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**United States of America  
before the  
Federal Energy Regulatory Commission**

Avista Corporation )  
Avista Energy, Inc. )  
Enron Power Marketing, Inc. )  
Portland General Electric Company )

Docket No. EL02-115-000

**Affidavit of  
Patrick R. Crowley  
Regarding Amended Comments & Findings  
of FERC Trial Staff Investigative Report into  
Avista Utilities & Avista Energy, Inc.**

*Patrick R. Crowley, being duly sworn on oath, does depose and say:*

My name is Patrick R. Crowley. My business address is 888 First Street, N.E., Washington, D.C., 20426. I am employed by the Federal Energy Regulatory Commission (FERC or Commission) as an Economist in the Office of Administrative Litigation. As the FERC Trial Staff technical team leader on the Avista Investigation, I sponsored Appendix A of the FERC Trial Staff Investigation Report.

**Qualification**

My educational background and professional qualifications are as follows: I graduated from DePaul University in Chicago, Illinois, in 1976 with a Bachelor of Arts degree in Economics. In 1978, I received a Master of Arts degree in Economics from DePaul University. I began work at the Commission in 1979 as an Industry Economist in the Pipeline Rates Division of the Office of Pipeline Rates. As an expert witness with the Trial Staff litigation team from 1979 to 1992, I prepared pipeline depreciation studies, long term forecasts of natural gas reserves and production, mortality studies of plant investment and retirements, cost behavior studies for pipeline facilities, and Mcf/...

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2 **before the**  
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12 **Affidavit of**  
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34 investment and retirements, cost behavior studies for pipeline facilities, and Mcf/mile

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1 studies. From 1992 through 1994, I worked on two teams shepherding the restructuring  
2 of two major gas pipeline companies. From 1994 through 1998, I worked on the advisory  
3 side of the Commission where I prepared reports for Commission orders regarding  
4 proposals for revised tariff terms; new services, rate designs, and tariff rates; and a wide  
5 variety of utility reports and cost studies. In 1998, I returned to the litigation side of the  
6 Commission where I now work on electric utility, natural gas pipeline, and oil pipeline  
7 rate cases and complaint cases.

8 I have previously filed testimony before the Commission in the following rate  
9 cases:

10 Black Marlin Pipeline Company, Docket No. RP81-67-000;  
11 Tarpon Transmission Company, Docket No. RP84-82-000;  
12 National Fuel Gas Supply Corporation, Docket No. RP86-136-000;  
13 Pacific Gas Transmission Company, Docket No. RP87-62-000;  
14 Sea Robin Pipeline Company, Docket No. RP88-181-000;  
15 Natural Gas Pipeline Company of America, Docket No. RP88-209-000;  
16 Paiute Pipeline Company, Docket No. RP88-227-000;  
17 Southwest Gas Storage Company, Docket No. RP89-60-000;  
18 Natural Gas Pipeline Co. of America, Docket No. 93-36-000;  
19 San Diego Gas & Electric Co. v Public Service of NM, Docket No. EL97-54-002;  
20 Montana Power Company, Docket No. ER98-2382-000;  
21 Big West Oil Co. & Chevron Products Co. v Anschutz Ranch East Pipeline, Inc.  
22 & Express Pipeline Partnership, Docket Nos. OR02-1-000 & OR02-3-000;  
23 Big West Oil Co. & Chevron Products Co. v Frontier Pipeline Co.  
24 & Express Pipeline Partnership, Docket Nos. OR02-2-000 & OR02-4-000;  
25 Boston Edison Company, Docket No. ER01-890-000.

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1 **Purpose of this Affidavit**

2 The purpose of this affidavit is to address the concerns raised by Chief Judge  
3 Curtis Wagner regarding apparent conflicts between FERC Trial Staff’s conclusions set  
4 forth in the FERC Trial Staff *Investigative Report* of Avista Corporation and Avista  
5 Energy, Inc. (Trial Staff Report), filed January 30, 2003, and the allegations discussed in  
6 the Advisory Staff *Final Report on Price Manipulation in Western Markets, Fact-Finding*  
7 *Investigation of Potential Manipulation of Electric and Natural Gas Prices* (Final  
8 Report), Docket No. PA02-2-000, issued March 26, 2003. I will also reference the  
9 Advisory Staff *Initial Report*, Docket No. PA02-2-000, issued August 2002, because it is  
10 the report that gave rise to the investigation in Docket No. EL02-115-000.

