their cars to keep the heat on. One Snohomish County woman burned cardboard boxes in her wood-burning stove for heat when she ran out of money for wood. Seniors on fixed incomes are particularly squeezed. An elderly woman with health problems called a Snohomish County aid program after setting her heat at 60 degrees and putting on three pairs of overalls and two sweaters to keep warm

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People who run utility-assistance programs say they're worried about the spring. "I can guarantee you we'll run out sooner this year because of Boeing," which is still in the process of laying off thousands of workers, said Dennis Smedsrud, who oversees PSE's Warm Home Fund. Bill Beuscher, who runs Snohomish County's federal energy-assistance program, said he's likely to be out of funds by the end March, right before what may be his program's busiest week.

Kimberly Clark facing huge hike in PUD rates, Everett Herald (September 29, 2001)

For residential customers of Snohomish County PUD, electricity costs will climb 18 percent starting Monday. But for Kimberly-Clark Corp., a major employer in the county and a major PUD customer, power costs will rise more than four times that amount, or 75 percent. "It's a matter of huge concern and priority," said Scott Felter, manager of Kimberly-Clark's Everett pulp mill, earlier this week. Felter and Dave Faddis, general manager of Kimberly Clark's waterfront pulp and tissue mills, knew a significant rate increase was on the way. The operation had long had a negotiated agreement for lower rates, but that's expiring. But the increase was larger than expected and will cost the company millions of dollars at a

time when it's looking to trim costs as much as possible to remain competitive.

We now have some reasonable estimates of the cumulative economic impact caused by the crisis. For example, a 2001 article in the *Wall Street Journal* estimated that disposable household income in Washington State will be cut by \$1.7 billion and 43,000 jobs will be lost over the next three years due to the Western energy crisis.⁴⁶ Similarly grim statistics from California confirm the impact of the crisis on ordinary residential ratepayers. The Federal Reserve Bank of San Francisco estimated in 2001 that the average California household will have to spend an extra \$450 per year for gas and electric bills, along with \$300 more to cover the extra costs of goods and services attributable to the power crisis.⁴⁷ Stanford University energy economist Frank Wolak recently found that the impact on ratepayers is likely to be even higher. He estimated in 2001 that California would spend \$70 billion on electricity in that year, as compared to \$8 billion in 1999. On a per capita basis, this means that every man, woman, and child in California will spend almost \$2000 more per year for electricity after the crisis than before.⁴⁸

On a regional basis, a 2002 study published by a group of economic analysts estimated that, across the West, the crisis caused 589,000 lost jobs and reduced regional economic output by \$35 billion, about 1.5% of regional GDP.⁴⁹ This staggered the regional economy, and the terrorist attacks of September 11, 2001, knocked it flat. In the Puget Sound region, in only a few months, we went from having one of the most robust economies in the nation to the most severely depressed. Put another way, "If FERC had intervened in May 2000, the entire crisis might well have been avoided. . . . [T]he bankruptcy of Pacific Gas & Electric and the closure of industries from Arizona to British Columbia could have been avoided, and thousands of jobs could have been preserved."⁵⁰

ORIGIN OF THE CRISIS: DEREGULATION AND THE CONVERSION OF ELECTRICITY FROM A NECESSITY TO A COMMODITY

At FERC, electric deregulation began innocently enough. In 1989, FERC received an application from a small, innovative non-profit company in Massachusetts, Citizens Power & Light Corp., seeking permission to sell electric power at market-based rates as

⁴⁶ "Rising Energy Prices Could Tip Washington Toward a Recession," *Wall Street Journal*, March 13, 2001.

⁴⁷ "Calif. Energy Crisis Could Take Extra 1.5% of Incomes," *Wall Street Journal*, April 16, 2001

⁴⁸ See Paul Krugman, "Let Them Shovel," *New York Times*, April 15, 2001.

⁴⁹ Ottie Nabors, George Backus & Jeff Amlin, *Simulating Effects of Business Decisions on Regional Economy: Experience During the California Energy Crisis*, **J. Indus., Competition & Trade**, vol. 2, at 143 (June 2002).

⁵⁰ Robert McCullough, "Revisiting California," *Pub. Utils. Fortnightly*, April 1, 2002, at 36.

part of a plan to help low-income energy consumers.⁵¹ Not wanting to stand in the way of progress, FERC approved the experiment. Recognizing that the Consumers Energy proposal represented a radical departure from the traditional approach to utility pricing, where rates were set by FERC based on the demonstrated cost of service of the regulated utility rather than by market forces, FERC tried to carefully limit and condition the scope of the permission it granted Consumer's Energy. For example, FERC required Consumers to demonstrate that it lacked market power, required it to periodically report its sales and purchases, and imposed other reporting requirements on the company.

