

**BEFORE THE WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION**

UE-030751

WASHINGTON UTILITIES AND)
TRANSPORTATION COMMISSION,)
)
Complainant,)
)
v.)
)
AVISTA CORPORATION, d/b/a)
AVISTA UTILITIES,)
)
Respondent.)
_____)

2003 ENERGY RECOVERY MECHANISM PRUDENCE REVIEW

**REDACTED VERSION
DIRECT TESTIMONY OF
DONALD W. SCHOENBECK
ON BEHALF OF
THE INDUSTRIAL CUSTOMERS OF NORTHWEST UTILITIES**

August 25, 2003

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 **A.** My name is Donald W. Schoenbeck. I am a principal of Regulatory & Cogeneration
3 Services, Inc. (“RCS”), a utility rate and economic consulting firm. My business address
4 is 900 Washington Street, Suite 1000, Vancouver, WA 98660.

5 **Q. PLEASE DESCRIBE YOUR BACKGROUND AND EXPERIENCE.**

6 **A.** I’ve been involved in the electric and gas utility industries for over 25 years. For the
7 majority of this time, I have provided consulting services for large industrial customers
8 addressing regulatory and contractual matters before numerous state commissions, public
9 utility governing boards, governmental agencies, state and federal courts, the National
10 Energy Board of Canada and the Federal Energy Regulatory Commission (“FERC”). I
11 have appeared before the Washington Utilities and Transportation Commission
12 (“WUTC” or “Commission”) at least 20 times since 1982. A further description of my
13 educational background and work experiences is summarized in ICNU Ex. ____
14 (DWS-1).

15 **Q. ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**

16 **A.** I am testifying on behalf of the Industrial Customers of Northwest Utilities (“ICNU”).
17 ICNU is a non-profit trade association, whose members are large industrial customers
18 served by electric utilities throughout the Pacific Northwest, including Avista Utilities
19 (“Avista” or “the Company”).

20 **I. INTRODUCTION AND SUMMARY**

21 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

22 **A.** ICNU has asked me to examine the \$18.4 million (including interest) in power costs
23 deferred by Avista under its Energy Recovery Mechanism (“ERM”), from July 1, 2002,

1 through December 31, 2002 (the “2002 ERM Period”). It is ICNU’s position that not all
2 of these costs are appropriate for recovery.

3 **Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

4 **A.** ICNU recommends that the Commission reduce Avista’s \$18.4 million ERM balance by
5 \$4.4 million. This results in a total recovery of \$14.0 million, as depicted on ICNU Ex.
6 ____ (DWS-2) at line 23. This exhibit replicates Avista’s methodology of calculating the
7 ERM deferral, but modifies the balance, based on ICNU’s proposed disallowance.
8 ICNU’s proposed disallowance relates to only two issues regarding Avista’s ERM costs
9 in this proceeding: 1) the appropriate ERM treatment of Avista’s buyout of its Enron
10 contract; and 2) the implications on the ERM balance of the delay in the commercial
11 operation date of the Coyote Springs 2 generating project (“CS2”). ICNU recommends
12 excluding \$1.765 million associated with Avista’s Enron contract buyout costs from
13 current period expenses, and reducing the ERM balance by \$2.65 million to account for
14 the delay in the operation of CS2. ICNU Ex. ____ (DWS-2) at lines 23-24; ICNU Ex. ____
15 (DWS-5) at lines 23-24.

16 **Q. DOES ICNU’S PROPOSED DISALLOWANCE MEAN THAT THE REMAINDER**
17 **OF THE ERM BALANCE WAS PRUDENTLY INCURRED?**

18 **A.** No, not necessarily. ICNU limited its review in this proceeding to the issues described
19 above. Other parties in this proceeding may propose approximate disallowances that
20 further reduce the ERM balance.