11 Specifically, Judge Wagner requested that the FERC Trial Staff address three  
12 potential market gaming strategies discussed in the Final Report: Get Shorty, Ricochet,  
13 and Cut Schedules. I address these concerns below.

14

15 **Get Shorty & Ancillary Services Gaming**

16

17 Get Shorty was Enron’s name for its internal strategies in the California ancillary services  
18 (A/S) markets. The Enron memorandum described two forms of ancillary services strategies: 1)  
19 the arbitraging of pricing differentials for A/S between the day ahead price and the hour ahead  
20 price, and 2) the selling of A/S that Enron did not have in the hope that either the service would  
21 not be called on or that the service could be purchased in real time if it was called upon. Trial  
22 Staff sought to determine if Avista Energy or Avista Utilities engaged in similar behavior,  
23 particularly with respect to the second form, which relies on the filing of schedules based of false  
24 information.

25

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1 Final Report

2 The Advisory Staff’s Final Report describes Get Shorty as the paper trading of ancillary  
3 services in which Enron would commit to provide A/S in the Cal PX day ahead market and then  
4 cover its position in the Cal ISO hour ahead market because it did not have the resources to  
5 available to provide the service when Enron submitted the schedule. The Report recognizes that  
6 Amendment 4 of the tariff permits the buy back of A/S and that it represents a legitimate energy  
7 marketing business operation.

8 The key element that differentiates the legitimate arbitraging of A/S from “shorting” or  
9 “gaming” the A/S market is whether the A/S provider has the resources on hand to provide the  
10 service when the commitment is made. The Final Report notes that the Enron memorandum  
11 states that Enron did not have the resources on hand to provide the service. (See Exhibit No. S-7,  
12 the December 6, 2000, Enron Memorandum, page 5 and 6, §4. d & e.) The Final Report states  
13 that the Cal ISO tariff required A/S providers to identify the specific generating source for their  
14 A/S commitments. (For out-of-state providers, however, only an interconnect point was required  
15 to be identified under the tariff. See Cal ISO Tariff, sec. 2.5.7.4.2, Sheet No. 67). Because  
16 Enron did not have a real source for its A/S bid to the Cal ISO, its bid was based on false  
17 information. The filing of schedules based on false information is what differentiates it from  
18 legitimate arbitraging of A/S pricing differentials.

19 The Final Report notes the difficulty of determining whether an A/S provider actually had  
20 the resources available when committing in the day ahead market, especially if the resource is  
21 located in another control area, emphasizing the “real question: was this revenue earned by  
22 legitimate arbitrage or through submitting a false schedule...”

23 The Final Report’s concerns about the Get Shorty strategy arise out of the October 4,  
24 2002, Cal ISO Report *Analysis of Trading and Scheduling Strategies Described in the Enron*  
25 *Memos* (October 4 Report). The October 4 Report includes a calculation of the net revenues  
26 earned by all those, including Avista Energy, who engaged in buying back their A/S. These net  
27 revenues are the difference between the revenues earned through the sales of A/S to the Cal ISO

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1 in the day ahead market and the costs of buying them back in the hour ahead market. As noted in  
2 the Trial Staff Report (page 18), Avista Energy sold 334,421 MW of A/S to the Cal ISO in 2000  
3 and 2001; it bought back 152,378 MW. The differential in the pricing between the day ahead  
4 and hour ahead markets amounted to the net revenue of \$11.8 million referenced in the October 4  
5 Report.

