

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-090134

DOCKET NO. UG-090135

DOCKET NO. UG-060518

(consolidated)

REBUTTAL TESTIMONY OF

ROBERT J. LAFFERTY

REPRESENTING AVISTA CORPORATION

I. INTRODUCTION

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

A. My name is Robert J. Lafferty. I am employed as the Director of Power Supply at Avista Corporation and my business address is 1411 East Mission Avenue, Spokane, Washington.

Q. Would you briefly describe your educational and professional background?

A. Yes. I received a Bachelor of Arts degree in Business Administration and a Bachelor of Science degree in Electrical Engineering from Washington State University, both in 1974. I began working as a distribution engineer for Avista in 1974 and held several different engineering positions with the Company. In 1979, I passed the Professional Engineering License examination in the state of Washington. I have held management positions in engineering, marketing, demand-side-management and energy resources. I began work in the Energy Resources Department in March 1996, and have held various positions involving the planning, acquisition and optimization of energy resources. Since March 2008, I have served as Director of Power Supply where my primary responsibilities involve management and oversight of the short- and long-term planning and acquisition of power resources for the Company.

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

A. My testimony will respond to Public Counsel witness Mr. Woodruff's testimony and address why the Bonneville Power Administration (BPA) transmission contracts and the natural gas transportation contracts associated with the Lancaster Power Purchase Agreement are prudent and necessary for the operation of Avista's power resources.

1 **Q. Are other company witnesses providing testimony regarding issues you are**
2 **addressing?**

3 A. Yes. Company witness Mr. Kalich will provide rebuttal testimony addressing
4 other issues concerning the acquisition of the Lancaster Power Purchase Agreement.

5 **II. LANCASTER TRANSMISSION**

6 **Q. Please provide a review of the transmission expense for Lancaster included**
7 **in the Company’s filing.**

8 A. The acquisition of the Lancaster power purchase agreement on January 1, 2010
9 includes the assignment of 250 MW of BPA firm point to point transmission from the Lancaster
10 plant to John Day. There are two BPA transmission agreements, one for 150 MW and one for
11 100 MW, that both terminate June 30, 2026. The 150 MW agreement can be terminated by
12 Avista with two years notice. The 100 MW contract cannot be terminated early.

13 Avista plans to use this transmission to move power to Avista’s system to serve retail
14 load or other points when the power is sold in the wholesale market. The transmission will be
15 purchased at BPA’s tariff rate, including losses. The total fixed annual expense for this
16 transmission will be \$4,503,000 at the current BPA transmission rate.

17 **Q. Are BPA transmission rates reasonable?**

18 A. Yes. BPA transmission rates are reasonable and are in-line with other
19 transmission providers in the region. BPA’s Point-To-Point transmission rate at \$1.501/kW-
20 month is reasonably close to Avista’s Point-To-Point transmission rate at \$1.40/kW-month.

21 **Q. How does the 250 MW of BPA transmission compare to the Lancaster**
22 **plant’s generation capability.**

1 A. The plant’s generation capability, including the duct burner, exceeds the amount
 2 of BPA firm transmission in all months. The Company will purchase additional non-firm
 3 transmission for the remaining balance of the generation. Table 1 below shows the estimated
 4 Lancaster generation capability across all months under average temperature conditions and
 5 under peak conditions represented by an ambient temperature of 0 degree Fahrenheit.

<u>Month</u>	<u>Generation Capability w/ Duct Burner</u> (MW)	<u>BPA Transmission Capacity Alberta</u> (MW)	<u>Transmission Shortfall</u> (MW)
Jan	290	250	40
Feb	287	250	37
Mar	284	250	34
Apr	280	250	30
May	274	250	24
Jun	269	250	19
Jul	264	250	14
Aug	265	250	15
Sep	271	250	21
Oct	279	250	29
Nov	286	250	36
Dec	289	250	39
Average	278	250	28
Peak Day (1)	296	250	46

1) Based on 0 degrees Fahrenheit

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7 **Q. Is there a short-term alternative to BPA transmission for the Lancaster**
 8 **plant?**

9 A. No. The only current means to move Lancaster power from the plant to Avista’s
 10 system or to the market is BPA transmission. This is a known and measurable expense in the pro
 11 forma rate year.

1 **Q. What is Avista doing regarding a long-term alternative to BPA transmission**
2 **for the Lancaster plant?**

3 A. Avista is in the process with BPA to jointly study interconnecting Avista’s
4 transmission to the BPA Lancaster substation, where the Lancaster plant is currently
5 interconnected. An extension of Avista transmission system to the BPA substation at Lancaster
6 could only occur following power flow and reliability studies, negotiation of an interconnection
7 agreement with BPA, and design and construction of the facilities. This entire process, already
8 underway, is expected to take a minimum of two more years.

