

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Puget Sound Energy, Inc.	:	Docket Nos.	EL01-10-000
Complainant,	:		EL01-10-001
	:		
v.	:		
	:		
All Jurisdictional Sellers of Energy	:		
and/or Capacity at Wholesale Into Electric	:		
Energy and/or Capacity Markets in the Pacific	:		
Northwest, Including Parties to the Western	:		
Systems Power Pool Agreement,	:		
Respondents.	:		

**PREPARED REBUTTAL TESTIMONY OF
CARL PECHMAN ON BEHALF OF THE CALIFORNIA PARTIES**

- 1 Q. Please state your name and business address.
- 2 A. My name is Carl Pechman. My address is 206 Ravenswood Court, Santa Cruz, California.
- 3
- 4 Q. By whom are you employed and in what capacity?
- 5 A. I am President of Power Economics, a consulting firm specializing in the economics of
- 6 electricity.
- 7
- 8 Q. Please describe briefly your educational and employment background.

1 A. I received my B.S. degree in biology in 1976, the M.S. in Applied Econometrics and
2 Quantitative Analysis in 1983, and the Ph.D. degree in Resource Economics in 1990. All of
3 my degrees were earned at Cornell University in Ithaca, New York.

4 From 1979 through 1997, I held a series of positions of increasing responsibility at
5 the New York Public Service Commission. When I left the Commission in 1997 I was
6 Supervisor of Energy and Environmental Economics. In that role I was responsible for the
7 economic analysis of a wide variety of issues relating to the costing, pricing and production
8 of electricity. I played an active role in the creation of the New York Independent System
9 Operator, and in evaluating alternative models of competition.

10 I left the New York Public Service Commission in 1997 and joined LECG, an
11 economics consulting firm. At LECG, I worked with a variety of clients on issues related to
12 the transformation of the electric utility system to competitive markets.

13 I founded Power Economics, Inc, in 1999. Power Economics is a consulting firm
14 providing expert services on issues related to the economics of electricity.

15 A copy of my resume is attached as Exhibit CAL-15.

16
17 Q. What is the purpose of your testimony?

18 A. The purpose of my testimony is to rebut the following points made by the witnesses for the
19 TFG:

20 a. that refunds are not warranted and would send the wrong signals to the electric
21 markets.

22 b. that the extraordinarily high prices experienced during the refund period are in the
23 customers' interests and are simply the result of a competitive market.

1 Q. Are the criteria suggested by Dr. Jones for ordering refunds consistent with the Federal
2 Power Act and the Federal Energy Regulatory Commission regulatory authority?

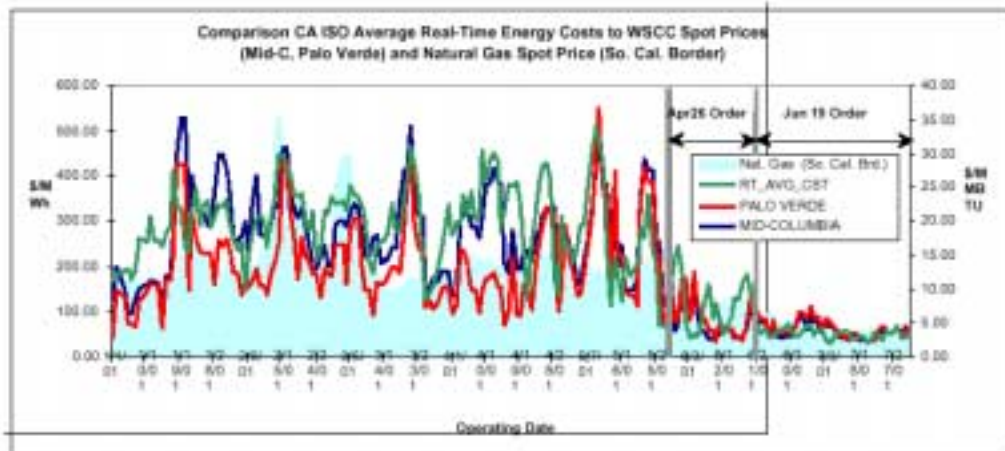
3 A. No. Dr. Jones proposes a pre-condition for ordering refunds -- a “finding of unlawful
4 activity” – that is inconsistent with the Commission’s regulatory authority (Jones: pg 3, line
5 8). The Commission has the power to order a refund without a finding of unlawful activity
6 whenever a rate is unjust or unreasonable. (16 U.S.C. § 824e.) The Commission’s “Order
7 Establishing Evidentiary Hearing Procedures, Granting Hearing in Part and Denying
8 Rehearing in Part” (July 25, Order), outlines its authority to order refunds. In fact, in the San
9 Diego proceeding, where the Commission has ordered refunds to occur, there has been no
10 finding by the Commission that any specific seller engaged in an unlawful exercise of market
11 power.