6 The Advisory Staff Final Report refers to the \$11.8 million in a discussion that begins  
7 with a recommendation that to the extent that selling A/S includes the supplying of false  
8 information, it should be prohibited. The Final Report then notes the difficulty in knowing  
9 whether the resources are actually available when the sale to the Cal ISO is made. The Final  
10 report then suggests that the \$11.8 million earned by Avista Energy is an indication of “the  
11 potential extent of this practice” (page VI-32). The Final report does not clarify which practice  
12 the figures are indicative of, but the implication is that the \$11.8 million is an ill-gotten gain.  
13 The Final Report concludes its Get Shorty discussion with the finding that the Get Shorty  
14 strategy falls within the anti-gaming provisions because it makes the Cal ISO and Cal PX  
15 markets more vulnerable to price manipulation. The Final Report does not explain how pricing  
16 arbitrage, a legitimate business operation, makes the market more vulnerable to price  
17 manipulation. Nor does the Final Report explain how selling A/S short makes the market more  
18 vulnerable to price manipulation. (The Trial Staff finds that it does not in fact make the market  
19 vulnerable to price manipulation. The question of whether it makes the system less reliable is  
20 not addressed in the Final Report.)

21 The Advisory Staff Final Report also suggests that the buy back of A/S may have been a  
22 coordinated operation under Enron related business alliances. The Final Report bases this  
23 allegation on an undated Enron memo with a cryptic reference to a revenue sharing arrangement  
24 between Enron and “Avista” for A/S. No further explanation of the document is provided in the  
25 Final Report, although it implies a coordinated effort by Enron and Avista Energy to game the  
26 A/S market. (Trial Staff followed up on the memo and discovered that it appeared to be a  
27 reference to four transactions in 1998 between Enron and Avista Utility - not Avista Energy.)

5

1           Limitations of the Advisory Staff Final Report

- 2           • The Final Reports does not clearly differentiate between the two forms of the Get
- 3           Shorty strategy in its discussion and, in fact, consistently intermingles the two subjects
- 4           leaving the distinct impression that Avista Energy’s legitimate arbitraging operations
- 5           were based on filing false information.
- 6           • The Final Report lists the earnings from A/S buy-backs, implying that the \$11.8 million
- 7           in net revenues was the result of filing schedules based on false information rather than
- 8           the result of legitimate arbitraging operation earnings.
- 9           • The Final Report did not demonstrate how legitimate A/S arbitrage operations made the
- 10          Cal ISO and Cal PX vulnerable to price manipulation.
- 11          • The Final Report did not analyze or explain impact of Get Shorty on the hour ahead
- 12          market clearing price. (To the contrary, Trial Staff finds that in fact there is no impact on
- 13          the hour ahead market clearing price, as discussed below.)
- 14          • The Final Report did not provide guidance as to how to determine whether the A/S
- 15          provider had the resources when it made the commitment, despite noting that it is *the* key
- 16          question in the debate.
- 17          • The undated memo, purporting to evidence an illicit business alliance between Enron
- 18          and Avista Energy, turned out to be a 1998 A/S arrangement under which Enron and
- 19          Avista Utilities (then Washington Water Power) carried out four transactions; it was not
- 20          an arrangement between Enron and Avista Energy to game the markets.

21  
22           Trial Staff Report

23           Although the Advisory Staff Initial Report, which gave rise to the Trial Staff investigation

24           in Docket No. EL02-115-000, did not mention Avista Utilities or Avista Energy in conjunction

25           with the Get Short strategy, the FERC Trial Staff did undertake an investigation of the possibility

26           that either Avista Utilities or Avista Energy may have engaged in such a Get Shorty type strategy.

27           As noted in the Trial Staff Investigation Report at page 19, Avista Energy was an active

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1 participant in the buy-back of A/S; Avista Utilities was not an active participant in the Cal ISO  
2 A/S markets. The Trial Staff investigated both the legitimate arbitraging operations of Avista  
3 Energy and the possibility that Avista Energy might have sold services without the resources to  
4 back it up.

