

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-05- _____

DIRECT TESTIMONY OF

WILLIAM G. JOHNSON

REPRESENTING AVISTA CORPORATION

I. INTRODUCTION

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

Q. Please state your name, business address, and present position with Avista Corporation.

A. My name is William G. Johnson. My business address is 1411 East Mission Avenue, Spokane, Washington, and I am employed by the Company as a Senior Power Supply Analyst in the Energy Resources Department.

Q. What is your educational background?

A. I am a 1981 graduate of the University of Montana with a Bachelor of Arts Degree in Political Science/Economics. I obtained a Master of Arts Degree in Economics from the University of Montana in 1985.

Q. How long have you been employed by the Company and what are your duties as a Senior Power Supply Analyst?

A. I started working for Avista in April 1990 as a Demand Side Resource Analyst. I joined the Energy Resources Department as a Power Contracts Analyst in June 1996. My primary responsibilities involve long-term resource planning and regulatory issues.

Q. What is the scope of your testimony in this proceeding?

A. My testimony will 1) describe the adjustments to the 2004 test period power supply revenues and expenses, 2) describe the increases in net power supply expense since the last general rate case, and 3) describe the new base level of power supply costs for Energy Recovery Mechanism (ERM) calculation purposes, using the proforma costs proposed by the Company in this filing. A table of contents for my testimony is as follows:

1

	<u>Description</u>	<u>Page</u>
2	Introduction	1
3	Summary	2
4	Proforma Power Supply Costs	3
5	ERM Calculations	11
6		

7

8 **Q. Are you sponsoring any exhibits to be introduced in this proceeding?**

9 A. Yes. I am sponsoring Exhibit Nos. ____ (WGJ-2) through ____ (WGJ-5), which
10 were prepared under my supervision and direction.

11 **Q. Are other company witnesses providing testimony regarding issues you are
12 addressing?**

13 A. Yes. Company Witness Kalich provides detailed testimony on the AURORA
14 model used by the Company to develop short-term power purchase expense and fuel expense and
15 short-term power sales revenue included in my exhibits.

16

II. SUMMARY

17 **Q. Please provide an overview of your direct testimony.**

18 A. My testimony explains adjustments made to normalize power supply revenue and
19 expense items in the proforma period compared to the 2004 test period. This involves the
20 determination of revenues and expenses based on normal stream flow and weather conditions,
21 and expected wholesale market power prices. In addition, adjustments are made to reflect known
22 and measurable power contract changes between the 2004 test period, and the time period that
23 retail rates are expected to be in effect (i.e., the proforma period beginning January 1, 2006 and
24 ending December 31, 2006). The net effect of my adjustments to the 2004-test period power
25 supply revenues and expenses is a decrease in net expense of \$18,912,000 on a system basis.

1 The Washington allocation of this adjustment of \$12,323,059 is incorporated into the revenue
2 requirement calculation for the Washington jurisdiction by Mr. Falkner.

3 **III. PROFORMA POWER SUPPLY COSTS**

4 **Overview**

5 **Q. Please identify the specific power supply cost items that are covered by your**
6 **testimony.**

7 A. Exhibit No. ____ (WGJ-2) identifies the power supply expense and revenue items
8 that fall within the scope of my testimony. These revenue and expense items are related to power
9 purchases and sales, wheeling expenses, thermal fuel expenses and other miscellaneous power
10 supply expenses and revenues.

11 **Q. What is the basis for the adjustments to the 2004 actual power supply**
12 **revenues and expenses?**

13 A. Adjustments are made to set the power supply revenues and expenses based on
14 normal weather and normal stream flows. The AURORA model is used to normalize power
15 supply revenue and expenses that are dependent upon weather, stream flows and wholesale
16 electric and natural gas market prices. The AURORA Model dispatches Company resources on
17 an hourly basis and calculates the level of generation from the Company's thermal resources
18 along with the short-term purchases and sales required to serve system requirements.

19 Adjustments are also made to reflect known and measurable contract changes between
20 the 2004 test period and the proforma period. The Company has included proforma power
21 supply adjustments to reflect power costs for the twelve-month period beginning January 1, 2006

1 and ending December 31, 2006. A brief description of each adjustment is shown in Exhibit No.
2 ____ (WGJ-3). Detailed workpapers have also been provided for each adjustment.

3 **Adjustment from 2004 Test Year**

4 **Q. Why have the proforma adjustments from the 2004 test period resulted in a**
5 **reduction in net power supply expense?**

6 A. The \$18,912,000 (system) reduction in net power supply expense from the 2004
7 test year is due in large part to removal of the Potlatch purchase, which is 100 percent allocated
8 to the Idaho jurisdiction. Apart from the Potlatch contract the proforma shows an approximately
9 \$4 million increase in net expense versus the 2004 test year.

