## DOCKET NO. UE-991255 APPLICATION TO SELL THE CENTRALIA POWER PLANT

## REBUTTAL TESTIMONY OF WILLIAM G. JOHNSON

#### REPRESENTING AVISTA CORPORATION

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#### EXHIBIT NO. 315

#### WITNESS: WILLIAM G. JOHNSON AVISTA CORPORATION

Exhibit 315

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EXHIBIT NO. 316

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EXHIBIT NO. 317

## WITNESS: WILLIAM G. JOHNSON AVISTA CORPORATION

Exhibit 317

1	Q Please state your name, business address, and present position		
2	with Avista Corporation ("Avista").		
3	A My name is William G. Johnson. My business address is East		
4	1411 Mission Avenue, Spokane, Washington. I am employed as a Power Contract		
5	Analyst in the Resource Optimization Department.		
6	Q Have you previously provided direct testimony in this		
7	proceeding?		
8	A Yes.		
9	Q What is the scope of your rebuttal testimony in this		
10	proceeding?		
11	A My testimony will respond to issues raised by Mr. Lazar's		
12	direct testimony on behalf of Public Counsel.		
13	O. Are you sponsoring any exhibits to be introduced in this		
14	proceeding?		
15	A. Yes, Lam sponsoring Exhibit No(s), 315 through 317, as		
16	previously marked for identification, which were prepared under my supervision and		
17	direction.		
18	O On page 9 line 21 of his direct testimony Mr. Lazar asks if		
19	long-term forecasts of market prices are speculative. Do you agree with his		
20	response?		
20	A Lagree with Mr Lazar that forecasts of market prices are		
21	dependent on many factors including fuel costs, power plant construction costs and		
22	the power demand and supply balance. The uncertainty of these factors makes any		
23 24	long-term forecast speculative. I do not agree that the power prices forecast by the		
2 <del>4</del> 25	Northwest Power Planning Council which Mr. I agar uses in his analysis are any		
25 26	better or any more appropriate for the analysis of the Centralia plant than are the		
20 27	market prices included in the sellers' analyses. Market price projections are very		
27 28	uncertain and models that predict market prices are based on assumptions that are		
20 20	also very uncertain		
2) 30	also very uncertain. O Does Mr. Lozer colonowiedge the uncertainty of long term		
30	Q. Does MI. Lazar acknowledge the uncertainty of long-term		
27	power price forecasts?		
32 33	A. Yes ne does. In his Exhibit 502 Economic Evaluation of Controlio Toroot Solution" he repeatably addresses the uppertainty of long term		
33 34	Centrana Target Solution he repeatably addresses the uncertainty of long-term		
34 25	power price forecasts. In the second paragraph on page 4 of Exhibit 502 he states,		
33 26	The studies prepared by Pacificorp are based on specific assumptions, many of which are best success due to the uncertainties of long run cost and market		
30 27	which are best guesses due to the uncertainties of long-run cost and market		
31 20	conditions. Again in the last paragraph on page 5 he states, The value of power		
38 20	over a time far into the future is extremely uncertain." Finally in the third paragraph		
39 40	of page 11 he states, "Most important of these risks is that the value of power is		
40	extremely uncertain."		
41	Q. On page 2, line 22 of his direct testimony, Mr. Lazar states that		
42	"At the time the proposed sale was conceived, expected future power prices were		
43	much lower than are forecast today." Do you agree with that statement?		
44	A. Market energy prices have been moving up from the very low		
45	levels in 1995, 1996 and 1997 when prices were less than \$14/MWh for an annual		