5  
6 Avista Energy A/S Resource Back Up

7 The Trial Staff investigated the key question of whether Avista Energy had the resources  
8 available to provide A/S when it sold the services to the Cal ISO. The Trial Staff investigated  
9 that possibility in two steps: 1) Trial Staff asked Avista Energy to provide its back-up resources  
10 for the A/S commitments made in 2000/2001, and 2) Trial Staff looked for instances in which  
11 Avista Energy could not provide the A/S when it was called upon. The evidence does not lead to  
12 the conclusion that Avista Energy gamed the system by selling A/S services it could not provide.

13 In regard to the first step, Avista Energy provided Trial Staff a copy of the Cal ISO's  
14 Scheduling Coordinator Certification letter, dated September 13, 1999, affirming the Cal ISO's  
15 acceptance of Avista Energy's ability to deliver A/S to the points of interchange with the Cal ISO  
16 system. (See Exhibit No. S-8.) The letter confirms that Avista Energy had demonstrated to the  
17 Cal ISO that it had the ability to deliver A/S if and when called upon. Avista Energy further  
18 explained to Trial Staff that much of its A/S resources were backed up by an arrangement with  
19 the Chelan Public Utility District, which provided A/S back up through Chelan's resources,  
20 including readily available hydro facilities located on the Columbia River.

21 In regard to the second step, Trial Staff examined the Cal ISO July 3, 2002 Market Notice  
22 regarding rescinded A/S payments provides that test (Tab 8 of Appendix B of the Trial Staff  
23 Report). The July 3<sup>rd</sup> Notice lists all A/S providers that got caught short when called upon to  
24 deliver the A/S contracted for. Of the \$129 million in rescinded payments, Avista Energy  
25 accounted for approximately \$53,000 – substantially all of which could be traced to a single  
26 incident in a single hour, as discussed in the Trial Staff Investigation Report. There were no  
27 other instances in which Avista Energy was unable to provide the A/S when called upon, and,

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1 because it was primarily a single incident, provides no evidence of a pattern of behavior designed  
2 to violate the Cal ISO tariff.

3 Avista Energy Arbitrage Operations

4 Trial Staff's January 30, 2003 Report stated, based on discussions with Avista Energy  
5 personnel, that the Cal ISO appeared to have over-supplied itself with A/S in the day ahead  
6 market and then offered that excess A/S back to the market in the hour ahead market, resulting in  
7 depressed prices which gave the incentive for the buy back arbitrage operations.

8 Trial Staff's discussions with Cal ISO system operating personnel brought forth another  
9 explanation for the A/S buy back transactions, namely, that the buy-back arbitraging  
10 opportunities arose due to peculiarities in the Cal ISO tariff provisions. The Cal ISO avers that  
11 the tariff (§2.5.10.2) established a buy-back provision to provide for instances where the seller of  
12 A/S was uncertain of its ability to perform if called upon. The buy-back provision allowed the  
13 seller to back out of the service and allowed the Cal ISO to seek replacements on a timely basis.  
14 The tariff provision was probably intended as an emergency adjustment mechanism but did not  
15 prohibit the use of the tariff provision as a financial device.

16 Avista Energy and others used the tariff provision as a financial market device, which, as  
17 noted in the Final Report, is a legitimate arbitraging operation. Regardless of which underlying  
18 rationale (oversupplies or software glitches) drove the underlying economics of the A/S buy back  
19 markets, the impact on the hour ahead A/S clearing price was the same. The fact is that despite  
20 having earned over \$11 million on these transactions, no harm was done to the Cal ISO energy  
21 markets, as the pricing mechanism discussion below illustrates.