10 The \$4 million (system) increase in proforma net expense is driven primarily by reduced
11 hydro generation (\$7 million), transmission expense increases (\$4 million), WNP-3 purchase and
12 Rathdrum lease expense increases (\$5 million). Offsetting those expense increases are
13 reductions in expense due to the elimination of the losses related to the sale of natural gas not
14 consumed for generation (\$8 million) and the reduction in proforma expense due to increased
15 operating margin from the second half of Coyote Springs 2 (approximately \$4 million).

16 **Changes from Prior General Rate Case**

17 **Q. What is the overall change in normalized power supply costs compared to the**
18 **prior general rate case?**

19 A. Proforma power supply net expense has increased by approximately \$28.5 million
20 (Washington allocation) from the currently authorized net expense. The currently authorized net
21 expense is based on a 2000 test year and a proforma period of November 2002 through October

1 2003. The proforma net expense in this case is based on a 2004 test year and a proforma period
2 of January 2006 through December 2006.

3 The increase in proforma expense is driven primarily by reduced hydro generation,
4 increases in fuel related expenses, and a reduction in long-term wholesale revenues. Hydro
5 generation in the proposed proforma net expense is 48.2 aMW lower than the currently
6 authorized level. This reduction in hydro generation is primarily driven by the termination of the
7 Priest Rapids contract with Grant PUD on October 31, 2005 (loss of 28 aMW). Other reductions
8 in hydro generation are discussed in Mr. Kalich's testimony. Table 1 below summarizes the
9 factors driving the increase in proforma power supply net expense.

10 **Table 1**
11 **Proforma Net Expense Factors**

Reason for Proforma Net Expense Increases	Increase (\$000)
Hydro Generaton Reduction (Priest Rapids contract ends, model changes)	\$11,654
Fuel prices / Electric price / Thermal plants operating margins	\$3,365
Transmission Expense (transmission for 2nd half of CS2 and BPA rate increase)	\$1,349
Fixed Gas Transportation (gas transportation to CS2)	\$4,066
Reduced Long-Term Sales Margin (PacifiCorp contract ended)	\$2,539
Rathdrum Lease Expense	\$1,425
Other	\$4,095
Total Proforma Net Expense Increase (Washington Allocation)	\$28,494

12
13 **Short-Term Purchases and Sales**

14 **Q. How are the short-term market purchases (Account 555) and sales (Account**
15 **447) determined in the proforma?**

16 A. Short-term market purchases and sales are an output of the AURORA model.
17 They are the purchases and sales made to balance the system obligations and resources on an
18 hourly basis. Mr. Kalich explains the derivation of the \$56,331,869 (system) of short-term sales

1 revenue, and \$20,917,019 (system) of short-term purchase expense in detail in his testimony.
2 Exhibit No. ____ (WGJ-4), shows the proforma monthly short-term purchases and sales amounts
3 and average price. These figures were taken from Mr. Kalich's Exhibit No. ____ (CGK-3).

4 **Long-Term Contracts**

5 **Q. What long-term purchase contracts are included in the proforma?**

6 A. In addition to the Mid-Columbia hydroelectric purchases, there are seven long-
7 term or medium-term purchases and several small PURPA purchases. The long-term purchases
8 are the WNP-3 purchase from the Bonneville Power Administration (BPA), a 10-year wind
9 power purchase that began in early 2004 and a purchase from Grant County PUD that is part of
10 the new power purchase agreement for the Priest Rapids and Wanapum projects that begins
11 November 2005. There are four medium-term purchases of 25 aMW, all with a term of January
12 2004 through December 2006. There are approximately 7.4 average megawatts of PURPA and
13 other small power purchases. Additional details related to these agreements are included in
14 workpapers.

15 **Q. Please explain the two line items labeled Grant Displacement and Grant**
16 **Revenue Credit included in the proforma?**

17 A. Both of these items are part of the new power purchase agreement with Grant
18 PUD for their Priest Rapids and Wanapum projects that begins November 2005. Avista currently
19 purchases 6.1% of the Priest Rapids project and 8.2% of the Wanapum project. The Priest
20 Rapids contract expires October 31, 2005. As part of the new agreement Avista will receive
21 approximately 22 average megawatts of displacement power from Grant PUD through
22 September 2011. This power will be priced at Bonneville Power Administration's (BPA) PF

1 rate. This expense is included on Line 9 of Exhibit No. ____ (WGJ-2) and is labeled Grant
2 Displacement. Another part of the new power purchase agreement with Grant PUD allows
3 Avista to receive revenue based on the difference between the market price of power and the cost
4 of the Priest Rapids project. Avista will receive revenue on its allocation of power
5 (approximately 8 aMW). This revenue is included in the proforma on line 10 of Exhibit No.
6 ____ (WGJ-2) and is labeled Grant Revenue Credit. Additional details related to these
7 agreements are included in workpapers.