21 **II. ERM BACKGROUND**

22 **Q. PLEASE DESCRIBE THE BACKGROUND AND PURPOSE OF THE ERM.**

23 **A.** On May 23, 2002, ICNU, Public Counsel, Commission Staff, and Avista entered into a
24 Stipulation (“Stipulation”) that resolved a number of outstanding issues in Avista’s

1 general rate case in Docket No. UE-011595. The Stipulation provided that Avista would
2 implement an ERM in its electric operations beginning July 1, 2002, and that the
3 Commission would conduct a prudence review of the costs deferred under the ERM each
4 year. The Commission approved the Stipulation in its Fifth Supplemental Order in
5 Docket No. UE-011595. WUTC v. Avista, WUTC Docket No. UE-011595, Fifth Supp.
6 Order (June 18, 2002).

7 The purpose of the ERM was to allow the Company the opportunity to recover, or
8 to return to ratepayers, amounts attributable to deviations from authorized levels for
9 certain fuel and power-related costs. As was noted in the Commission's Fifth
10 Supplemental Order in UE-011595, the ERM was intended to cover "ordinary" variations
11 in power supply costs. UE-011595, Fifth Supp. Order at 15. It certainly was not ICNU's
12 intent that the ERM would allow recovery associated with extraordinary events such as
13 extended plant outages. In addition, from ICNU's perspective, a central focus during the
14 negotiations was the ratemaking treatment afforded to certain gas contracts that Avista
15 had entered into with various parties. We believed that the ERM provided a reasonable
16 sharing of these contract costs between the Company and ratepayers.

17 **Q. PLEASE DESCRIBE THE PROCEDURE SET OUT IN THE STIPULATION FOR**
18 **THE PRUDENCE REVIEW AND AUDIT OF THE ERM.**

19 **A.** Paragraph 4.b of the Stipulation outlines the procedure for the ERM review:

20 Annual Filing to Review Deferrals: The Company agrees to make
21 an annual filing on or before April 1st of each year to provide
22 opportunity for the Commission and interested parties to review
23 the prudence of and audit the ERM deferral entries for the prior
24 calendar year. The Company will respond to data requests within
25 10 days to allow the Commission Staff and interested parties the
26 opportunity to review the deferral information during a 90-day
27 review period ending June 30th of each year. The 90-day review

1 period may be extended by agreement of the parties participating
2 in the review, or by Commission order.

3 On March 28, 2003, Avista made an initial filing for the prudence review and audit of the
4 amounts deferred during the 2002 ERM Period. The Commission subsequently ordered
5 Avista to make an evidentiary filing to justify the prudence of the amounts deferred under
6 the ERM. WUTC v. Avista, WUTC Docket Nos. UE-030751, UE-011595, Sixth Supp.
7 Order (May 27, 2003). Avista filed testimony and exhibits in this docket on June 23,
8 2003.

9 **Q. WHAT INFORMATION, DOCUMENTS, AND DATA DID YOU REVIEW IN**
10 **ORDER TO ANALYZE AVISTA'S 2002 ERM POWER COSTS?**

11 **A.** I reviewed Avista's March 28, 2003 filing and the ERM reports for the relevant time
12 period, read the Company's direct testimony and exhibits filed on June 23, 2003, and
13 examined the Company's discovery responses in this docket.

14 **III. PRUDENCE ISSUES**

15 **Enron Contract Buyout**

16 **Q. PLEASE DESCRIBE THE COMPANY'S CONTRACT WITH ENRON AND**
17 **EXPLAIN HOW THE COMPANY ACCOUNTED FOR THE BUYOUT OF THE**
18 **ENRON CONTRACT IN THE 2002 ERM PERIOD.**

19 **A.** [REDACTED]
20 [REDACTED]
21 [REDACTED]
22 [REDACTED]
23 [REDACTED] Avista reflected this Enron contract buyout in the October

1 2002 ERM report as a purchase power expense (Account 555).

