

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-08 \_\_\_\_\_

DOCKET NO. UG-08 \_\_\_\_\_

DIRECT TESTIMONY OF

DAVE B. DEFELICE

REPRESENTING AVISTA CORPORATION

**I. INTRODUCTION**

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

A. My name is Dave DeFelice. I am employed by Avista Corporation as a Senior Business Analyst. My business address is 1411 East Mission, Spokane, Washington.

**Q. Please briefly describe your education background and professional experience.**

A. I graduated from Eastern Washington University in June of 1983 with a Bachelor of Arts Degree in Business Administration majoring in Accounting. I have served in various positions within the Company, including Analyst positions in the Finance Department (Rates section and Plant Accounting) and in Marketing/Operations Departments, as well. In 1999, I joined a department in the Company as a Senior Business Analyst that focuses on economic analysis of various project proposals as well as evaluations and recommendations pertaining to business policies and practices.

**Q. As a Senior Business Analyst, what are your responsibilities?**

A. As a Senior Business Analyst I am involved in activities ranging from financial analysis of numerous projects with various departments such as Engineering, Operations, Marketing/Sales and Finance. Also, a portion of my job tasks involve advisory and informal training of employees pertaining to regulatory finance and ratemaking concepts.

**Q. What is the scope of your testimony?**

A. My testimony and exhibits in this proceeding will cover the Company's proposed regulatory treatment of capital investments in utility plant through 2008.

**Q. Are you sponsoring any exhibits?**



1 effect; such pro forma adjustments correct what would otherwise cause a miscalculation of the  
2 value of property that is used and useful for service”.

3 If utility plant investment that is being used to serve customers is not reflected in retail  
4 rates then the retail rates will not be "just, reasonable, and sufficient," i.e., it would not be just or  
5 reasonable for customers to receive the benefit provided by the utility investment without paying  
6 for it, and the retail rates would not provide revenues "sufficient" to provide recovery of the costs  
7 associated with providing service to customers.

8 **Q. Is the Company's application of these ratemaking principles in this filing**  
9 **consistent with prior general rate cases?**

10 A. Yes. In prior cases, the objective has been the same -- to include in retail rates the  
11 investment, or rate base, that is providing service to customers, and ensure that there is a proper  
12 matching of revenues and expenses during the period that rates are in effect.

13 **Q. How does new investment in utility plant change rate base over time for**  
14 **ratemaking purposes?**

15 A. Historically, the annual dollars spent by the Company on new utility plant has  
16 generally been relatively close to the level of depreciation expense, with the exception of years  
17 where the Company has invested in major new utility projects.<sup>1</sup> I will use an example to  
18 illustrate, in general terms, how new investment in utility plant changes rate base over time. Let's  
19 assume that the Company's rate base (adjusted net plant in service used to serve customers) at the  
20 beginning of Year 1 is \$1.5 billion. Also assume that depreciation expense in Year 1 is \$80  
21 million, and the Company's new investment in utility plant in Year 1 is also \$80 million. During

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<sup>1</sup> Recognizing that a portion of the costs associated with capital additions are offset by additional revenues.

1 Year 1, rate base increased by \$80 million (new investment), and decreased by \$80 million  
2 (depreciation), and ended up at the same level of \$1.5 billion at the end of the year. In this  
3 simplified example, the Company's rate base is \$1.5 billion, both at the beginning of Year 1, and  
4 at the end of Year 1. For ratemaking purposes, the \$1.5 billion of rate base is representative of  
5 the level of plant investment used to serve customers, both at the beginning of the year and at the  
6 end of the year. Over time, if depreciation expense continues to be approximately equal to new  
7 plant investment, rate base would continue at a relatively constant \$1.5 billion. Under these  
8 circumstances, the use of the \$1.5 billion rate base amount from a prior year, i.e., a historical test  
9 year, would be adequate for setting rates for the upcoming year (pro forma rate year), because  
10 there is little change in the net plant investment used to serve customers.

