

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET No's. UE-050482 and UG-050483

REBUTTAL TESTIMONY OF

TARA L. KNOX

REPRESENTING AVISTA CORPORATION

**I. INTRODUCTION**

**Q. Please state your name, employer and business address.**

A. My name is Tara L. Knox. I am employed as a Rate Analyst in the State and Federal Regulation Department of Avista Corporation. My business address is 1411 East Mission Avenue, Spokane, Washington.

**Q. Have you previously submitted direct testimony in this proceeding?**

A. Yes, I sponsored the electric and natural gas cost of service studies.

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

A. My testimony responds to cost of service issues discussed in the testimony of Public Counsel witnesses Mr. Lazar and Mr. Lott.

**Q. Would you please summarize your rebuttal testimony?**

A. Yes. Avista's electric cost of service study is not inconsistent with Commission policy, nor does it use "flawed data," as implied in Mr. Lazar's testimony. Furthermore, the similarity of the results produced by alternative studies supports the fact that the Company's cost of service study results are reasonable and should be used as a guide for revenue/rate spread.

Mr. Lott's discussion of the revenue credit factor calculation may lead the reader to believe the "common cost issue" represents a material change to the ERM. This is not true. The common costs are only indirectly related to the production function, and even if they were included in the factor, the impact on the ERM is not significant.

**Q. Are you sponsoring any exhibits with your rebuttal testimony?**

A. Yes, I have included Exhibit No. \_\_\_(TLK-7) which I will discuss later in my testimony.

1 **II. ELECTRIC COST OF SERVICE METHODOLOGY**

2 **Q. Mr. Lazar discusses the Puget-specific peak credit assumptions at some**  
3 **length, and implies that having used different peak credit assumptions causes the cost of**  
4 **service results to be unreliable. Can you please summarize the issues involved here?**

5 A. Yes. Production and transmission costs are segregated into demand and energy  
6 related components using a theoretical concept called peak credit. The Avista study computes  
7 and applies the peak credit theory differently from the process approved for Puget Sound Energy  
8 (then Puget Sound Power & Light) in 1992.

9 Mr. Lazar is concerned about two aspects of this issue: first, the proportion of production  
10 and transmission costs that are classified as demand-related and second, how these demand-  
11 related costs are allocated to the customer classes. Mr. Lazar's position is that the Puget process  
12 for both classification and allocation is the only acceptable way to treat these costs. However,  
13 the process used by Puget is specific to its system and it is more appropriate to utilize the Avista-  
14 specific application of the peak credit theory.

15 **Q. Has this issue already been argued in a previous Avista case?**

16 A. Yes. In Docket No. UE-991606 the Company filed a cost of service study  
17 utilizing Company-specific peak credit assumptions and definition of peak hours. These  
18 assumptions were specifically identified as items that made the methodology different from the  
19 1992 Puget case resolution to which Mr. Lazar refers (Puget Method). The Commission  
20 accepted this deviation from the Puget Method in that case, stating: "The Commission agrees  
21 that the peak usage patterns of each unique company are appropriately used in that company's

1 cost of service study.” (Third Supplemental Order, Docket No. UE-991606 & UG-991607, page  
2 108.)

3 **Q. Why do you object to applying the Puget peak credit assumptions in the**  
4 **Company’s cost of service study?**

5 A. The assumptions built into the Puget peak credit calculation and the definition of  
6 the related coincident peak allocation factor were specific to Puget’s Integrated Resource Plan in  
7 1992. The two part comparisons they use and the two hundred hour peak are not relevant to  
8 Avista’s system because the Company’s use of peaking units is based upon economic dispatch of  
9 the entire resource stack. All of the Company resources should be represented in the comparison  
10 as well as all times of the year.

11 The process Avista has traditionally used incorporates all of the Company’s production  
12 resources into the demand/energy comparisons. The Company’s demand allocation using the  
13 average of twelve monthly peaks captures customer contribution to peak throughout the year.

14 **Q. Mr. Lazar presents the results of an alternative study where the Company’s**  
15 **study was revised to approximate the Puget Method. He remarks on the similarity of the**  
16 **results, implying that this is unexpected and indicative of some flaw in the data. Do you**  
17 **have any comments on his assessment of the impact of the difference between the Company**  
18 **method and the Puget Method?**

19 A. Mr. Lazar has overlooked the fact that, in the Company method, not all  
20 production-related accounts receive the demand allocation percentages determined by the  
21 replacement cost analysis. Specifically, in the Company’s application of peak credit, fuel  
22 accounts receive 100% energy allocation. The overall production and transmission costs in the

1 Company study included 28% demand allocation, whereas the study Mr. Lazar requested in order  
2 to emulate the Puget Method included 20% demand allocation for the same costs. Eight percent  
3 is not an overwhelming shift between demand and energy. Also both demand and energy  
4 allocations are related to usage so the factors are similar. Therefore, it is not surprising, nor does  
5 it indicate some inexplicable flaw in the data, when these two alternative scenarios produce  
6 similar cost relationships.