2 **Q. PLEASE DESCRIBE YOUR PROPOSED TREATMENT OF THE ENRON**
3 **CONTRACT BUYOUT COSTS AND THE REASONS SUPPORTING YOUR**
4 **PROPOSED TREATMENT.**

5 **A.** The Commission should remove the costs associated with the Enron contract buyout from
6 the 2002 ERM Period for a number of reasons. First, during the settlement discussions
7 with Avista that resulted in adoption of the ERM, ICNU noted that any contract buyout
8 expenses should be reflected over the life of the contract and not recorded as a current
9 expense. Although initially ICNU made this point with regard to certain of the
10 Company's gas contracts, this "contract term" accounting treatment is the only equitable
11 way to prevent the gaming of the ERM when the Company seeks to recover costs
12 associated with termination of any agreement.

13 **Q. PLEASE EXPLAIN THE PROBLEMS THAT MIGHT ARISE IF AVISTA WAS**
14 **NOT REQUIRED TO USE THE "CONTRACT TERM" ACCOUNTING**
15 **METHOD.**

16 **A.** If Avista was not required to reflect contract buyout costs over the life of the contract
17 under the ERM, the Company could have, for example, entered into the gas contracts
18 about which ICNU was concerned, sold off all the gas volumes, and recorded the above-
19 market charge in the ERM as a current expense. Such a result would significantly alter
20 the careful balance of ratepayer-shareholder cost responsibility for these contracts
21 established under the ERM. Under this balance, Avista shareholders are responsible for
22 the first \$9 million of cost overruns each year. Without "contract term" accounting,
23 Avista could shift its costs to years when it is likely to exceed the \$9 million deadband by
24 terminating contracts. The Commission should prohibit this type of gaming.

1 **Q. WHAT IS YOUR SUGGESTED TREATMENT OF THE ENRON CONTRACT**
2 **BUYOUT COSTS?**

3 **A.** Similar to the gas contracts about which ICNU was concerned during settlement
4 negotiations, the costs of the Enron buyout should be reflected in the ERM over the life
5 of the agreement. The cost of the Enron contract termination should be included in the
6 ERM over a 36-month period beginning January 1, 2004. This better reflects the sharing
7 of costs between customers and shareholders that was intended under the ERM.
8 Removing the Enron contract termination charge from Avista's October 2002 purchase
9 power expenses reduces the Company's total costs for the 2002 ERM Period by \$1.765
10 million (including interest), as shown by ICNU Ex. ____ (DWS-3) at line 24.

11 **Coyote Springs 2**

12 **Q. PLEASE DESCRIBE HOW THE COMPANY HAS TREATED THE COSTS**
13 **ASSOCIATED WITH CS2.**

14 **A.** In the general rate case, the Company included in rates a pro forma adjustment reflecting
15 the complete commercial operation of its 50% ownership interest in CS2. At the time of
16 the Company's filing in UE-011595, CS2 was projected to be in service by June 1, 2002.
17 UE-011595, Avista Ex. ____ (DMF-T) at 23, lines 9-10 (November 30, 2001). The
18 associated pro forma adjustments reflecting the CS2 costs total about \$27.8 million for
19 the Washington jurisdiction. For the six-month review period of this ERM filing, the
20 revenue requirement associated with CS2 was about \$14.7 million. The fixed-cost
21 portion of these amounts is \$15.1 million and \$7.5 million, respectively.

22 **Q. WAS CS2 IN SERVICE ON JUNE 1, 2002?**

23 **A.** No. CS2 did not begin commercial operation until July 1, 2003. This was almost
24 thirteen months after the expected in-service date projected by the Company in the

1 general rate case.

2 **Q. WHAT EVENTS CONTRIBUTED TO THE DELAY IN THE COMMERCIAL**
3 **OPERATION OF CS2?**

4 **A.** As noted by the Company, a portion of this delay was attributable to the Enron
5 bankruptcy, because Avista had retained a subsidiary of Enron as a contractor on the CS2
6 project. Avista Ex. ____ (TJC-T) at 3. The delay attributable to this circumstance was
7 approximately two months. Id. The remaining delay was attributable to a series of
8 events associated with the failure of the three-phase step-up transformer used in CS2. Id.
9 at 3-12.

