

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 ~~25,742-966~~ Dth/day from Alberta and ~~25,000~~~~26,388~~ Dth/day from Malin  
20 for a total delivery capability of ~~50,742~~~~52,354~~ 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~~-less 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>Excess Gas Transport (dth/day)</u>
Jan	49,778	25,966	26,388	2,576
Feb	49,256	25,966	26,388	3,098
Mar	48,775	25,966	26,388	3,579
Apr	48,169	25,966	26,388	4,185
May	47,347	25,966	26,388	5,007
Jun	46,638	25,966	26,388	5,716
Jul	45,961	25,966	26,388	6,393
Aug	46,110	25,966	26,388	6,244
Sep	46,920	25,966	26,388	5,434
Oct	48,044	25,966	26,388	4,310
Nov	49,098	25,966	26,388	3,256
Dec	49,606	25,966	26,388	2,748
Average	47,975	25,966	26,388	4,379
Peak Day (1)	51,397	25,966	26,388	957
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.

<b>Table 3 Lancaster &amp; CS2 Gas Consumption and Transportation</b>					
	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)	Excess Gas Transport (dth/day)
Jan	49,778	50,739	52,354	43,000	(5,163)
Feb	49,256	50,272	52,354	43,000	(4,174)
Mar	48,775	49,634	52,354	43,000	(3,055)
Apr	48,169	49,007	52,354	43,000	(1,822)
May	47,347	48,276	52,354	43,000	(269)
Jun	46,638	47,626	52,354	43,000	1,090
Jul	45,961	46,963	52,354	43,000	2,430
Aug	46,110	47,151	52,354	43,000	2,093
Sep	46,920	47,994	52,354	43,000	440
Oct	48,044	49,030	52,354	43,000	(1,720)
Nov	49,098	50,017	52,354	43,000	(3,761)
Dec	49,606	50,525	52,354	43,000	(4,777)
Average	47,975	48,936	52,354	43,000	(1,557)
Peak Day (1)	51,397	51,647	52,354	43,000	(7,690)

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