12
13 Q. A number of expert witnesses, particularly those on behalf of the Transaction Finality Group,
14 offer testimony that attempts to undermine the conclusion that the electricity markets in the
15 Pacific Northwest and California are interrelated, and argues that while California may be
16 dysfunctional, the Pacific Northwest markets were not. Hasn’t the Commission already
17 made findings that the markets are interrelated and that mitigation is appropriate in the
18 Pacific Northwest as well as California?

19 A: In the Commission’s June 19, 2001 Order, the Commission noted that the “West is a single
20 market which is at once inextricably interrelated . . .” June 19 Order at 2. Indeed, a major
21 consideration of the Commission in electing to extend price mitigation to the entire Western
22 System Coordinating Council (WSCC) area was its conclusion that “[t]here is a critical
23 interdependence among the prices in the ISO’s organized spot markets, the prices in the

1 bilateral spot market in California and the rest of the West, and the prices in forward
 2 markets.” June 19 Order at 5. This interdependence was recently corroborated by the
 3 California Independent System Operator in Figure 1 to its *Comments of the California*
 4 *Independent System Operator Corporation Concerning the Order on Rehearing of*
 5 *Monitoring and Mitigation Plan for the California Wholesale Electric Markets, Establishing*
 6 *West-Wide Mitigation and Establishing Settlement Conference*, dated August 20, 2001
 7 (Docket No. EL00-95-000, et al.).
 8

Figure 1. Comparison of Regional Spot Energy and Natural Gas Prices



9
 10
 11
 12 Q. At page 4 of his testimony, Dr. Jones states that “Ordering refunds is adverse regulatory
 13 intervention in a process that was producing the very signals that would prevent future price
 14 spikes.” Will the ordering of refunds necessarily eliminate adequate price signals required to
 15 stimulate adequate investment?

16 A. Absolutely not. Generators will invest in power plants if they can expect a reasonable return
 17 on their investment. One only needs to look at New York to appreciate that merchant

1 generators are willing to develop generation facilities at prices that are considerably lower
2 than those experienced in the Pacific Northwest from December 25, 2000, through June 20,
3 2001. In addition, California has entered into contracts for power that necessitate the
4 construction of new generation facilities. The prices of these contracts are lower than the
5 pre-refund prices that Dr. Jones argues are necessary for power plant development.

6
7 Q. Would it be reasonable for a generator or investor to base power plant investment decisions
8 on the price experience of 2000 through early 2001?

9 A. No. Investment is based upon expectations of future prices. Generators already know that
10 experience in 2000 through June 2001 is irrelevant to future expectations. The Commission
11 has imposed a market mitigation plan that uses marginal cost principles to calculate prices
12 which, at least to some extent, appears to have reduced price levels from those experienced
13 during the refund period. However, the Commission has recognized the importance of
14 providing the market with adequate price signals to attract new investment. In doing so, it
15 has accepted the current mitigated price of \$92/MWh as adequate to attract investment. In
16 stark contrast, prices during the refund period hit \$610 MWh and for many months averaged
17 \$300 MWh. No power system in the U.S. needs such abnormally high prices to encourage
18 needed investment. The mitigated prices are more than sufficient to induce investment. The
19 extraordinarily high prices experienced during the refund period simply result in a significant
20 and unwarranted redistribution of wealth.

21 Moreover, prudent investors would not base their investment decision to invest on the
22 assumption that prices would remain at extremely high levels. While Dr. Jones uses standard
23 theoretical jargon concerning competition, supply curves, opportunity costs, etc., he has

1 failed to explain how these concepts might play out in the real world. In lay terms, in any
2 market producers use rising costs to justify, to the public, higher prices and the public
3 generally accepts rising prices under those circumstances. But no power producer, in this
4 proceeding or in the California proceedings, has demonstrated that its actual costs
5 approached the extraordinarily high prices experienced during the proposed refund period.
6 Power producers simply raised prices because they knew they could.