1 average. Prices have moved to around \$21 to \$22/MWh in 1998 and 1999. Year 2 2000 power is trading around \$26/MWh currently whereas earlier in the year it was 3 trading under \$23/MWh. What this upward movement in near-term prices has done 4 is to increase the starting point for long-term price forecasts. When similar long-term 5 escalations are applied to the new higher starting points, the effect is to produce a 6 much higher long-term forecast. Every price forecast used in the Centralia analysis 7 starts from roughly today's prices and escalates upward. Except for a pause in 8 escalation in around 2010 in the Northwest Power Planning Forecast and Puget 9 Sound Energy's Forecast (both use the Aurora model) the prices continuously 10 increase. This is generally what happens in energy price forecasts because the forecasters do not attempt to model, do not understand how to model, or can't foresee 11 12 future technologies, events or structural changes that may effect the future escalation 13 of prices. Essentially, every forecast starts from were we are now (a known) and 14 escalates upward continuously from that point. 15 In the past, energy price forecasts, showing escalating real prices, 16 have been subject to extreme errors. For example, in 1990 BPA forecast the New 17 Resource/Surplus Firm power rate, representing a proxy for the market price and new 18 resources, to be \$57.10/MWh in 2000 rising to \$115.90/MWh in 2011. Exhibit 315 19 shows the BPA 1990 forecast. Actual market/new resource rates are less than one-20 half that in the year 2000. In fact, market prices were higher in 1985 than they were 21 in 1998. Looking back, there may be plausible explanations for why this occurred 22 but it is very unlikely that anyone in 1985 would have predicted prices to be lower 23 in 1998. 24 Q. Has Avista seen market prices for the near-term, 2000 - 200625 that support the values for power that Mr. Lazar uses in his analysis? 26 А We have not. Based on market price quotes for longer-term 27 (through 2010) power purchases, Avista believes that replacement power will be less 28 costly than projected plant costs over the next 10 years. Beyond 10 years the market 29 is essentially non-existent and price assumptions are speculative. 30 Is there precedent for focusing on the next 10 years with regard Q. 31 to resource planning. 32 Yes there is. In Avista's last Integrated Resource Plan (IRP) A. 33 in 1997, The Washington Utilities and Transportation Committee (WUTC) agreed 34 to allow the company to conduct a 10-year plan. The company proposed this change 35 primarily because there is so much uncertainty beyond 10 years. Beyond 10 years 36 there is a lot of uncertainty regarding the structure of the industry, what our load 37 obligations might be, future generation technologies, fuel costs and environmental 38 regulation. While it may not be appropriate to limit the evaluation of Centralia to 10 39 years, it may be appropriate to put a greater emphasis on the first 10 years when some 40 of the unknowns are more predictable. 41 Do you agree with Mr. Lazar's analysis in Exhibit 501 that **O**. 42 estimates that the present value of future plant costs is around \$1.1 billion less than 43 the cost of replacement power? 44 A. No I do not. First, based on conversations in the last two 45 weeks with staff at the Northwest Power Planning Council (NWPPC), it appears as

1 though the market price forecast used in Exhibit 501 is not appropriate for valuing 2 the replacement cost of Centralia power. The NWPPC forecast presented to its 3 Regional Technical Forum included certain assumptions that created unrealistically 4 high prices. 5 More importantly, the NWPPC market price forecast is not necessarily 6 intended to project the market price of longer-term fixed purchase arrangement. The 7 model is intended to project spot market wholesale prices in a deregulated environment. Avista is not planning to replace Centralia with spot market purchases. 8 9 Do you agree with Mr. Lazar's assertion that ratepayer's have 10 overpaid for Centralia power by \$512 million? I do not. Mr. Lazar's analysis as shown on Exhibit 504 11 A. 12 compared the total cost of Centralia to short-term market prices. This is not a valid 13 comparison. Centralia is a long-term firm energy resource. During the 1980's and 14 until the later 1990's firm power, such as Centralia, was priced with both an energy 15 and capacity component. The firm power replacement for Centralia during the period 16 in Mr. Lazar's analysis, 1986 through 1998, needs to be calculated with both an 17 energy and capacity value. Including the value of capacity with the short-term energy 18 value Mr. Lazar uses in Exhibit 504 would produce a long-term firm power value that is more comparable with the total cost of Centralia. I calculated that the 19 20 minimum average capacity value to eliminate Mr. Lazar's claimed \$512 million 21 "Ratepayer's Loss" would have had to be \$2.45/kW/month over the period 1986 to 22 1998. During that period 1989 through 1997, Avista made a long-term firm power 23 sale to Pacificorp with capacity rates ranging from \$3.50/kW/month to 24 \$6.00/kW/month. In 1998, Avista sold firm-energy to Clark PUD with a capacity 25 charge of \$2.65/kW/month. Including an average capacity charge of \$3.50/kW/month in Mr. Lazar's Exhibit 504 changes the claimed "Ratepayer's Loss" 26 27 of \$512 million to a gain of \$219 million. These calculations are shown in Exhibit 28 316. The value of the Centralia plant as a firm power resource was much greater than 29 just the value of shot-term energy as proposed in Mr. Lazar's Exhibit 504. Including 30 the value of capacity in Mr. Lazar's analysis shows that the cost of the Centralia plant 31 was less than the value of long-term firm power over the period 1986 to 1998. 32 Do you have any comments on Mr. Lazar's testimony О. 33 suggesting that a sale price for Centralia of \$1.361 billion would be required for 34 ratepayers to breakeven? 35 A. Yes. Mr. Lazar's sale price does not pass the test of reasonableness. Mr. Lazar's suggested sales price would be 10.8 times book value, 36 37 as shown in the calculations below. The actual ratio of sales price to book value 38 under the sale to TECWA is 3.4 times book value. 39 40 Mr. Lazar's suggested sale price for breakeven \$1,361,300,000 41 Less: Book value for mine per Exh. 501, Page 7 \$107,200,000 42 Suggested sale price for plant \$1,254,100,000 43 Avista's ownership percentage 15% 44 Avista's share of Mr. Lazar's sale price \$188,115,000 45 Avista's estimated book value at 12/31/99 17,477,000