Regrettably, FERC's initial caution was not echoed by the Commodity Futures Trading Commission (CFTC) which, in 1993, determined that it would not regulate forward transactions in energy.⁵² Congress subsequently codified this regulatory exemption with the passage of the Commodity Futures Modernization Act of 2000.⁵³

Nor did FERC's initial caution endure for very long. Armed with the CFTC decision and the FERC's initial toe in the water of market-based rates, Enron and a host of other power marketers soon came to FERC seeking authority to sell power, like Consumers, at market-based rates. FERC granted Enron, for example, authority to sell power at market-based rates beginning in 1993.⁵⁴ Over the next few years, hundreds of entities, large and small, obtained authority to sell power at market-based rates.

FERC required as a condition for obtaining authority to sell at market-based rates that the seller demonstrate it lacked market power in the relevant market. But FERC used a test for market power, called the "hub-and-spoke" methodology, that assumed the old, vertically integrated utility model still prevailed, and failed to reflect the increasingly complex new world of electric power, where vertically integrated utilities were quickly going by the wayside, to be replaced by independent generators, power marketers, and a host of other new entities unimagined when the hub-and-spoke methodology was developed. As far as we have been able to determine, FERC never once turned down a request for market-based rate authority on the ground that the applicant had failed to demonstrate it lacked market power. Only after the crisis has FERC moved to correct this regulatory flaw.⁵⁵

Similarly, over time, FERC moved to trim back reporting requirements for entities with market-based rates, and even the requirements that remained were most often observed in the breach. Marketers frequently filed reports with, for example, sales and purchases aggregated, without prices, or in other ways that obscured relevant information. In some cases, filing requirements were not observed at all. Again, only recently, after the Ninth

⁵¹ *Citizens Power & Light Co.*, 48 FERC ¶ 61,210 (1989).

⁵² Exemption for Certain Contracts Involving Energy Products, 58 FR 21286, April 20, 1993.

⁵³ P.L. 106-554.

⁵⁴ *Enron Power Marketing, Inc.*, 65 FERC ¶ 61,305 (1993).

⁵⁵ See *AEP Power Marketing, Inc. et al.*, 97 FERC ¶ 61,219 (2001), *order on reh'g*, 107 FERC ¶ 61,018 (2004) (discussing reform to "hub and spoke" methodology).

Circuit concluded that FERC's failure to enforce these filing requirements amounted to an "abdication" of its regulatory authority, has FERC moved aggressively to require compliance.⁵⁶

CFTC's voluntary withdrawal from the field, combined with FERC's near-total abandonment of its regulatory responsibilities, left a void that Enron quickly filled. With Enron leading the way, a group of large utilities and power marketers moved to standardize electricity contracts, with the explicit aim of making electricity tradable in the same way as pork bellies, wheat futures, and other commodities.⁵⁷ Although now widely used, the new contract forms have never been reviewed, let alone approved, by FERC. Nor has FERC attempted to impose the kind of basic regulatory structures that prevent abuse of standard commodity markets – "circuit breakers" to head off attempts to "corner" the market, price transparency, clearly-defined rules and penalties, etc. Through this combination of regulatory apathy and Enron-driven industry reorganization, the electricity markets were essentially converted to commodities markets without a shot being fired.

The lack of regulation made commodified electricity markets a sitting duck for any unscrupulous trader looking for a quick buck. Abuses of standard commodities markets are legion and well-documented. The physics of electricity make electric markets even more vulnerable to abuse of market power than markets in standard commodities. Unlike other commodities, there is no ready substitute for electricity, electricity cannot be stored, and supply must match demand on an instantaneous basis to avoid voltage fluctuations, system instability, blackouts and brownouts. Further, electricity is a necessity of modern life, utilities operate under a legal obligation to provide all power demanded by their customers, and the loss of electric service produces enormous costs, far beyond the costs of power itself. And, at least in the short term, electricity prices are extremely inelastic.

Because of these characteristics, electric power is especially vulnerable to market abuse in at least two unique respects. First, suppliers can drive up short-term power prices if they can convince system operators that a supply shortage is imminent. The Enron schemes involving export of power from California, then reimportation, were aimed at least in part in creating the impression at the California ISO of impending shortages that threatened blackouts or brownouts. This forced the ISO into "panic buying" that sent short-term and spot prices into the stratosphere in as the ISO tried to avoid blackouts.