11 In a similar manner, in prior general rate cases we have used a rate base amount from a  
12 historical test year as the starting point for the pro forma rate year. If there were no major plant  
13 additions between the historical test year and the upcoming pro forma rate year, the historical test  
14 year rate base amount would be used for the pro forma rate year as being representative of the net  
15 plant used to serve customers. If there were known major plant additions that would be in  
16 service for the pro forma rate year, such as the recent addition of Coyote Springs II for Avista,  
17 the major transmission upgrades, and the hydroelectric upgrades, then rate base for the pro forma  
18 rate year is adjusted for these major investments, so that rate base for the pro forma rate year is  
19 representative of the level of investment used to serve customers.

20 **Q. Is Avista's new investment in utility plant exceeding its annual depreciation**  
21 **expense, causing an increase in rate base?**

1           A.     Yes. Avista's investment in plant in 2007 and 2008, is well above the annual  
2 depreciation expense, and will result in an increase in net plant in service (rate base) that will be  
3 used to serve customers in the 2009 pro forma rate year. Much of this new investment in plant  
4 for 2007 and 2008 is spread among many different utility plant categories, as opposed to a few  
5 major plant additions. Therefore, the Company's pro forma adjustment for new investment in  
6 plant in this filing involves a more detailed analysis of the net change in rate base from the  
7 historical test period to the pro forma rate year. The end result, however, is the same in this case  
8 as in prior cases – to reflect in retail rates the level of net plant investment that is used to serve  
9 customers during the pro forma rate year, and to have a proper matching of revenues and  
10 expenses.

11           **Q.     How was rate base for the pro forma rate year developed for this filing?**

12           A.     As in prior rate cases, Avista started with rate base for the historical test year,  
13 which for this case is the calendar year 2007. Adjustments were made to reflect new additions  
14 and accumulated depreciation through December 2008, such that the proposed rate base reflects  
15 the net plant in service that will be used to serve customers during the 2009 pro forma rate year.  
16 Later in my testimony I will provide the details of the adjustments to rate base.

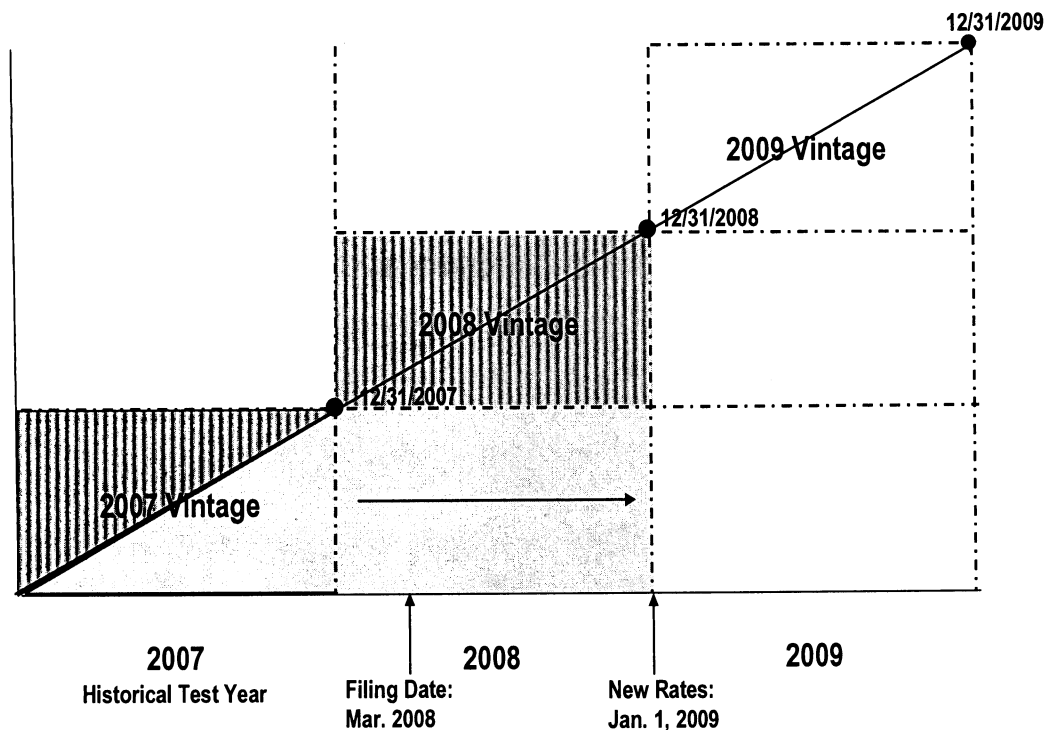
17           Although there is a strong case to be made that the new capital investment in 2009 will be  
18 used to serve customers during the 2009 rate year, and should be reflected in this case, the  
19 Company has only included new investment through December 2008.