7 In fact, the Commission's June 19 Order has not adversely affected the incentives for
8 new investment in generation. The California Independent System Operator's mitigated
9 market clearing price reflects the marginal cost of the last thermal generation unit dispatched.
10 Especially during peak periods, this will generally be an old and inefficient unit. New
11 generation will necessarily be more efficient to allow a return on fixed costs at the mitigated
12 market price. For example, the California Independent System Operator's Department of
13 Market Analysis indicated in its Comments of the California Independent System Operator
14 Corporation Concerning the Order on Rehearing of Monitoring and Mitigation Plan for the
15 California Wholesale Electric Markets, Establishing West-Wide Mitigation, and Establishing
16 Settlement Conference, dated August 20, 2001 (Docket Nos. EL00-95-000, et al.), that
17 annual fixed cost revenue requirements for a new combined cycle generation unit ranged
18 from \$70/KW/year to \$90/KW/year. The CAISO analysis further showed that marginal
19 proxy clearing prices under the June 19 Order provided annual revenues well in excess of
20 this revenue range. To the extent the Commission's mitigation plan allows for recovery of
21 fixed costs, the market stability created by the mitigation plan will provide a regularized
22 price expectation necessary to stimulate investment.

1 Q. Does Dr. Jones acknowledge that generators possess market power?

2 A. Yes, at pg. 4, lines 4-5, he states that “Because the sellers did not know that the regulators
3 might consider ordering refunds (confiscating proceeds), sellers did not factor in the cost that
4 this risk presented when making power sale transactions.” Dr. Jones suggests that sellers
5 would have simply charged even higher prices. Charging a premium over and above such
6 price only increases the unjustness and unreasonableness of the price.

7

8 Q. Dr. Jones also testifies (pg. 5, lines 1-3) that “Refunds should not be ordered. The bilateral
9 spot market transactions for electricity that took place between December 2000 and June
10 2001 were the results of negotiations between informed buyers and sellers.” Does the fact
11 that the buyers were “informed” provide a reasonable basis for not ordering a refund?

12 A. No. In fact the list of issues about which Dr. Jones testifies buyers and sellers were informed
13 of is irrelevant to the decisions of a purchaser in the spot markets. This list includes: the lack
14 of precipitation, shortage of capacity, concern about unusually cold weather and a number of
15 other irrelevant items. The relevant information to a purchaser in the spot market (as defined
16 by the TFG) are factors that are not on Dr. Jones’ laundry list of information available to
17 buyers and sellers: a forecast of next day load, and offers for generation. This is because, in
18 the short-run, the operator of the power system is facing inelastic demand. To the extent that
19 a buyer is facing insufficient supply, for whatever reason, the buyer is faced with a Hobson’s
20 choice – of rolling black-outs that risk the health and safety of the people and the economy or
21 paying whatever the suppliers demand.

22 The appropriate analogy is of a salesman that holds the last available supply of
23 oxygen available to a sufferer of emphysema -- who risks death without obtaining that

1 supply. The salesman knows that his buyer has an inelastic demand curve and is willing to
2 pay any price to receive the supply. In this case both the buyer and seller enter into what can
3 be characterized as a bilateral spot transaction. Dr. Jones' laundry list of factors that buyers
4 knew is analogous to stating that the buyer in the oxygen example was an informed buyer
5 because he knew (or should have known) that smoking cigarettes could adversely affect his
6 health. Such a conclusion is irrelevant to the fact that the infirm buyer is being gouged to
7 stay alive.

8
9 Q. Do you agree with Dr. Jones' definition of a competitive market?