7 **Q. Mr. Lazar seems to think that using Puget's 200 peak hour definition of the**  
8 **coincident peak allocation factor, instead of the average of the twelve monthly peaks the**  
9 **Company has traditionally used, would have materially changed the results of the alternate**  
10 **study. Do you agree with his assessment?**

11 A. No. Due to the nature of the seasons in the Spokane area as compared to the  
12 milder temperatures experienced in the Seattle area, use of 200 peak hours on Avista's system  
13 will tend to have the opposite effect on demand allocation factors than Mr. Lazar may have seen  
14 on Puget's system. Rather than smooth the peaks for low load factor customers like the  
15 residential class, in Spokane a 200 hour peak will focus all the hours during extreme weather  
16 events. This will tend to increase the demand allocation to highly weather sensitive customer  
17 groups like the residential class while leaving high load factor customers with lower costs  
18 because their demand has remained the same while the total has increased. The average of the  
19 twelve monthly peaks, on the other hand, includes customer contribution to demand during  
20 extreme weather events as well as their contribution during more moderate times of the year.

21 **Q. What were the results of the two study scenarios?**

1           A.     Table 1 below shows the rate of return and relative return ratio for each customer  
 2 class from the Company’s study as filed and the Puget Method study I provided to Mr. Lazar in  
 3 response to his data request.

4     **Table 1**

<b>Customer Class</b>	<b>As Filed Rate of Return</b>	<b>Puget Method Rate of Return</b>	<b>As Filed Return Ratio</b>	<b>Puget Method Return Ratio</b>
Residential Service Sch 1	4.23%	4.43%	0.61	0.64
General Service Sch 11	13.14%	13.17%	1.91	1.92
Large General Service Sch 21	10.53%	10.22%	1.53	1.49
Extra Large Gen. Service Sch 25	4.56%	4.33%	0.66	0.63
Pumping Service Sch 31	7.25%	6.77%	1.06	0.99
Lighting Service Sch 41 - 49	<u>7.86%</u>	<u>7.51%</u>	<u>1.14</u>	<u>1.09</u>
Total WA Electric System	<u>6.87%</u>	<u>6.87%</u>	<u>1.00</u>	<u>1.00</u>

5  
 6           **Q.     What do you think the similarity in the results of the two study scenarios**  
 7 **indicates?**

8           A.     When more than one cost of service scenario shows the same customer classes  
 9 with under-recovery or over-recovery of the costs to serve them, it strengthens the value of the  
 10 study results. In this case, even when you change a significant classification assumption, the  
 11 study still supports the revenue/rate spread implications of the original study, and validates its  
 12 use as a “guide” in resolving rate spread issues.

**III. REVENUE CREDIT FACTOR**

1  
2 **Q. How is the Company's cost of service study connected to the ERM deferral**  
3 **calculation?**

4 A. Summary results of the cost of service study organized by function are used to  
5 determine the average production cost per kWh embedded in authorized retail rates. This value  
6 is multiplied by changes in Washington retail load to determine the retail revenue credit amount  
7 in the ERM calculation.

8 **Q. What is the purpose of the revenue credit in the ERM calculation?**

9 A. The purpose of the revenue credit in the ERM deferral calculation is to provide a  
10 volume variance component caused by retail loads. Part of the variability in power supply costs  
11 in the ERM is related to increased or decreased volumes of retail sales. The retail revenue credit  
12 provides an offset to actual net power supply costs associated with the change in retail  
13 consumption. The value of the retail revenue credit represents any additional production-related  
14 revenue received from retail customers.

15 **Q. In his testimony Mr. Lott raises concerns related to the calculation of the**  
16 **retail revenue credit. Was a different methodology used in this case compared to Docket**  
17 **No. UE-011595?**

18 A. As mentioned in my direct testimony Exhibit No. \_\_\_(TLK-2) of this case, at page  
19 1 paragraph 3: "In this study I have created a separate functional category for common costs.  
20 Administrative and general costs that cannot be directly assigned to the other functions have been  
21 placed in this category." This is the first time I have presented a functional summary in  
22 Washington with common costs in their own category. In Docket No. UE-011595 an allocation

1 of common costs was included in the retail revenue credit. In this case common costs have not  
2 been included in the retail revenue credit.