20           The capital additions through 2008 will be in-service by the time new rates are in effect  
21 from this rate filing, and customers will be receiving benefits from this investment. The  
22 following chart illustrates the 2007 historical test period, the March 2008 filing of this case, and

1 the expectation that new retail rates will become effective by January 1, 2009. The chart also  
 2 illustrates that the capital additions for 2007 and 2008 will be completed and in service prior to  
 3 January 1, 2009. During 2009 customers will receive the benefit from the full investment in  
 4 2007 and 2008, and it is appropriate for this investment to be reflected in the retail rates for 2009.

5 **Illustration 1**

6 **Capital Additions 2007 – 2009**  
 7 **Avista Utilities**



19 As illustrated by the chart, if the proposed rates in this case go into effect in January  
 20 2009, the 2007 plant additions will be entering their third year of service during calendar year  
 21 2009, and the 2008 capital additions will be in their second year of service. Clearly the 2007 and  
 22 2008 investment will be providing service to customers, and would reflect the true cost of

1 funding assets that are necessary, and used and useful, to provide service to customers during the  
2 year that new rates will be in effect. It would result in a mismatch of revenues and expense  
3 during 2009 if the costs associated with these investments are not reflected in the 2009 retail  
4 rates.

5 **Q. You stated earlier that new utility investment in 2007 and 2008 will be**  
6 **substantially higher than the annual depreciation expense. What is driving the significant**  
7 **investment in new utility plant?**

8 A. The Company is currently being required to add significant new transmission and  
9 distribution facilities, including strengthening the “back bone” of our system, due in part to  
10 customer growth in our service area, reliability requirements, and capacity upgrades. Other  
11 issues driving the need for capital investment include an aging infrastructure, physical  
12 degradation, and municipal compliance issues (i.e., street/highway relocations), etc. While the  
13 overall economy is slowing on a national basis, Spokane County is still growing. In 2007,  
14 employment growth in Spokane County ranked in the top 25% of all metropolitan areas.

15 In addition, the cost of raw materials, including concrete, steel, copper, aluminum and  
16 other materials, have sky-rocketed in recent years, causing the cost of these new facilities to be  
17 significantly higher than in the past. Because the cost of adding new facilities is significantly  
18 higher than the existing facilities, the investment in new facilities will be significantly higher  
19 than the annual depreciation expense on the existing facilities.

20 **Q. What is causing the substantial increase in raw materials for Avista, and the**  
21 **utility industry in general?**



1           A.     In September 2007, The Edison Foundation commissioned a study from The  
2 Brattle Group titled, “Rising Utility Construction Costs: Sources and Impacts,” which identified  
3 cost trends specifically related to the utility industry pertaining to critical materials and  
4 equipment, as well as labor support services used for building capital infrastructure. This study  
5 is attached as Exhibit No. \_\_\_\_ (DBD-2). The study identifies the reasons for drastic cost  
6 increases in critical raw materials, such as global competition and an aging domestic utility  
7 infrastructure as well as the need for additional infrastructure to accommodate growth in the near  
8 future.