10 A. No. Nobel prize winner George Stigler from the bastion of those that extol the virtues of
11 market economies, the University of Chicago, in his classic text "The Theory of Price" (The
12 Macmillan Company, Fourth Printing, 1956. pg. 13) suggests a number of requisites for
13 competition. These include: "That each economic unit be sufficiently small so it exerts an
14 imperceptible influence on prices." Dr. Jones adopts this as his own "classic definition,"
15 without attribution, that a "Competitive market is a market that relies on the interaction of
16 many informed buyers and sellers such that no single buyer or seller can institute and
17 profitably sustain a significant increase in price." (Jones testimony pg. 7 lines 12-14). Dr.
18 Jones' testimony represents an ideological and self-serving spin on standard economic
19 theory. From Stigler's "imperceptible influence" on price, Dr. Jones has modified the
20 standard criteria of competition to allow the ability to institute an increase in price, as long as
21 the increase is "not significant" or "sustained." Dr. Jones' loophole is so large and so
22 vulnerable to subjective self-interested manipulation, that it allows a proverbial Mack truck
23 of non-competitive activity to pass through as competitive.

1 Q. Are there other infirmities with Dr. Jones' definition of a competitive market?

2 A. Yes. His definition allows joint action by multiple sellers that results in a significant and
3 sustained increase in price. One such action could be the physical or economic withholding
4 of generation, resulting in supply shortages that reduce reliability and increase price.
5

6 Q. Does Dr. Jones provide any empirical support for his testimony on page 8 that bolsters his
7 conclusion that "electricity trade in the Pacific Northwest exhibit(s) the characteristics with
8 workably competitive" markets?

9 A. No, he does not evaluate whether the price increases were sustained or significant.
10 Therefore, he provides no analysis to test his own definition. We need to pay attention not
11 only to whether the structure of the market was competitive or workably competitive but the
12 most important test is to evaluate the performance of the market. As demonstrated by the
13 testimony of Dr. Tabors, the increase in price was both sustained and significant. This price
14 behavior is, in fact, unprecedented in the history of power markets.
15

16 Q. Why do you disagree with Dr. Jones' assessment that the description "workably competitive
17 market" applies in his analysis of the Pacific Northwest market?

18 A. First, a competitive market is made up of buyers and sellers who are free to submit bids and
19 offers or negotiate trades to their mutual advantage. While this applies to a degree to sellers
20 in the Pacific Northwest power market, it was not true during the time period in question for
21 buyers, because the institutional and technical ability to reduce load in response to higher real
22 time prices was for all practical purposes non-existent. In other words, the demand side of
23 the market was not developed sufficiently to allow any meaningful demand elasticity to

1 manifest itself, causing the market to fail to be competitive. Thus, wholesale buyers were
2 forced to buy electricity to meet their obligation to serve at prices above those that customers
3 would be willing to pay in a competitive market. Second, the failure of the spot market in
4 California contaminated the Pacific Northwest power market by providing the opportunity
5 for generators in the Pacific Northwest to sell into the California market at very high prices
6 which reflected market power present in California.

7
8 Q. In Dr. Jones' testimony, he compares electricity to apples. Is this an accurate comparison?

9 A. No, it is like "comparing apples to oranges." Dr. Jones uses apples as an example of the
10 efficient consumption of goods to support the idea that the electricity market is competitive.
11 The example is flawed. One of the basic tenets of a competitive market is a single
12 equilibrium price that only varies by transportation costs. In his example, he assumes the
13 market structure of a discriminating monopolist. In his example, Dr. Jones has the lower cost
14 provider, selling "at least a portion of daily production at a higher price." (pg. 9, lines 4-5).
15 He presumes that the lower priced orchard would raise its prices. But possibly the buyers of
16 the \$7 apples would offer, say, \$5.50 to the buyers of the \$5 apples and cause the price to
17 drop in the \$7 orchard. Of course, under his assumptions the price in the \$5 orchard would
18 eventually rise, but doubtfully to the full \$7 unless the demand curve hit \$7 at a quantity
19 greater than the output of the \$5 orchard. In that case the \$5 starting price hardly makes
20 sense. One can also ask of the example: why is there one orchard with a price of \$5 and
21 another with a price \$7 (for presumably the same quality apples)?" In what kind of
22 competitive market does a competitor come in at a price 40% above the competition with the
23 same product?

1 Q. How does the price variability of apples compare to that of electricity in the Pacific
2 Northwest?

3 A. The price of apples is considerably less volatile than that of the Pacific Northwest. The
4 USDA claims a rebound in price from the lows of 1998/99. In this case prices increased
5 from 15.9 cents per pound to 21.1 cents, or an increase of approximately a third. This
6 increase, in price – in what Dr. Jones presumes to be a competitive market is considerably
7 less than that in power markets in the Northwest. Such sustained price increases are
8 unprecedented in competitive markets.