3 **Q. If the common costs had been allocated to the production, transmission, and**  
4 **distribution categories in the same manner as shown in the functional summary from**  
5 **Docket No. UE-011595, what would the effect have been on the proposed revenue credit**  
6 **factor?**

7 A. Exhibit No. \_\_\_(TLK-7) shows the functional component summary presented  
8 both with and without common costs in their own category. As is shown on line 36, column (f)  
9 the retail revenue credit factor including an allocation of common costs is \$0.03739 per kWh.  
10 This is compared to a retail revenue credit factor of \$0.03399 per kWh shown on line 26, column  
11 (f) that excludes an allocation of common costs. Mr. Johnson identified the \$0.03399 per kWh  
12 figure as the Company's proposed revenue credit factor.

13 **Q. If you compare the difference in these two factors using Mr. Lott's ERM**  
14 **examples on page 61 of his testimony, what is the impact of including indirect common**  
15 **costs in the factor?**

16 A. In Mr. Lott's Year 1 example, the reduction in power cost from the revenue credit  
17 would be \$3,400 more with common costs in the factor, therefore the deferral would be smaller.  
18 In Mr. Lott's Year 2 example, the increase in power costs from the revenue credit would be  
19 \$6,800 more with common costs in the factor, therefore the deferral would be larger. The  
20 example calculations are shown in Table 2 below. As these examples illustrate, the effect of  
21 modifying the rate is symmetrical and does not represent a large monetary impact to the deferral  
22 calculation.



1 **Table 2**

<b>Incremental Load</b>	<b>\$0.03739</b>	<b>\$0.03399</b>	<b>Impact on Deferral</b>
<b>ERM Year 1</b>			Decrease
Up 1,000,000 kWhs	-\$37,390	-\$33,990	\$3,400
<b>ERM Year 2</b>			Increase
Down 2,000,000 kWhs	+\$74,780	+\$67,980	\$6,800

2

3 **Q. What is the Company's position regarding indirect common costs in the**  
4 **revenue credit factor?**

5 A. Common costs were presented as a separate functional component in this case  
6 because allocating them artificially inflates the perceived "cost" of production, transmission, and  
7 distribution embedded in the study. The Company prefers the revenue credit factor based on  
8 direct production costs excluding an allocation of common costs, however, this item is not  
9 considered a material issue.

10 **Q. If the cost of service study were re-run to reflect results of operations and**  
11 **proposed revenues associated with the Settlement Agreement, what is the retail revenue**  
12 **credit factor produced by those assumptions?**

13 A. The retail revenue credit factor associated with the proposed Settlement  
14 Agreement is \$0.03302 per kWh excluding an allocation of common costs.

#### 15 **IV. CONCLUSION**

16 **Q. Do you have any closing comments on the cost of service issues raised by**  
17 **Public Counsel witnesses?**

18 A. The electric cost of service study is not "flawed" as Mr. Lazar implied and the  
19 similarity of the study results using alternative assumptions supports the rate spread guidance  
20 provided by the Company study.

1           Whether or not common costs are included in the revenue credit factor used in the ERM  
2 calculation as Mr. Lott proposes is not a material issue, but the Company's preference is to  
3 exclude an allocation of common costs.

4           **Q.     Does this conclude your pre-filed rebuttal testimony?**

5           A.     Yes, it does.

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DOCKET NO. UE-050482

EXHIBIT NO. \_\_\_(TLK-7)

TARA L. KNOX

REPRESENTING AVISTA CORPORATION

Sumcost  
Scenario: Company Base Case  
UE-011595 Methodology

AVISTA UTILITIES  
Revenue by Functional Component Summary  
For the Year Ended December 31, 2004