1	Ratio of sale price to book value		10.8 times		
2			¢50,000		
3	Sale proceeds from sale to TECWA		\$59,298,000		
4	Avista's estimated book value at 12/31/99				
5 6	Ratio of TECWA sale p	rice to book value	3.4 times		
7	A No	A November 1, 1999 article entitled "Did Power Plant Buyers Pay			
8	Too Much?" by Art I	Too Much?" by Art Holland (Public Utilities Fortnightly, pp. 26-36), contains a tabl			
9	of eighteen recent p	of eighteen recent power plant sales. The table shows a range of sale prices to net			
10	book value of 0.17 t	book value of 0.17 times to 5.85 times with an average of 2.18 times. This table is			
11	shown in Exhibit 317	shown in Exhibit 317. It is understood that there are many factors that will cause one			
12	plant to receive a sa	plant to receive a sale price multiple different that another, such as the age of the			
13	plant, the condition of	plant, the condition of the plant, environmental compliance, availability and quality			
14	of fuel, recent opera	of fuel, recent operating performance, etc. This data, however, suggests that Mr.			
15	Lazar's sale price of	Lazar's sale price of 10.8 times book value for the Centralia Plant is outside the			
16	bounds of reasonable	bounds of reasonableness.			
17	Q.	Would you please summarize	e your testimony?		
18	А.	Yes. The analysis of the value	e of the Centralia plant depends,		
19	along with other fact	along with other factors, on the projection of replacement power costs. Projections			
20	of long-term power of	of long-term power costs are highly uncertain. Mr. Lazar has used a long-term price			
21	forecast that is higher	forecast that is higher than the price forecast used by Avista or the other sellers. Price			
22	forecasts beyond 10 years are truly speculative and dependent on assumptions made				
23	in the forecasting pro	in the forecasting process. The recent uptick in near-term prices has resulted in long-			
24	term forecasts increasing because of the higher starting point. While all forecasts tend				
25	to show prices continuously increasing, history has shown that energy prices can				
26	decrease as witnesse	decrease as witnessed by 1998 market prices being lower than 1985 prices.			
27	Mr. Lazar's analysis showing that the cost of power from Centralia				
28	exceeding the marke	exceeding the market price of power by \$512 over the period 1986 through 1998 is			
29	flawed because it con	flawed because it compares a long-term firm power resource, Centralia, with short-			
30	term energy prices.	term energy prices. Including value for capacity for the period shows that the value			
31	of the power from C	of the power from Centralia exceeded the cost of the plant by \$219 million.			
32	Q.	Does that conclude your rebu	uttal testimony?		
33	Α.	Yes.			
34					