9

10 Q. Are there any other factors that distinguish apples from electricity?

11 A. Yes. There are substitutes for apples. A parent shopping for fruit for their children's school
12 lunch box has an array of alternatives to apples. These include: dried apples, bananas, pears,
13 and plums. The availability of substitutes allows the consumer to optimize their
14 consumption decisions. In contrast, the short-run demand for electricity is highly inelastic.
15 System operators purchasing power from spot markets have the choice of curtailing
16 customers or paying from the array of prices offered.

17

18 Q. Do the TFG witnesses provide evidence of market power?

19 A. Yes, Mr. Peterson, President and Chief Executive Officer of Powerex Corp. describes his
20 firm's market power on page 8 of his testimony. "Powerex was able to supply large
21 quantities of power to CDWR in peak and superpeak periods, oftentimes on no more than 10
22 to 20 minutes advance notice, and with tremendous hourly swings in the level of purchases
23 scheduled by CDWR. This shaping of power deliveries for CDWR could only be achieved

1 by drawing on the hydroelectric generation facilities of BC Hydro. Many of these deliveries
2 literally enabled California to keep the lights on, and to avoid imbalances on the CAISO
3 grid.” Mr. Peterson clearly recognizes that the choice that the CDWR had was to buy from
4 Powerex or have blackouts. California’s demand was inelastic, and Powerex was able to
5 charge prices up to \$750 per MWh. In other words, the generators had the buyers at their
6 mercy.

7
8 Q. Does Mr. Peterson justify his pricing to the CDWR on the basis of current (at the time of the
9 sale) cost of service?

10 A. No.

11
12 Q. Does Mr. Peterson say how Powerex established its price of power to CDWR?

13 A. Yes. Mr. Peterson, at page 13 testifies that Powerex “priced [sales] to reflect fair market
14 value given the temporal flexibility of hydro production.” He goes on to testify,

15 Prices charged throughout the period were based on the August forward price for the
16 Mid-Columbia trading hub in the PNW (“Mid-C”), which averaged over \$480 for the period
17 January 1, 2001 through May 31, 2001, when most of the Powerex sales to CDWR occurred.

18 These forward prices represented the opportunity cost of the limited amount of energy
19 available in BC Hydro reservoirs.

20
21 Q. If the prices charged by Powerex were based on opportunity costs of the August forward
22 prices, does that basis make the sales just and reasonable?

1 A. No. The statement, or even the fact, that prices are based on the opportunity costs of
2 alternative sales do not make such prices just and reasonable. Mr. Peterson justifies the
3 prices Powerex charged on the basis of the opportunity cost of a forward market. However,
4 there is no evidence that the forward market price was itself just and reasonable. The
5 forward market price will be based on the cost of replacement power. This will generally be
6 from a thermal unit which, as discussed above, is substantially lower than prices offered.
7 The Commission has already found that the California market was dysfunctional and ordered
8 refunds to remedy unjust and unreasonable electric energy prices. The Commission is further
9 investigating the potential abuse of market power in the natural gas industry. Accordingly,
10 Mr. Peterson's logic is circular. Mr. Peterson's statements further correspond with profit
11 maximizing business behavior. An unregulated monopolist's pricing behavior may also be
12 based on profit maximizing, but the price such a monopolist charges, particularly if the price
13 is based on profit maximizing behavior, cannot be considered to be just and reasonable.

14 Mr. Peterson does not justify the prices Powerex charged on the basis of production
15 costs but rather on the opportunity costs presented by forward prices. However, Mr. Peterson
16 does not go on to defend the reasonableness of the forward prices, which also cannot be
17 justified on the basis of production costs or replacement costs. Thus, if forward prices
18 cannot be cost justified, forward prices cannot form the basis for justifying spot market
19 prices.

20
21 Q. Is there an inconsistency in Dr. Jones' testimony that high market prices are not sustainable
22 (pg 14), and the forward price curves that Dr. Tabors suggests are the appropriate basis for
23 determining Powerex's opportunity cost ?

1 A. Yes. Dr. Tabors presents forward price curves with sustained high prices. Yet Dr. Jones
2 testifies that high prices would not be sustainable. Thus, if Powerex believed that the market
3 were truly competitive, it would not have used the forward price curves that Dr. Tabors
4 recommends as the basis for determining its opportunity cost of generation.