Washington Jurisdiction  
Electric Utility

03-10-01

	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
Description	System Total	Residential Service Sch 1	General Service Sch 11-12	Large Gen Service Sch 21-22	Extra Large Gen Service Sch 25	Pumping Service Sch 31-32	Street & Area Lights Sch 41-49				
<b>Revenue From Current Rates by Functional Components</b>											
1 Production	158,404,218	64,333,039	14,188,033	51,217,343	24,387,318	3,524,170	754,316				
2 Transmission	28,875,469	10,901,502	3,019,492	10,160,933	4,031,315	630,584	131,644				
3 Distribution	64,535,770	29,821,968	8,977,479	19,200,497	2,555,780	1,232,661	2,747,385				
4 Common	34,335,543	17,007,491	3,235,996	8,888,227	3,864,588	681,586	657,655				
5 Total Current Rate Revenue	286,151,000	122,064,000	29,421,000	89,467,000	34,839,000	6,069,000	4,291,000				
Expressed as \$/kWh											
6 Production	\$0.03073	\$0.02917	\$0.03820	\$0.03367	\$0.02684	\$0.02934	\$0.02757				
7 Transmission	\$0.00560	\$0.00494	\$0.00813	\$0.00668	\$0.00444	\$0.00525	\$0.00481				
8 Distribution	\$0.01252	\$0.01352	\$0.02417	\$0.01262	\$0.00281	\$0.01026	\$0.10041				
9 Common	\$0.00666	\$0.00771	\$0.00871	\$0.00584	\$0.00425	\$0.00567	\$0.02404				
10 Total Current Melded Rates	\$0.05552	\$0.05535	\$0.07922	\$0.05881	\$0.03834	\$0.05052	\$0.15682				
<b>Revenue From Current Rates by Functional Components with Common Costs Allocated to Production, Transmission, and Distribution</b>											
11 Production	175,465,577	72,033,821	15,517,122	56,117,470	27,096,331	3,877,692	823,141				
12 Transmission	32,031,762	12,287,497	3,272,284	11,096,222	4,532,661	697,831	145,266				
13 Distribution	78,653,661	37,742,681	10,631,594	22,253,307	3,210,008	1,493,477	3,322,594				
14 Common	0	0	0	0	0	0	0				
15 Total Current Rate Revenue	286,151,000	122,064,000	29,421,000	89,467,000	34,839,000	6,069,000	4,291,000				
Expressed as \$/kWh											
16 Production	\$0.03404	\$0.03266	\$0.04178	\$0.03689	\$0.02982	\$0.03228	\$0.03008				
17 Transmission	\$0.00621	\$0.00557	\$0.00881	\$0.00729	\$0.00499	\$0.00581	\$0.00531				
18 Distribution	\$0.01526	\$0.01711	\$0.02863	\$0.01463	\$0.00353	\$0.01243	\$0.12143				
19 Common	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000				
20 Total Current Melded Rates	\$0.05552	\$0.05535	\$0.07922	\$0.05881	\$0.03834	\$0.05052	\$0.15682				
<b>Revenue From Proposed Rates by Functional Components</b>											
21 Production	175,176,296	72,296,238	15,301,354	55,664,678	27,215,755	3,874,893	823,378				
22 Transmission	34,747,285	13,687,515	3,407,692	11,718,364	5,023,870	753,809	156,035				
23 Distribution	76,582,931	36,219,720	10,033,359	22,467,434	3,261,148	1,472,952	3,128,318				
24 Common	35,477,489	17,613,035	3,328,378	9,161,757	3,991,468	703,583	679,269				
25 Total Proposed Rate Revenue	321,984,000	139,816,507	32,070,783	99,012,233	39,492,240	6,805,236	4,787,000				
Expressed as \$/kWh											
26 Production	\$0.03399	\$0.03278	\$0.04120	\$0.03659	\$0.02995	\$0.03226	\$0.03009				
27 Transmission	\$0.00674	\$0.00621	\$0.00918	\$0.00770	\$0.00553	\$0.00628	\$0.00570				
28 Distribution	\$0.01486	\$0.01642	\$0.02702	\$0.01477	\$0.00359	\$0.01226	\$0.11433				
29 Common	\$0.00688	\$0.00799	\$0.00896	\$0.00602	\$0.00439	\$0.00586	\$0.02483				
30 Total Proposed Melded Rates	\$0.06247	\$0.06340	\$0.08635	\$0.06509	\$0.04347	\$0.05665	\$0.17495				
<b>Revenue From Proposed Rates by Functional Components with Common Costs Allocated to Production, Transmission, and Distribution</b>											
31 Production	192,710,400	80,220,417	16,662,566	60,691,010	30,004,034	4,238,252	894,120				
32 Transmission	38,038,868	15,137,276	3,669,572	12,689,834	5,548,061	823,903	170,221				
33 Distribution	91,234,732	44,458,814	11,738,646	25,631,389	3,940,145	1,743,080	3,722,658				
34 Common	0	0	0	0	0	0	0				
35 Total Proposed Rate Revenue	321,984,000	139,816,507	32,070,783	99,012,233	39,492,240	6,805,236	4,787,000				
Expressed as \$/kWh											
36 Production	\$0.03739	\$0.03637	\$0.04487	\$0.03990	\$0.03302	\$0.03528	\$0.03268				
37 Transmission	\$0.00738	\$0.00686	\$0.00988	\$0.00834	\$0.00611	\$0.00686	\$0.00622				
38 Distribution	\$0.01770	\$0.02016	\$0.03161	\$0.01685	\$0.00434	\$0.01451	\$0.13605				
39 Common	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000				
40 Total Proposed Melded Rates	\$0.06247	\$0.06340	\$0.08635	\$0.06509	\$0.04347	\$0.05665	\$0.17495				