22

23 A/S Buy Back Pricing Mechanism & Market Impacts

24 The buy-back of A/S is accomplished through the submission of a negative MW bid in  
25 the hour ahead A/S market. The negative bid, in effect, nullifies the day ahead offer to supply  
26 A/S, and triggers the Cal ISO A/S program to seek replacements for the withdrawn A/S supplies.  
27 Parties buying back their A/S do so as "price takers," i.e., they receive from the Cal ISO the

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1 market clearing price for A/S at the hour involved. The Cal ISO meets its A/S requirements  
2 through an open bidding process that establishes a market clearing price in both the day ahead  
3 and hour ahead markets. The Cal ISO stacks the bids by bid price until it has sufficient reserves  
4 to ensure system reliability. The last bid accepted sets the market clearing price for all bidders.  
5 Some parties submit very low bids to ensure that their resources are included in the stack  
6 regardless of the clearing price. In the hour ahead A/S market, it was frequently the case that all  
7 the A/S reserves requirements were met by bidders submitting extremely low bids, e.g., one  
8 cent/MW. Consequently, the Cal ISO was able to meet its A/S requirements in the hour ahead  
9 market at very low costs. In turn, as price-takers, those who bought back A/S in the hour ahead  
10 market could do so at the very low market clearing price. Hence, the impact of the buy-back of  
11 A/S on the market or the Cal ISO is almost nil. The cost to replace the A/S withdrawn through  
12 the buy back provisions of the tariff was the market clearing price: one cent/MW, the same  
13 amount received by Avista Energy.

14 The \$11.8 million earned by Avista Energy through the arbitraging of A/S prices between  
15 the day ahead and hour ahead markets is based entirely on the market clearing prices and  
16 Commission accepted tariff mechanisms. Trial Staff found no evidence to suggest that Avista  
17 Energy's arbitraging operations in the A/S markets constituted violations of the Cal ISO tariff.

18

### 19 **Ricochet & Megawatt Laundering**

20 Ricochet was Enron's term for its strategy for arbitraging the price spread between the  
21 Cal PX day ahead market and the Cal ISO real time market. The strategy is designed to evade  
22 the Cal PX pricing strategy and the Cal ISO price caps by taking energy out of California and  
23 reselling it as an import and thus not bound by the price cap rules. Trial Staff's analysis of  
24 whether Avista Energy or Avista Utility may have engaged in a similar strategy took a two step  
25 approach. First, Trial Staff examined the Cal ISO database, described below, to determine if any  
26 Avista Energy transactions fit the definitions outlined in the Final Report to qualify as Ricochet  
27 transactions; second, Trial Staff examined the Avista Energy data base for its transaction

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1 portfolio for the week of December 1<sup>st</sup> through December 7<sup>th</sup>, 2000, to determine whether the day  
2 ahead and real time transactions showed a pattern of behavior which appeared to be a Ricochet  
3 strategy. Given the definition outlined in the Final Report, there were no Avista Energy  
4 transactions that fit the conditions necessary to be Ricochet transactions. The following  
5 discussion describes the Trial Staff investigation of the Avista Energy transactions that appeared  
6 at first to be Ricochet transactions.

7

### 8 Enron Memo

9 The Trial Staff began its overall analysis of the Ricochet strategy by first examining the  
10 Enron Memo (Exhibit No. S-7 page 6-7) that launched the Commission inquiry into market  
11 manipulations of the Western energy markets in 2000. It describes the Ricochet strategy as one  
12 in which Enron buys power from the Cal PX in the day head market, schedules it for export,  
13 sends it out of California to another party, buys it back and sells it back into the California  
14 markets. The Enron Memo states that the intent of the strategy is solely to arbitrage prices and  
15 not to serve load or meet contractual obligations and may have the effect of raising the market  
16 clearing price by raising the demand for energy. The Memo also states that the strategy appears  
17 to have had no impact on the supply of energy in California and that the parties buying the  
18 ricocheted power are the same entities that under-scheduled load in the first place.