8 **Q. What long-term sale contracts are included in the proforma?**

9 A. The Company has very few remaining long-term sales. One that remains is the
10 Peaker capacity sale. This sale is the Portland General Electric capacity sale that was monetized
11 in 1998. The other long-term sales include the Nichols pumping sale and the sale of load
12 regulation and reserves. With the Nichols sale, Avista sells power to the other owners of Colstrip
13 units 3 and 4 to supply power to the pumps that supply water to the plant. The contract rate is the
14 Dow Jones Mid Columbia index price. For the proforma, the revenue from the sale is based on
15 the average market purchase and sales prices developed by the AURORA model. The result is
16 no net effect on overall net power supply expense since the revenue from the sale offsets the cost
17 created by the obligation. The advantage of this sale is that it reduces the transmission losses
18 associated with wheeling Colstrip energy to Avista's system since some of Avista's Colstrip
19 energy is "laid-off" at Colstrip to serve the Nichols pumping load.

20 Other long-term sales include the sale of load control services (Dynamic Energy Services
21 (DES)) to Kaiser Aluminum Company and Pend Oreille PUD. Additional details related to these
22 agreements are included in workpapers.

1 **Thermal Fuel Expense**

2 **Q. How are thermal fuel expenses determined in the proforma?**

3 A. Thermal fuel expenses include the Colstrip coal costs, Kettle Falls wood waste
4 costs and natural gas expense for the Company's gas-fired resources including Coyote Springs 2,
5 Rathdrum, Northeast, Boulder Park, and the Kettle Falls combustion turbine. Unit coal costs at
6 Colstrip are based on the long-term coal supply and transportation agreements. Unit wood fuel
7 costs at Kettle Falls are based on multiple contracts with fuel suppliers and existing inventory.
8 Unit fuel costs for natural gas are based on a 6-month average forward price as explained by Mr.
9 Kalich. Total fuel costs for each plant are based on the unit fuel cost and the plant's level of
10 generation as determined by the AURORA model. Exhibit No. ____ (WGJ-4) shows the
11 proforma fuel costs by month for each plant.

12 **Q. What is the change in Colstrip and Kettle Falls unit fuel costs?**

13 A. The Colstrip per unit coal cost has increased from \$10.41 per ton in the 2004 test
14 year to \$11.19 per ton in the proforma. The Kettle Falls per unit wood waste cost has increased
15 from \$14.10 per green ton in the test year to \$17.67 per green ton in the proforma. Kettle Falls
16 wood fuel cost increases are due to a variety of factors including increased transportation costs
17 and increased competition for the fuel.

18 **Q. What is the change in natural gas fuel costs?**

19 A. Natural gas fuel expense in the proforma, including operation of the entire
20 Coyote Springs plant for an entire year, totals approximately \$70 million. This is an increase of
21 almost \$50 million from the 2004 test year. The increase is primarily due the addition of the
22 second half of Coyote Spring 2. Coyote Springs 2 generates approximately 162 aMW and the

1 Company's other gas fueled plants combined, which are primarily peaking units, generate
2 approximately 8 aMW.

3 Natural gas expenses in the proforma also include the expense for natural gas
4 transportation agreements used to serve the Coyote Springs 2 plant. Details of the gas
5 transportation arrangements for Coyote Springs 2 are discussed in Mr. Peterson's testimony.
6 Additional details related to these transportation agreements are included in workpapers

7 **Transmission Expense**

8 **Q. What factors are driving the increase in transmission expense in the**
9 **proforma?**

10 A. Transmission expense in Account 565 increased by approximately \$3.9 million
11 (system) over the test year. The primary reason for the increased expense is additional amounts
12 of transmission purchased in the proforma period and BPA transmission rate increases. The total
13 amount of BPA transmission purchased to integrate generation in the proforma is 466 MW,
14 which includes 196 MW for Colstrip and 270 MW for Coyote Springs 2. Prior to acquiring the
15 second half of Coyote Springs 2 the Company held 343 Megawatts of BPA transmission to
16 integrate generation. On October 1, 2005 BPA transmission rates are set to increase
17 approximately 18% for Point-to-Point transmission, and transmission expense for Avista's WNP-
18 3 purchase is set to increase approximately 14%.