Second, at least in conditions of tight supply, the price curve for electricity rises very steeply. This means sellers can, by withholding even small amounts of power, drive the market price up significantly. This characteristic of the market was exploited by the generators who withheld power from the Western markets. Enron also exploited this

⁵⁶ *California ex rel. Bill Lockyer v. FERC*, 383 F.3d 1006, 1014-15 (9th Cir. 2004), *appeal en banc pending*

⁵⁷ See Andrew S. Katz, *Using the EEI Master Contract to Manage Power Marketing Risks*, 21 Energy L.J. 269, 272 & nn. 16-17 (2000)(crediting Enron for heavy participation in developing standard industry contract form for electricity); Mark Haedicke, *Competitive-Based Contracts for the New Power Business*, 17 Energy L.J. 103, 115-16 (1996) (article by Enron general counsel urging commodities-style standardization of electricity contracts).

characteristic with a number of its schemes, which were designed to create the impression of a shortage for system operators.

In 1996, California added a new, and fundamentally flawed, layer of retail deregulation to this already dangerously teetering foundation of wholesale deregulation acceded to by FERC and CFTC. Among the dangerous flaws in the California deregulation model were an untried, unwieldy, complex, and opaque set of market rules, and a system which kept the vast majority of price information tightly wrapped under the veil of “proprietary information.” Within weeks after the California market began operation on April Fool’s Day, 1998, we now know that Enron was experimenting with ways to game the system, experiments which continued in California and in other deregulated markets throughout 1999. By the beginning of 2000, Enron had achieved sufficient experience with its market manipulation schemes that it launched an all-out attack on the market, using one or more of its fraudulent trading schemes on nearly every day thereafter. Soon after that, in May 2000, the crisis began and it continued for over a year, until FERC finally stepped in and imposed region-wide price caps that took much of the sting out of Enron’s schemes.

But Enron’s abuses were not limited to its power trading operation. On the contrary, Enron filled the regulatory void created by CFTC and FERC with EOL, a web-based power trading platform that allowed Enron to exploit its unilateral access to information from its competitors to gain a unique knowledge advantage, and to engage in market abuses like wash trading. Enron’s power trading operation and EOL worked in tandem to create volatility in the market, which Enron then exploited for massive profits through its power trading operation.

By that time FERC finally acted to stem the tide of crisis in mid-2001, the damage – billions of dollars worth of it – had been done.

FERC’S RELUCTANT RESPONSE TO THE CRISIS AND ITS AFTERMATH

FERC’s tepid response to the crisis is by now well-documented. Blinkered by a near-religious conviction that market outcomes will inevitably be better than regulatory outcomes, FERC dithered for months, and when it acted, it took half-measures that may well have made matters worse. FERC’s unshakable conviction that the market dysfunction was caused by shortages of generation, rather than Enron-style manipulation, was epitomized by then-FERC Chairman Hebert, who, in the midst of the crisis, announced Antoinette-like that Californians ought to “get out their shovels and start digging” because building new plants was the only way out of the crisis. Indeed, that policy was directed from the highest levels of the federal government: “Throughout California’s energy crisis last year, President Bush and Vice President Dick Cheney strongly opposed any government interventions or price controls intended to rein in the surging costs of electricity.”⁵⁸

⁵⁸ Don Van Natta, Jr., “Bush’s California Energy Stance Faulted,” New York Times, May 8, 2002.

Even after the crisis, FERC has been hesitant at best about providing relief to Western ratepayers. For example, utilities from across the West, including Snohomish, brought claims at FERC arguing that the highly inflated forward contracts entered into during the crisis were “unjust and unreasonable” and therefore illegal under the Federal Power Act (“FPA”). Despite what became a massive accumulation of evidence concerning the abuses that occurred during the crisis period, and expert testimony demonstrating that the spot market dysfunction forced purchasers of forward contracts to pay a 400% premium, amounting to “paying for market power on the installment plan,” FERC refused to provide any relief. FERC purported to rely the “sanctity of contracts,” although this notion is fundamentally incompatible with Congress’s declaration in the FPA that all wholesale electric contracts must contain just and reasonable rates and any that do not are illegal.

FERC’s aversion to intervention in the market can be traced to the dual role it has assumed in recent years, acting as a cheerleader and advocate for aggressive pro-deregulation policies while at the same time being responsible for policing those deregulated markets. Much of FERC’s hesitation to provide effective relief to electric consumers is attributable to the fact that aggressive intervention in the market to prevent Enron-style abuses would be a tacit admission that the pro-deregulation policies it has pursued in recent years might be wrong. Indeed, the evidence from failed deregulation experiments across this country and around the world suggests that may well be the case.