10 **Q. PLEASE DESCRIBE THE NEED FOR A STEP-UP TRANSFORMER AND THE**
11 **DIFFERENCE BETWEEN SINGLE-PHASE TRANSFORMERS AND THREE-**
12 **PHASE TRANSFORMERS.**

13 **A.** Virtually all generating stations require a step-up transformer. The purpose of the step-up
14 transformer is to boost the voltage at which the power is generated (the “low side”
15 transformer voltage—typically 13.8 kV) to a level whereby the power can be transmitted
16 to load areas. This “high side” or transmission level voltage can be 115,000, 230,000,
17 345,000 or 500,000 volts. Another aspect of transformer voltage design has to do with
18 the number of voltage levels required for transformation. Transformers can have more
19 than one “low side” voltage and more than one “high side” voltage or a combination of
20 the two.

21 In addition to the design voltage(s), transformers are built as a “single-phase” or
22 “three-phase” unit. Because power is generated in three phases, a power plant could
23 utilize three single-phase generating step-up transformers or a single three-phase
24 transformer. Generally, these aspects of transformer design are considered in terms of
25 trade-offs between economics (the cost of building the transformers) and reliability (the

1 outage time required to replace a failed unit).

2 **Q. CAN YOU PROVIDE AN EXAMPLE OF THE ECONOMIC TRADE-OFFS OF**
3 **DIFFERENT TRANSFORMER DESIGNS?**

4 **A.** Yes. Comparing the generator step-up transformer at CS2 with its “sister” unit at
5 Portland General Electric’s (“PGE”) Coyote Springs 1 (“CS1”) illustrates the economic
6 trade-offs of different designs. Both combined cycle plants have a turbine generator and
7 a steam generator. The output voltage of the turbine generator is 13.8 kV while the
8 output voltage of the steam generator is 18 kV. Both plants also have step-up
9 transformers with two low-side voltages to connect to both the steam and turbine
10 generators and one high-side voltage (500 kV) to connect to the transmission grid.

11 An important design difference between the two units, however, is that CS1 has
12 three single-phase transformers (four counting the spare transformer), while CS2 has a
13 single three-phase transformer. Undoubtedly, PGE’s four single-phase transformers cost
14 more than a comparable three-phase unit when combined with the requisite siting costs.
15 Consider, however, the implications of a failure of a step-up transformer, which is a
16 critical piece of equipment in any generating facility. In the case of CS1, a unit can be
17 replaced in just a few days because a spare unit is on site. The ready availability of a
18 spare transformer allows CS1 to be up and running again very quickly.

19 CS2’s single three-phase step-up transformer, on the other hand, is “one-of-a-
20 kind,” with two low-side voltages stepping all the way up to 500 kV in a three-phase unit.
21 There are *no other identical transformers in the United States*. See Avista Ex. ____
22 (TJC-1). As a result, there are no “spares” or portable transformers that Avista can move
23 to the site in order to bring CS2 back on line quickly if a failure occurs. Consequently, a
24 transformer failure at CS1 might result in an outage that lasts a few days, but the same

1 type of failure at CS2 would likely result in an outage lasting at least six months, because
2 the failed unit would have to be repaired or another transformer built. As described in the
3 testimony of Avista witness Timothy J. Carlberg, Avista experienced such an extended
4 delay in the operational date of CS2 during the 2002 ERM Period due to the failure of the
5 facility's three-phase step-up transformer and the difficulty of replacing or repairing that
6 unit. Avista Ex. ____ (TJC-T) at 3-12.

7 **Q. HOW HAVE THE OPERATIONAL DELAYS AT CS2 AFFECTED THE COST**
8 **OF THE FACILITY?**

9 **A.** The operational delays at CS2 have added substantial cost to the plant. The estimated
10 capital cost of CS2 during UE-011595 was about \$188 million. The actual cost
11 associated with the plant is now about \$250 million. This equates to a Washington
12 jurisdiction cost overrun of \$20.5 million ($\$62 \text{ million} \times 50\% \text{ ownership} \times 66.29\%$) or
13 33%. Although the entire capital cost of CS2 must undergo a thorough prudence review,
14 the cost overrun would add an additional \$4 million to the fixed cost revenue requirement
15 of CS2 if the Commission allowed full recovery.