19

### 20 First Step

#### 21 Cal ISO MW Laundering Data Base

22 The Trial Staff's first step was to examine the data bases that gave rise to the Advisory  
23 Staff's concerns about MW Laundering. The Final Report drew its list of parties that may have  
24 engaged in MW laundering from the Cal ISO October 4, 2002 Report (see Tab 1 of Appendix B  
25 of the Trial Staff Report) and a Cal ISO Response to an Advisory Staff data request dated  
26 February 10, 2003 (February Data Base). The February Data Base included a set of spreadsheets  
27 devoted to the issue of MW Laundering. Within this set of spreadsheets was a data base listing

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1 all transactions by all parties that had exports out of California through Cal PX purchases and  
2 imports through the Cal ISO real time operations at the same hour. A portion of this data base  
3 can be seen in Exhibit No. S-9. The database does not identify any specific instances of  
4 Ricochet transactions but rather screened the export/import combinations of every entity that did  
5 business with the Cal PX and Cal ISO to find instances where imports equaled or exceeded  
6 exports during any given hour. In discussions with Cal ISO system operators Trial Staff learned  
7 that the Cal ISO reasoning is that the net export amount reflects hours in which the cross flows of  
8 exports and imports held the possibility for evading the price caps.

9 The Trial Staff understanding of the Ricochet strategy is that parties could seek to evade  
10 the Cal PX price strategy and Cal ISO caps by sending California-generated power out of state  
11 and bringing it back in, at significantly higher prices in the same hour. In a dynamic power  
12 market there can be hundreds of transactions in every hour for each market participant. The net  
13 MW flows can be surprisingly small given the volume of financial transactions for any given  
14 hour. Trial Staff's approach was to differentiate possible Ricochet transactions from all other  
15 export and import combinations by screening the universe of export/imports to cull only those  
16 exports from the Cal PX in the day ahead market and the import was in the real time Out of  
17 Market transaction.

18 The reason for this approach is that in order to evade the Cal ISO price caps, the seller of  
19 power must wait for the Cal ISO to determine if it has met its load requirements through the  
20 normal Cal PX bidding process and the Ancillary Services and Supplemental Energy markets. If  
21 these do not meet the load requirements, the Cal ISO begins seeking additional energy supplies  
22 through "out of market" transactions, which are simply power purchases at prices above its caps  
23 – prices that will not factor into the calculation of the market clearing price. Out of Market  
24 prices can be above or below the Cal ISO price cap depending on the bidding levels.

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1 Screening the Data Base

2 Trial Staff sought and received a copy of the Cal ISO database that included all potential  
3 Ricochet transactions by all parties. Trial Staff examined the Cal ISO MW Laundering data base  
4 and focused in particular on the transactions identified as Avista Energy exports and imports.  
5 The Avista Energy transactions included in this data base consists of 18,268 records and 53  
6 columns of data. An example of the data base is included as Exhibit No. S-9 to this affidavit.  
7 Exhibit No. S-9 reflects the removal of extraneous columns and the reformatting of pages and  
8 column titles. Due to the size of the data base, I have included only a representative sample of  
9 the transactions for mid-November through mid-December, 2000, pages 83 through 95 of 315  
10 pages. This is the period in which the western energy markets faced their wildest gyrations and  
11 the only period in which any pairs of Avista Energy transactions met some of the qualifications  
12 for MW Laundering.

13 Trial Staff then further screened the data base for exports from California through  
14 purchases from the Cal PX in the day ahead market and imports to the Cal ISO in the real time  
15 market at "out of market" prices. Only imports into California in the real time markets qualify as  
16 possible Ricochet transactions, all other imports are not possible Ricochet transactions. Staff  
17 also screened the export/imports pairs to cull out only transactions in which the Cal ISO bought  
18 out of market and above the caps, since the definition specifies that the intent was to evade the  
19 price caps. The result of these screens is the data base shown in Exhibit No. S-10 which reflects  
20 48 transactions over five days. (There were other transaction pairs in which Avista Energy  
21 bought day ahead Cal PX power and sold power to the Cal ISO in out of market transactions.  
22 However, although the prices were above the prevailing market clearing price, the prices were  
23 still under the caps imposed by the Cal ISO. See for example Exhibit No. S-9, page 89, line  
24 5140.)