5
6 Q. Do you agree with Dr. Jones' testimony in response to the question, "(i)f a seller can sustain
7 prices above the marginal cost of production for a short period of time, say a few weeks or
8 months, does that constitute an act of market power that should not be penalized?"

9 A. Dr. Jones is correct that the ability to sustain prices above the marginal cost of production,
10 even for a short period, is an exercise of market power. I disagree, however, that the seller
11 should be rewarded for providing this type of price signal to the market. As Dr. Jones
12 testifies, "added capacity cannot be brought on line rapidly." (pg 14, line 22 – pg. 15, line 1)
13 Given the public nature of the siting process, new entrants will understand that the price will
14 come down with their entry, and the entry of others. Therefore, the expected price that
15 generators will face is not the price reflecting the sustained prices above marginal production
16 costs, but a price that would not reflect the same degree of market power.

17 The market conditions in Dr. Jones' example violate two conditions of a competitive
18 market, lack of barriers to entry and the inability of a single actor to affect price. The ability
19 to charge market based rates is predicated on expectation that market power cannot and
20 would not be exercised by entities charging market-based rates.

21

1 Q. What is the economic relevance of Dr. Jones' testimony at Section V (pp. 19- 26) that
2 "Refund proponents are in significant part responsible for the allegedly excessive prices they
3 paid for electricity"?

4 A. The testimony is irrelevant and it blames the victim. Dr. Jones' point is analogous to saying
5 that it is acceptable to gouge the emphysema patient for oxygen because they smoked
6 cigarettes. Furthermore, Dr. Jones relies on nascent economic instruments for utilities to
7 reduce their price risk. The Commission has an obligation to protect consumers from unjust
8 and unreasonable prices. Where a market fails to produce these prices, intervention is not
9 only justified, but mandated.

10 The fact "that Tacoma apparently was prepared to 'ride out' the high price period"
11 (pg. 24, lines 12-13) is also an indication that the prices that it was experiencing were
12 unprecedented and unpredictable. Power markets in the United States have never
13 experienced the sustained high price levels experienced in California and the Northwest. Dr.
14 Jones claims that Tacoma did not begin to seriously address high prices until March of 2001.

15 However, if Tacoma based its expectations on the lessons learned from the Midwest price
16 spikes of 1998, it would be quite reasonable to ride out the high price period.

17
18 Q. Dr. Jones testifies that "years of complacency may have led those responsible to ignore the
19 warnings that were made clear by the huge losses in the Midwest just two years earlier" (pg
20 25, 16-18). Do you agree that the price spikes in the Midwest should have prepared the
21 Pacific Northwest for the type of market conditions experienced in the Northwest?

22 A. No. The price increases referred to by Dr. Jones were of short duration (June 22 – 26, 1998).
23 The "Staff Report to the Federal Energy Regulatory Commission on the Causes of the

1 Wholesale Electricity Pricing Abnormalities in the Midwest During June 1998” (September
2 22, 1998, pg. v) states that “(w)hat some have called a price ‘spike’ was an extraordinary
3 high, but rather narrow and short-lived increase in spot market prices.” Furthermore, the
4 FERC staff found (pg. viii) that “the particular combination of factors that led to the June
5 event was quite unusual. This combination of factors was not typical, is not likely to recur,
6 and is not representative of how wholesale electricity markets usually work.” The difference
7 between the experience in the Midwest in 1998 and the Northwest in 2000-2001 is
8 demonstrated by Dr. Jones’ own exhibits (PPL-5 and PPL-6). The Midwest experience was a
9 needle peak with prices returning to a “normal” range. In the Northwest significant price
10 increases were sustained for a year. Utilities that provide power from their own facilities
11 would have a physical hedge and limited exposure to a mid-west type price spike. In
12 contrast, it is the cumulative impact of the sustained price increase that has caused financial
13 hardship for utilities.

14
15 Q. Do you have any additional comments on Dr. Jones testimony?