16 **Q. DO YOU AGREE WITH THE COMPANY'S ANALYSIS OF THE COST**
17 **IMPLICATIONS OF THE OPERATIONAL DELAY OF CS2?**

18 **A.** No. The Company's analysis understates the cost implications of not having CS2
19 available during the 2002 ERM Period by a significant amount. The Company asserts
20 that the cost of the loss of CS2 during the 2002 ERM Period was only \$1.4 million on a
21 system basis, or \$0.95 million for Washington. Avista Ex. ____ (RLS-T) at 6, lines 10-14.
22 Avista calculated this value based on two important factors: 1) it assumed an in-service
23 date of August 15, 2002; and 2) more importantly, the Company used historic daily spot
24 market prices to value the energy. Simply put, the Company's quantification of the CS2

1 cost overruns was based on an “*after-the-fact*” analysis. If the Company had used the
2 *forward-looking* analytical method that it used to justify other actions during the 2002
3 ERM Period, the actual value of the loss of CS2 would have been much greater.

4 **Q. IN WHAT OTHER INSTANCES IN THIS PROCEEDING HAS THE COMPANY**
5 **UTILIZED A FORWARD-LOOKING ANALYSIS TO QUANTIFY ITS POWER**
6 **COST SAVINGS?**

7 **A.** The Company used forward-looking analyses to quantify the power cost savings
8 associated with its gas sales. In response to Staff data request number 178, the Company
9 provided confidential documentation on each sale of gas covering the 2002 ERM Period.
10 As part of this documentation, the Company provided a spreadsheet that estimated the
11 power cost savings associated with the decision to sell gas, instead of using that gas to
12 generate electricity that would then be sold into the forward market. The Company
13 calculated the power cost savings for each transaction.

14 In the Company’s spreadsheets, it modeled CS2 as an available resource up until
15 the date of the CS2 transformer failure. The Company did not include CS2 in the
16 analysis, however, for transactions that occurred after the transformer failure, beginning
17 with the May 17, 2002 valuation. ICNU Ex. ____ (DWS-4), lines 1-15 presents a
18 summary of the Company’s results.

19 For the fourteen transactions that the Company entered into from May 17th
20 through November 20th, the Company calculated \$3.5 million in power cost savings (as
21 shown on line 15 of ICNU Ex. ____ (DWS-4)) for the 2002 ERM Period. Lines 16
22 through 30 of this same page present the ICNU analysis, which approximates the
23 Company’s approach, but assumes that CS2 was available for generation up to 130 MW.
24 With a much lower heat rate and variable operating and maintenance cost, it was more

1 economical to use the gas to produce electricity to sell into the market in many cases than
2 to sell the gas directly into the market. Had CS2 been available during this period, the
3 Company's result would have changed by \$6.4 million. Id. at line 31.

4 **Q. WHY IS THERE SUCH A SIGNIFICANT DIFFERENCE IN THE COMPANY'S**
5 **AFTER-THE-FACT CALCULATION OF THE VALUE FOR THE LOSS OF CS2**
6 **DURING THE 2002 ERM PERIOD AND THE FORWARD-LOOKING**
7 **CALCULATION?**

8 **A.** The dramatic difference in this result—\$6.4 million using the forward-looking analysis,
9 as compared to the \$1.4 million “after-the-fact” spot market valuation—is attributable to
10 the difference in market prices used in the analysis. For example, in the Company's spot
11 market approach, the average price of gas in September was \$3.15/Mcf. The average of
12 the daily Mid-Columbia prices used by the Company for this same month were
13 \$25.5/MWh for the on-peak period, and \$22.7/MWh for the off-peak period. With these
14 values, the Company calculated an economic loss due to the unavailability of CS2 of only
15 \$222,000 for the entire month of September. See ICNU Ex. ____ (DWS-4) at line 34.