9 **Q. Public Counsel witness Woodruff’s testimony suggests that an extension of**
10 **Avista transmission to the Lancaster plant would cost only one-tenth the BPA transmission**
11 **costs. Will an interconnection between the BPA and Avista transmission systems at the**
12 **Lancaster substation provide benefits?**

13 A. Yes. A transmission system interconnection between the BPA and Avista systems
14 can provide an opportunity for additional benefits for customers, but it is not available to the
15 Company for at least two years into the future as explained above.

16 **III. LANCASTER GAS TRANSPORTATION**

17 **Q. Please review the gas transportation arrangement for the Lancaster plant.**

18 A. Gas supply for Lancaster is sourced from two delivery points, Alberta and Malin.
19 Delivery capability is 25,742 Dth/day from Alberta and 25,000 Dth/day from Malin for a total
20 delivery capability of 50,742 Dth/day.

21 **Q. What is the amount of gas consumed by the Lancaster plant?**

22 A. Under average temperature conditions, Lancaster consumes approximately 48,000
23 Dth/day: 43,000 Dth/day for the combustion turbine and 5,000 Dth/day for the duct burner.

1 Table 2 shows expected gas consumption at Lancaster for each month under average temperature
 2 conditions. The average consumption across all months is 47,975 Dth/day. At peak generation
 3 conditions, represented by an ambient temperature of 0 degrees Fahrenheit, Lancaster is
 4 estimated to consume approximately 51,400 Dth/day, slightly more than the gas delivery
 5 capability of the gas transportation agreements. This figure is in-line with the Company's Coyote
 6 Springs 2 gas-fired CCCT plant which has very similar characteristics (size, heat rate). That
 7 plant has exceeded 51,000 Dth/day on various cold-weather days when Avista's load is at its
 8 peak.

<u>Month</u>	<u>Gas Consumption w/ Duct Burner (dth/day)</u>	<u>Gas Transport from Alberta (dth/day)</u>	<u>Gas Transport from Malin (dth/day)</u>	<u>Difference (dth/day)</u>
Jan	49,778	25,742	25,000	964
Feb	49,256	25,742	25,000	1,486
Mar	48,775	25,742	25,000	1,967
Apr	48,169	25,742	25,000	2,573
May	47,347	25,742	25,000	3,395
Jun	46,638	25,742	25,000	4,104
Jul	45,961	25,742	25,000	4,781
Aug	46,110	25,742	25,000	4,632
Sep	46,920	25,742	25,000	3,822
Oct	48,044	25,742	25,000	2,698
Nov	49,098	25,742	25,000	1,644
Dec	49,606	25,742	25,000	1,136
Average	47,975	25,742	25,000	2,767
Peak Day (1)	51,397	25,742	25,000	(655)

1) Based on 0 degrees Fahrenheit

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10 **Q. Does Avista have excess gas transport capacity for its combined cycle**
 11 **combustion turbine plants?**

1 A. No. As shown in Table 3 below, when both Lancaster and Coyote Springs 2 are
 2 operating at full capacity Avista will not have enough long-term firm gas transportation capacity
 3 and will have to purchase additional capacity.

Table 3 Lancaster & CS2 Gas Consumption and Transportation					
	Lancaster Gas Consumption w/ Duct Burner (dth/day)	CS2 Gas Consumption w/ Duct Burner (dth/day)	Lancaster Gas Transport (dth/day)	CS2 Gas Transport (dth/day)	Difference (dth/day)
Jan	49,778	50,739	50,742	43,000	(6,775)
Feb	49,256	50,272	50,742	43,000	(5,786)
Mar	48,775	49,634	50,742	43,000	(4,667)
Apr	48,169	49,007	50,742	43,000	(3,434)
May	47,347	48,276	50,742	43,000	(1,881)
Jun	46,638	47,626	50,742	43,000	(522)
Jul	45,961	46,963	50,742	43,000	818
Aug	46,110	47,151	50,742	43,000	481
Sep	46,920	47,994	50,742	43,000	(1,172)
Oct	48,044	49,030	50,742	43,000	(3,332)
Nov	49,098	50,017	50,742	43,000	(5,373)
Dec	49,606	50,525	50,742	43,000	(6,389)
Average	47,975	48,936	50,742	43,000	(3,169)
Peak Day (1)	51,397	51,647	50,742	43,000	(9,302)
1) Based on 0 degrees Fahrenheit for Lancaster and actual for CS2					