25 Finally, Trial Staff notes that the Final Report requires that Ricochet transactions must be  
26 sleeved through a second entity, which receives a fee (more likely, the first company sells to the  
27 second, which sells back to the first at a slightly higher price). This qualification requires

12

1 simultaneous transactions with a second party matching the hour and quantity of the Cal PX  
2 export and Cal ISO import. The sleeving essentially sells the power into a second entity's  
3 portfolio in the day ahead market and buys it back in the hour ahead market, to hide the  
4 transaction from the ISO. To test for his possibility, Trial Staff undertook its second step.

5  
6 Second Step

7 The Advisory Staff Final Report narrowly defines the Ricochet or MW laundering  
8 strategy (Final Report page VI-17) as "involving one entity buying energy from the PX in the day  
9 ahead market, exporting it to a second entity which received a fee from the first company. The  
10 energy was later sold to the Cal ISO in the real time market." The Final Report states that  
11 Ricochets "necessarily involve multiple entities." Trial Staff's second approach sought to  
12 determine whether Avista Energy "laundered" its Cal PX power before selling it to the Cal ISO  
13 in out of market transactions. Starting with the screened transactions identified in the first  
14 approach, Staff examined the portfolio of positions held by Avista Energy for November 22,  
15 2000 and for the first week in December, 2000. This portfolio of transaction can be seen in  
16 Exhibit No. S-14, "Mid-C Preschedule Position and Real Time Transactions." Exhibit No. S-14  
17 shows the hour by hour positions held by Avista Energy. Line 3 of each page indicates the  
18 preschedule positions entered into by the Avista Energy traders for each hour. These positions  
19 are the result of hundreds of deals stretching back over four to five years.

20 Examples of the hourly portfolio positions are provided in Exhibit No. S-11 for the hour  
21 ending 0100 (off-peak 1 AM), Exhibit No. S-12 for hour ending 0700 (on-peak 7 AM), and  
22 Exhibit No. S-13 for hour ending 1400 (on-peak 2 PM).

23 • Exhibit No. S-11 shows that for hour ending 0100 there were 181 preschedule  
24 transactions amounting to a net of 48 MW for sale, of which 11 transactions were entered  
25 into in the day ahead (line 171 through 181) for a net of 1 MW sold (line 185). None of  
26 these transactions were with the Cal PX. The 48 MW net position is seen in Exhibit No.  
27 S-14, line 3, column D.

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1 • Exhibit No. S-12 shows that for hour ending 0700 there were 715 preschedule  
2 transactions amounting to a net of 130 MW for sale, of which 21 transactions were  
3 entered into in the day ahead (line 696 through 715) for a net of 10 MW bought. 50 MW  
4 were bought at NOB from the Cal PX for export to the northwest (line 699). The 130  
5 MW net position is seen in Exhibit No. S-14, line 9, column J. Line 9 is made up of the  
6 50 MW bought from the Cal PX (line 5) and all other transactions (line 3).

7 • Exhibit No. S-13 shows that for hour ending 1400 there were 719 preschedule  
8 transactions amounting to a net of 130 MW for sale, of which 20 transactions were  
9 entered into in the day ahead (line 700 through 719) for a net of 10 MW bought. 50 MW  
10 were bought at NOB from the Cal PX for export to the northwest (line 703). The 130  
11 MW net position is seen in Exhibit No. S-14, line 3, column Q. Line 9 is made up of the  
12 50 MW bought from the Cal PX (line 5) and all other transactions (line 3).

13  
14 Having established the hourly positions as being made up of long-term deals and day  
15 ahead transactions, and identifying the Cal PX purchases among the transactions, Trial Staff then  
16 examined the sales of these portfolio positions. Lines 19 through 56 of Exhibit No. S-14 reveal  
17 the Avista Energy purchases and sales in real time markets. For December 6, 2000, line 41 of  
18 Exhibit No. S-14 shows that no sale was made into the Cal ISO supplemental energy markets  
19 while line 43 of Exhibit No. S-14 shows out of market sales to the Cal ISO for each hour of the  
20 day. Hours ending 0600 through 1300 and 1500 through 2400 show prices above the \$250 cap.  
21 Hours ending 0600 through 2200 also show, on line 5, that Avista Energy had day ahead Cal PX  
22 portfolio positions. Hours 0600 through 2200 thus show some of the requirements for a Ricochet  
23 transaction: day ahead Cal PX purchase and hour ahead Cal ISO sales out of market above the  
24 price caps. The next step in the definition is to determine whether the power was laundered by a  
25 sale to a second entity and a repurchase before selling back into the California markets.