16 In the forward-looking assessment used by the Company to support the May 17th
17 gas sale, the September forward gas price was \$3.32/Mcf, and the electric prices were
18 \$42/MWh during the on-peak period, and \$34/MWh during the off-peak period. By
19 locking in these prices, the Company would have profited by about \$373,000 by
20 generating at CS2. See ICNU Ex. ____ (DWS-4) at line 16. Furthermore, this gas sale
21 transaction was for just 5,000 Mcf/day, or about 25% of Avista's CS2 capacity, as
22 compared to the Company's spot market analysis, which used 100% of the CS2 capacity.

23 **Q. SHOULD THE COMMISSION ADJUST THE ERM BALANCE BASED ON THE**
24 **COMPANY'S UNDERVALUATION OF THE LOSS OF CS2 DURING THE 2002**
25 **ERM PERIOD?**

26 **A.** Yes. The Commission should adjust the proposed ERM balance to take into account the

1 lost opportunities from not having CS2 available during the 2002 ERM Period for several
2 reasons. First, the extraordinary length of the outage (thirteen months) was never an
3 event that ICNU imagined that the ERM would cover. As with any protracted unit
4 outage, the ratemaking treatment of the costs associated with these unique circumstances
5 needs to be addressed independently from a purchase power cost mechanism such as the
6 ERM.

7 Second, Washington ratepayers have been paying 100% of the fixed costs
8 associated with CS2 in rates even though it did not achieve commercial operability
9 during the 2002 ERM Period. As noted earlier, these revenue requirement costs
10 associated with CS2 for the 2002 ERM Period alone are about \$7.5 million. To force
11 ratepayers to pay for 90% of the replacement power costs (through the ERM) of CS2 in
12 addition to 100% of the fixed costs of a plant that was not used and useful during the
13 2002 ERM Period is entirely inequitable. In future rate proceedings before this
14 Commission, fixed cost recovery should not be allowed or assumed until the plant
15 achieves commercial viability.

16 Finally, it also is inappropriate for customers to bear all costs associated with
17 Avista's questionable decision to rely solely on a three-phase step-up transformer. It is
18 unreasonably risky for a utility to rely exclusively on a transformer that is so
19 extraordinarily unique in its design that no replacement can be found within the United
20 States. Customers should not bear all of the risk associated with questionable decisions
21 on the part of the Company.

22 **Q. WHAT IS YOUR RECOMMENDATION REGARDING AN ADJUSTMENT TO**
23 **REFLECT THE LOSS OF CS2 DURING THE 2002 ERM PERIOD?**

24 **A.** For the purpose of determining an adjustment to the ERM balance, ICNU proposes to

1 employ the average of the two opportunity analyses set forth on ICNU Ex. ____ (DWS-4).
2 In other words, ICNU's proposed adjustment equals one-half of the difference between
3 the market value of the plant based upon the Company's forward price projections and
4 the after-the-fact spot market analysis. However, ICNU has added about \$33,000 to the
5 Company's spot market analysis (see line 35), to reflect the market value had CS2 been
6 in service for the full ERM period.

7 As shown on line 37 of ICNU Ex. ____ (DWS-4), the adjustment is almost \$4.4
8 million on a system basis. As shown on line 24 of ICNU Ex. ____ (DWS-5), the
9 adjustment is \$2.6 million including interest for the Washington jurisdiction. ICNU
10 believes this adjustment is equitable because it captures the likely market value had the
11 plant been on line during this period, as well as the fixed cost contribution paid by the
12 Washington ratepayers.

13 **Q. PLEASE SUMMARIZE THE OVERALL ADJUSTMENT THAT YOU ARE**
14 **RECOMMENDING IN THIS DOCKET.**

15 **A.** The CS2 adjustment, when combined with the Enron adjustment proposed by ICNU,
16 results in an ERM balance of \$13.9 million, plus \$114,000 of associated interest expense
17 for the 2002 ERM Period. This represents an approximately \$4.4 million reduction in the
18 ERM balance calculated by Avista, as shown on ICNU Ex. ____ (DWS-2) at lines 21-22.
19 ICNU recommends that the Commission adopt this disallowance as part of its final order
20 in this Docket.

21 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

22 **A.** Yes.