19 **Q. How has the Company accounted for transmission expenses for the second**
20 **half of Coyote Springs 2?**

21 A. Avista has included in its proforma the cost of BPA long-term firm transmission
22 to move power from the second half of the CS2 project to its system. BPA currently indicates

1 that no additional annual long-term firm transmission capability is available to move more power
2 from CS2 to the Company's system, due to transmission constraints during the spring
3 hydroelectric runoff period. BPA indicates that constraints occur in the second quarter under
4 certain system conditions during the time of high hydroelectric generation levels. Transmission
5 is generally available, however, during the 1st, 3rd and 4th quarters of the year when Avista needs
6 the generation.

7 In the acquisition of the second half of CS2, Avista has the opportunity to acquire
8 Mirant's higher position in the BPA queue for long-term firm transmission requests. Avista also
9 has made its own long-term firm transmission request to BPA for the CS2 transaction. Avista
10 may acquire firm long-term BPA transmission through either of those processes. Avista is
11 participating in the 2005 BPA open season for transmission upgrades to the John Day – McNary
12 500 kV transmission line that will, if agreements are reached, provide adequate long-term firm
13 transmission from the CS2 project to our system.

14 In the near-term Avista plans to contract with third parties for short-term BPA
15 transmission, and use buy-sell arrangements, and/or exchange arrangements to move CS2 power
16 to Avista's system. These opportunities will allow the same energy transfer that would occur
17 with a firm BPA transmission purchase. Preliminary discussions with BPA indicate that
18 adequate short-term transmission capacity will be available for Q1, Q3, and Q4. In the
19 Company's experience, non-firm transmission has very seldom been curtailed by BPA.

20 The proforma includes the expense to purchase 123 MW of firm transmission for the
21 second half of Coyote Springs 2. To the extent Avista enters into purchase, sale or exchange
22 agreements to wheel power from Coyote Springs 2, the cost of those arrangements will be

1 credited to customers in the ERM deferrals. In this manner customers will only pay for
2 transmission for the second half of Coyote Springs 2 in base rates and not through the ERM.

3 **IV. ERM CALCULATIONS**

4 **Q. What changes in the ERM is the Company proposing?**

5 A. ERM deferral entries will continue to be calculated in the same manner as the
6 current calculations. The final order in this case will determine the new authorized level of
7 power supply revenues and expenses used in the ERM calculation. As discussed in Mr.
8 Peterson's testimony, Avista is requesting that the ERM dead-band be eliminated and that all
9 deferrals be subject to a 90%/10% sharing between customers and the Company. This change
10 would not affect the other mechanics of the ERM deferral calculations.

11 **Q. How are the revenues and expenses from purchases and sales transactions**
12 **related to the acquisition of natural gas for thermal generation treated in the ERM?**

13 A. The Company plans to fix the price in advance on some portion of natural gas
14 necessary to run thermal generation. There will also be instances where the Company later,
15 because of a change in market electric and natural gas prices, may sell the gas. These types of
16 transactions may lead to a net gain or loss on the sale of the natural gas that will be recorded as a
17 separate line in the ERM. The objective of these transactions is to provide some stability over
18 time to the cost of natural gas to fuel these generators, while also having the opportunity to make
19 the most economic decision when the time comes to either burn the gas or sell the gas and
20 purchase electricity. The revenue and expenses from these transactions will be recorded in
21 Account 557 (Other Power Supply Expenses) for the cost of the natural gas purchased and
22 Account 456 (Other Electric Revenues) for the revenue from the natural gas sales.

1 **Q. Will there be any change in how the retail revenue adjustment is calculated**
2 **in the ERM?**

3 **A.** No. The only changes will be the new authorized level of retail sales and the
4 average cost of power that will be approved in this case. The Company has proposed that the
5 authorized retail sales be based on the weather-adjusted 2004 sales used in this case. The
6 proposed base level of retail sales is shown in Exhibit No. ____ (WGJ-5). The change in retail
7 sales will be multiplied by a proposed rate of \$33.99/MWh. This number comes from Ms.
8 Knox's cost of service study, and represents the average production cost embedded in rates.

9 **Q. What is the new authorized level of power supply expense proposed by the**
10 **Company for the ERM?**

11 **A.** The proposed authorized level of annual power supply expense is \$105,245,450.
12 This is the sum of Accounts 555 (Purchased Power), 501 (Thermal Fuel), and 547 (Fuel) less
13 Account 447 (Sale for Resale). The current level of authorized power supply expense is
14 \$65,866,619. The increase in expense is \$39,378,830 on a system basis. The proposed
15 authorized monthly power supply expense for ERM calculation purposes is shown in Exhibit No.
16 ____ (WGJ-5).

17 **Q. Does that conclude your pre-filed direct testimony?**

18 **A.** Yes.

19

20

21

22