26 Lines 19 through 56 of Exhibit No. S-14 show the real time transactions for Avista  
27 Energy. A laundering transaction should show up as a sale to some entity and a repurchase from

14

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15

1 that same entity at fairly close prices and the same MWs. My examination of the real time  
2 transactions did not reveal any buy/sell transactions between Avista Energy and any other market  
3 participant. Consequently, none of the 48 transactions identified in the screening showed on  
4 Exhibit No. S-10 qualify as Ricochet transactions.

5

### 6 Conclusion

7 Trial Staff's analysis of whether Avista Energy or Avista Utility may have engaged in the  
8 Ricochet strategy examined the Cal ISO database to determine if any Avista Energy transactions  
9 fit the definitions outlined in the Final Report to qualify as Ricochet transactions. Given the  
10 definition outlined in the Final Report, there were no Avista Energy transactions that fit the  
11 conditions necessary to be Ricochet transactions.

12

### 13 **Cut Schedules & Congestion Gaming**

#### 14 October 4, 2002 Cal ISO Report

15 The October 4, 2002, Cal ISO Report *Analysis of Trading and Scheduling Strategies*  
16 *Described in the Enron Memos* includes a description of Enron's strategy called "Scheduling  
17 Energy to Collect the Congestion Charges." Under this "Cut Schedule" strategy, a scheduling  
18 coordinator would submit a counterflow power schedule in the day ahead market for lines it  
19 believed would become congested. The Cal ISO would then award the scheduling coordinator a  
20 congestion relief payment based on the schedule submitted and the adjustment bid values  
21 submitted by the various parties. In real time, the scheduling coordinator would cut its schedules  
22 – failing to dispatch the committed counterflow to relieve congestion. Failure to dispatch  
23 subjected the scheduling coordinator to a charge equal to the "inc" price for every MW the  
24 scheduling coordinator was short of its committed counterflow. The "inc" price was the market  
25 clearing price for energy bid into the Supplemental Market. The profitability of this strategy  
26 relied on the congestion relief payment being greater than the "inc" price. The scheduling  
27 coordinator would collect the congestion relief payment, pay the "inc" price for the MWs not

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1 dispatched, and pocket the difference.

2

3 **Trial Staff Finding**

4           The Cal ISO Report lists 33 companies that received counterflow congestion relief  
5 payments and subsequently failed to dispatch the committed energy. Avista Energy is included  
6 in that list due to a single day's cut schedule in March 2001. The Cal ISO tariff provided a  
7 mechanism for dealing with such instances, as described above. The tariff was designed under  
8 the assumption that real time inc prices would be greater than the congestion relief payments and  
9 thus act as a deterrent to intentional cutting of schedules. Avista Energy's March 10, 2001  
10 transaction represents a one-time occurrence of cutting a schedule and thus provides no evidence  
11 of a pattern of behavior designed to game the congestion relief mechanisms of the Cal IOS  
12 Tariff.

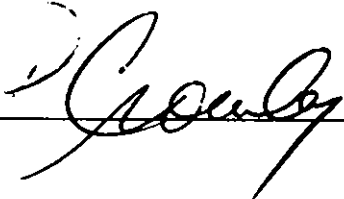
**United States of America**  
**before the**  
**Federal Energy Regulatory Commission**

Avista Corporation )  
Avista Energy, Inc. )  
Enron Power Marketing, Inc. )  
Portland General Electric Company )

Docket No. EL02-115-000

AFFIDAVIT OF Patrick R. Crowley

I, Patrick R. Crowley, do hereby declare that under penalty of perjury that I am the author of the foregoing affidavit, that the facts set forth herein are true and correct to the best of my knowledge.

  
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May 15, 2003