16 A. Yes. While I have previously pointed out the flaws in Dr. Jones’ analysis of power markets:
17 his distinction between the market price of electricity and the marginal cost of the last (most
18 expensive) generator merits comment and rebuttal. On pages 11-12 Dr. Jones asserts:

19 If one region is willing to pay for electrical capacity at a given price, and an adjacent
20 region also desires access to similarly situated supplies, then it is economically efficient for
21 both parties to bid up prices until the supply is fully distributed among buyers irrespective of
22 the marginal cost of generation at that point of time. [This statement had the following

1 footnote attached: It would have been irrational for sellers to ignore the opportunity cost of
2 selling to California when evaluating sales to the Northwest.]

3 Dr. Jones' assertion that prices would be bid up "irrespective of the marginal cost of
4 generation" is inconsistent with both traditional notions of economic dispatch and the cost
5 minimizing characteristics of competitive markets.

6
7 Q. Why is Dr. Jones' statement that prices can be bid up irrespective of marginal generation
8 costs incorrect?

9 A. Dr. Jones' statement is incorrect because he is trying to treat the wholesale electricity market
10 like a market for rare luxury goods, such as famous paintings, or prime real estate. In those
11 markets there is a fixed supply and a perfectly inelastic supply curve implying an undefined
12 marginal cost. However, in electric markets, at least until load curtailment, the elasticity of
13 supply is positive albeit quite low at the far (right) end of the supply curve. The following
14 example illustrates the infirmity of Dr. Jones' statement.

15 Suppose, that the price is well above (say \$250/MWH) -- to be "irrespective" of -- the
16 marginal cost of the last on-line generator (say \$150/MWH). Because the supply curve has a
17 non-zero elasticity, the price is also above the marginal cost of the generator above (to the
18 right of) the last generator on-line (say \$175/MWH).

19 Now that next-in-line generator could produce at prices at or above \$175 yet the
20 market price is \$250/MWH. If the marketplace has transparent prices (a condition of
21 competitive markets not described in the Dr. Jones testimony), then the buyers, paying \$250,
22 will see the \$175 price (either explicitly as in a bilateral market or implicitly in a
23 clearinghouse), the buyers will prefer and purchase the \$175 generation instead of the

1 “market” \$250. And the process will continue until the prices are “bid” down. The problem
2 with a price above the marginal cost of the last generator is that it creates the opportunity for
3 arbitrage that will lower that price. That is there is no reason for a buyer to settle for a price
4 above the marginal cost of a generator that is offering to supply power for less. The only way
5 that price can stay (significantly) above the marginal cost of the next-in-line generator is for
6 an imposed price floor above that marginal cost or some form of a restriction in supply. The
7 price will not rise above through the efforts of the buyers without a restriction of supply or
8 exercise of market power.

9
10 Q. Do you have any general conclusions regarding Dr. Jones testimony?

11 A. Yes. If the Pacific Northwest power market were competitive as he suggests, much of what
12 he claims would be true. However, because market power was present almost all of the time
13 in the California market during the relevant period, prevailing prices in the spot market were
14 far above efficient competitive levels. In turn, because generators in the Pacific Northwest
15 could sell into this market, their offered contracts were at prices far above competitive levels.
16 Since buyers in the Pacific Northwest had nowhere else to turn they were forced to purchase
17 electricity at excessive prices and provide windfall profits to generators. Thus, the price
18 signal was not, as Dr. Jones suggests appropriate and likely to lead to socially optimal
19 decisions, but rather a distortion that would lead to inefficient decisions and wealth transfer.

20
21 Q. Are the factual predicates of Dr. Tabors’ macro level discussion of the implications for
22 public policy correct?

1 A. No, Dr. Tabors' testimony on this point is error-filled revisionist history of regulation. At
2 page 9, Dr. Tabors states that "individuals and economic entities that operate within the law
3 or the rules/regulations established by relevant and accepted organizations such as the New
4 York Stock Exchange or the Chicago Board of Trade are not subject to ex post review." This
5 is simply wrong. Every transaction at the NYSE is under continuous surveillance. The
6 Stock Watch computer system searches for unusual trading practices and reports those to
7 NYSE regulatory personnel. Ex poste review is therefore built into the operating procedures
8 of the NYSE.