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5 **Q. Where did the figure of 20 percent excess transportation capacity originate**
 6 **from as identified by Public Counsel Witness Woodruff?**

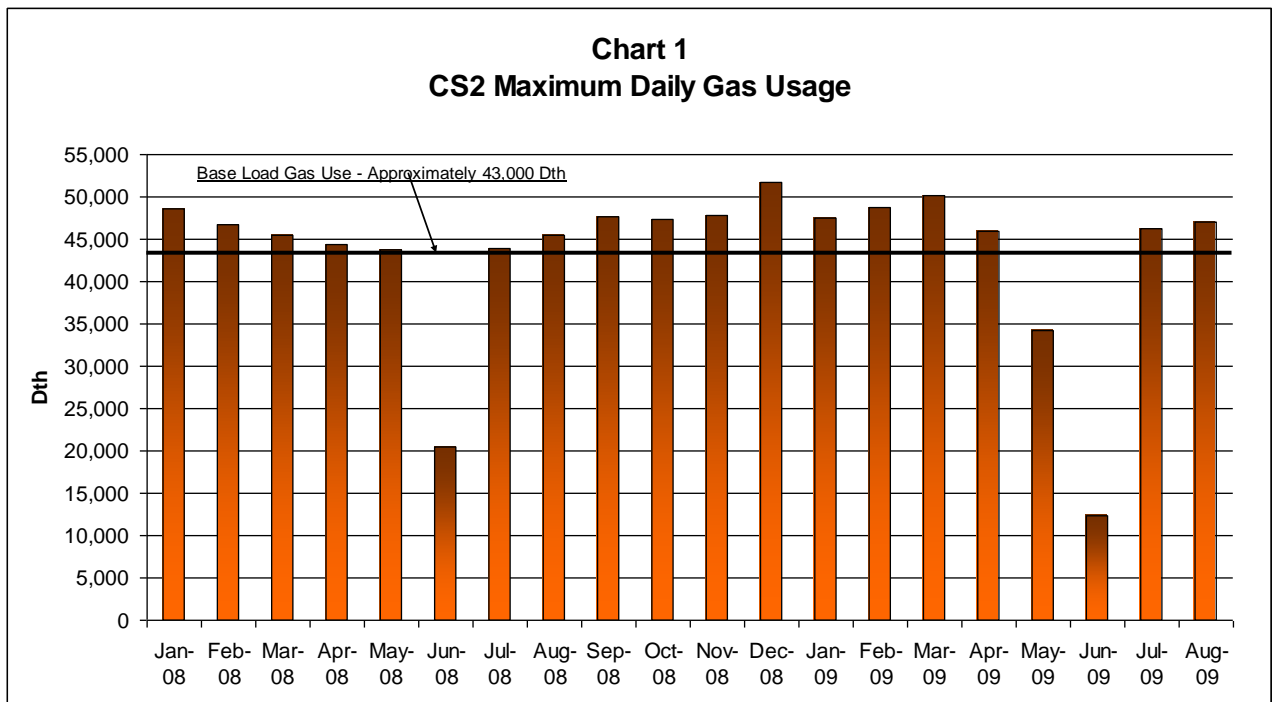
7 A. The figure of 20 percent excess gas capacity was noted in the Thorndike Landing
 8 evaluation (Exhibit RLS-6, page 11) in relation to an average consumption of 43,000 Dth/day.
 9 When the Lancaster duct burner is in operation, the gas delivery capacity is fully utilized. And
 10 when combined with the Coyote Springs plant, Avista is short of gas transportation when both

1 the Lancaster and Coyote Spring 2 plants are operating at full capacity under almost all
 2 conditions.

3 **Q. Is the CS2 plant duct burner used throughout the year?**

4 A. Yes. The duct burner at CS2 is used throughout the year. Over a 20 month
 5 period, from January 2008 through August 2009, the CS2 duct burner was used in 19 of those
 6 months. The daily maximum metered natural gas usage at CS2 for the 20-month period is shown
 7 by month in Chart 1, below. Seventeen (17) months of that period show natural gas metered
 8 usage above the 43,000 Dth/day base load usage level. Because of equipment and performance
 9 similarities between CS2 and Lancaster, duct burner operation at Lancaster is expected to be
 10 similar to that of CS2.

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13 **Q. Does that conclude your pre-filed rebuttal testimony?**

14 A. Yes.