But FERC’s problems are not just with attitude. Even if FERC exercised its available authority to the fullest, it lacks critical legal weapons to prevent or effectively deter the kind of abuses we’ve witnessed in the electric power markets. FERC Chairman Joseph Kelliher, in an article published in early 2005, provides an excellent summary of FERC’s legal authorities as compared to the authorities of the CFTC and SEC, and calls upon Congress to provide FERC with new powers to prevent and remedy market power abuse.⁵⁹ While Congress remedied many of these problems when, in the Energy Policy Act of 2005, it added provisions to the FPA prohibit market manipulation and providing FERC with penalty authority, the job is not yet done and critical work remains to ensure that, for example, electricity trading platforms like EnronOnline do not slip through the bureaucratic cracks.

In addition, Snohomish has, in its efforts to provide relief to its ratepayers, encountered two legal barriers that have cut off major avenues of relief that ought to be available in a world of market-based pricing. The first is the “filed rate doctrine,” a much-criticized legal doctrine that arose in the old era of cost-based regulation and makes very little sense in the new world where rates are never filed or approved by FERC. Where we rely on properly-functioning markets to ensure that electricity is provided economically and reliable, it is essential to ensure that these markets operate free from monopoly abuse. But the filed rate doctrine has exactly the opposite effect, preventing consumers from seeking antitrust damages for anti-competitive conduct and placing the entire onus for

⁵⁹ Hon. Joseph T. Kelliher, *Market Manipulation, Market Power, and the Authority of the Federal Energy Regulatory Commission*, 26 **Energy L.J.** 1 (2005).

enforcement of market rules on FERC,⁶⁰ which, as we have learned to our chagrin, can be a very weak reed indeed to bear this responsibility.

The second is the so-called “*Mobile-Sierra* doctrine.”⁶¹ While the original holdings of the *Mobile* and *Sierra* cases – that the FPA ought not to be a tool for regulated utilities to escape the consequences of their abusive practices – is sensible, over time the doctrine has strayed from its roots. The most egregious example is FERC’s novel reading of the *Mobile-Sierra* doctrine in the above-referenced cases concerning long-term contracts tainted by the dysfunctions of the market during the Western crisis, where FERC concluded that, under *Mobile-Sierra*, the fact that the contracts were tainted by market dysfunction is not relevant to the “public interest.”

RECOMMENDATION

Snohomish’s experience during the Western power crisis of 2000-01 demonstrates in no uncertain terms the devastation that can be wrought upon consumers by an out-of-control electricity market. Among the lessons of the crisis are these:

- By its nature, electricity is vulnerable to market power abuse to a degree unseen in standard commodities markets. This includes not only “wash trading” and other forms of abuse that occurred on, for example, EOL, and resemble similar abuses that occur in standard commodities markets, but also exotic kinds of abuses, such as the infamous Enron schemes such as “Death Star,” “Ricochet,” and “Black Widow.”
- If electricity is treated as a commodity, strong measures to prevent and properly punish abuses of the markets must be in place. If they are not, a repeat of the Western power crisis is inevitable.
- Electricity markets are highly interconnected. Hence, abuses in one market quickly spill over into interconnected markets. This makes gaps in the regulation of electricity as a commodity a grave threat to surrounding markets. As the Western power crisis teaches us, electric interconnections between regions mean that price dysfunctions in a failing market will quickly be communicated to all other markets that are electronically interconnected. Regulation of only part of the market cannot prevent abuse.
- Electricity prices are strongly influenced by prices for other forms of energy, especially natural gas. Hence, adequate regulation of electricity markets by itself is not enough to vouchsafe consumers. Rather, related markets such as natural gas must also be adequately regulated. One lesson of the Western power crisis is that abuses of the natural gas markets quickly drove up prices in electricity

⁶⁰ See, e.g., *PUD No. 1 of Snohomish County v. Dynegy Power Marketing, Inc.*, 384 F.3d 756 (9th Cir. 2004), *cert. denied*, 125 S.Ct. 2957 (2005).

⁶¹ *United Gas Pipe Line Co. v. Mobile Gas Serv. Corp.*, 350 U.S. 332 (1956) (“*Mobile*”); *FPC v. Sierra Pacific Power*, 350 U.S. 348 (1956) (“*Sierra*”).

- markets, where natural gas fired generators are now the marginal resource in most markets.
- Price transparency is critical. As Pacific Northwest energy economist Robert McCullough has testified: “Restriction of market information weakened the negotiating position of consumers and made high prices far more likely in these markets. Even today, weak reporting of marketers to FERC and restrictive information rules by ISOs make concentration and abuse in market hubs difficult to monitor.”⁶² In the absence of “open information” for consumers and policymakers, “market failures are easily disguised and corrective measures are painfully delayed.”⁶³ Simply put, consumers and regulators – such as FERC – cannot effectively detect and correct abuses by marketers if marketers are allowed to function under a cloak of secrecy.

⁶² Testimony of Robert McCullough Before the Senate Committee on Energy and Natural Resources (Jan. 29, 2002).

⁶³ *Id.*