9 Dr. Tabors testifies that the "regulatory intervention into markets has always been to
10 protect the market, not to protect the individual participants in the market." This statement
11 mischaracterized the rationale and role of economic regulation of public utilities. The
12 Commission has the responsibility of ensuring "just and reasonable" rates. While the
13 Commission's regulation of rates is designed to provide some modicum of protection to
14 utilities, it is unquestionably the interests of consumers in obtaining electric service at "just
15 and reasonable" rates that takes precedence over the utilities' commercial interests.

16
17 Q. Do you agree with Dr. Tabors statement (pp. 16–17) that refunds would "call into question
18 the basic principle of a competitive market: prices for products that are sold and transactions
19 that are completed *based upon the rules in place at the time the transaction is consummated*
20 are final and are not subject to *ex post* revisions"?

21 A. No. In this market the rule, as written by the Congress of the United States and implemented
22 by the Commission is the requirement that rates are "just and reasonable." To the extent that
23 prices are not "just and reasonable" then generators are on notice, through the Federal Power

1 Act that the prices are subject to refund. The market norm is no different than an ex post
2 revision to the price charged by a contractor who performs a repair poorly. One way in
3 which quality is maintained by contractors is the threat of an ex post revision in the price
4 paid. Ex poste revision for prices charged by power marketers that are unjust and
5 unreasonable will provide an incentive against exercising market power in the price offered
6 to the market.

7
8 Q. What factors mitigate Dr. Tabors' argument that the refund policy put forth by the NPG is an
9 increase in the likely cost of energy because of increased actual or perceived risk ?

10 A. There are two reasons. The first, is related to the actual versus forecast returns that
11 generators have earned. We do not know, nor has any party presented their expected returns
12 at the time that they entered into the competitive power markets. We do not know what
13 regulatory risks were incorporated into their estimates of expected returns. If generators
14 pursued pricing policies that have already reflected regulatory risk, e.g., some probability of
15 refunds due to the exercise of market power, would the generator lower its prices if the
16 Commission does not order refunds? It seems unlikely that they would. The second reason,
17 is that refunds will establish a precedent for pricing behavior. At this point, the de-regulated
18 power markets have no frame of reference as to what is "just and reasonable" pricing
19 behavior. Refunds will establish precedent and begin to establish norms of behavior. These
20 norms of behavior will form the basis of self-policing on the part of marketers and
21 generators.

22

1 Q. Does Dr. Tabors mischaracterize the rules under which regulatory agencies have historically
2 reviewed and reset prices?

3 A. Yes. He establishes an overly limited criteria -- that “regulatory authority may review and
4 reset prices when an individual or group of parties can be shown to have broken a regulatory
5 rule or law.” Utilities that violate the prudence standard have violated behavioral norms not
6 specific rules or the law. For example, when Con Edison was ordered to refund dollars for
7 its nuclear refueling in *In re: Consolidated Edison of N.Y.*, 29 P.U.R. 4th 327 (N.Y.P.C.S.
8 1979) it did not violate a rule or law. It merely did a poor job of planning and implementing
9 the refueling outage. The refund that it paid created an incentive to modify its behavior – in
10 that case improving the planning and implementation of nuclear refueling.

11
12 Q. Why is Dr. Cicchetti’s argument that power marketers should not pay refunds wrong?

13 A. Dr. Cicchetti’s point seems to be that if a small producer or marketer firm, with small supply
14 and no market power in and of itself, is able to “piggy back” its prices so as to charge prices
15 equal to the prices set by a participant who does have market power and who exercises that
16 market power, then the small producer does not owe a refund because he did not have market
17 power. Dr. Cicchetti is wrong. That marketer is still charging (and benefiting from) a market-
18 power-based price, even if that small producer does not, by itself, have market power; the
19 market price at which he was a “price-taker” was set by another producer who was a price-
20 setter—and so the price both firms were charging was a market-power-set price, not a
21 competitive-set price.

22 Dr. Cicchetti is confusing the criteria for whether a firm has been an active, joining,
23 part of a monopolization conspiracy, with whether the firm has been charging unjust and

1 unreasonable rates that resulted from someone’s exercise of market power. This is not a
2 Sherman Act, conspiracy hearing. We are not considering whether the small firm was part of
3 the conspiracy. This is a hearing about whether the prices paid and charged were associated
4 with the exercise of market power in the relevant market—and we must be concerned with
5 how prices were set, not merely whether a particular firm by itself had market power.

6

7 Q. Does this complete your testimony?

8 A. Yes, it does.