9           **Q.     What are some of the key cost drivers that are cited in the study?**

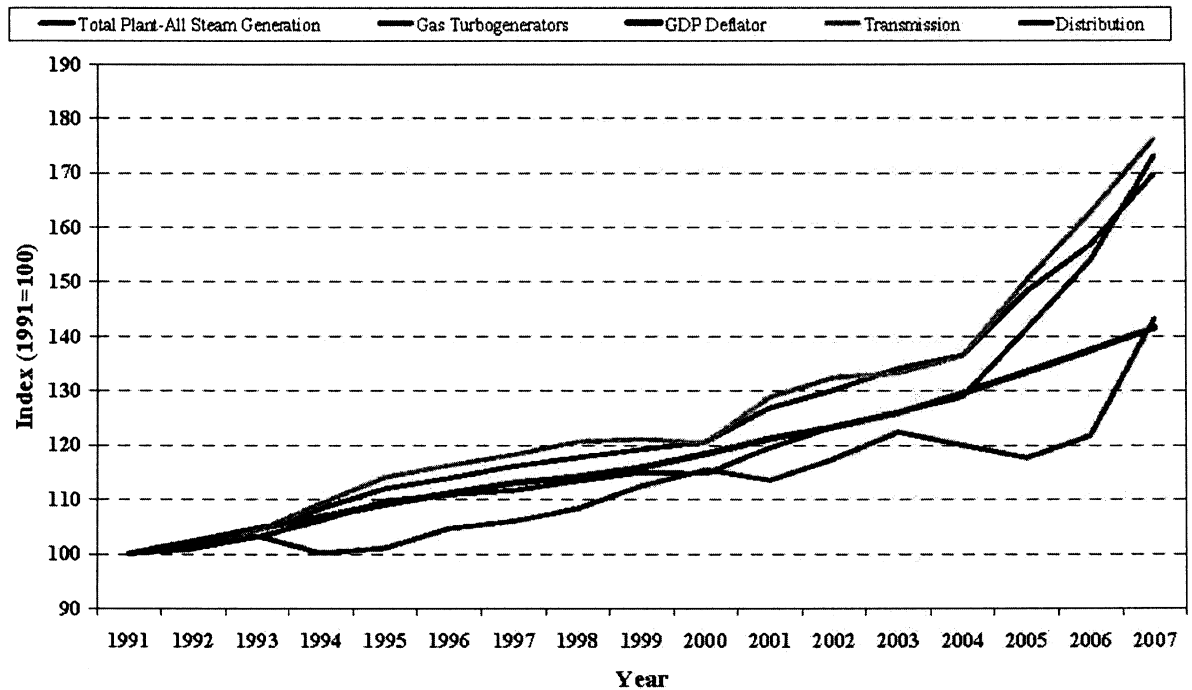
10          A.     The study, at page 16, cites four major cost drivers, “(1) material input costs,  
11 including the cost of raw physical inputs, such as steel and cement as well as increased costs of  
12 components manufactured from these inputs (e.g., transformers, turbines, pumps); (2) shop and  
13 fabrication capacity for manufactured components (relative to current demand); (3) the cost of  
14 construction field labor, both unskilled and craft labor; and (4) the market for large construction  
15 project management, i.e., the queuing and bidding for projects.” The study goes on to compare  
16 cost trends for various raw materials, critical equipment and labor services relative to the general  
17 inflation rate (GDP deflator). In addition, a cost trend is summarized by three key utility  
18 functional plant categories, including generation, transmission, and distribution plant. The study  
19 concludes that these inflation impacts have been outside the utility industry’s control and there  
20 are no immediate indications of cost relief in the near future.

21           Illustration 2 below depicts what has occurred to infrastructure costs nationally. From the  
22 chart, it is apparent that starting in 2003, costs of distribution, transmission and generation

1 infrastructure increased at a far more significant rate than the overall economy, as measured by  
 2 the GDP deflator.

3 **Illustration 2**

4 **National Average Utility Infrastructure Cost Indices**



Sources: The Handy-Whitman® Bulletin, No. 165 and the U.S. Bureau of Economic Analysis. Simple average of all regional construction and equipment cost indexes for the specified components. "Rising Utility Construction Costs: Sources and Impacts" Prepared by The Brattle Group for The Edison Foundation, September 2007

16 **Q. Is there specific evidence that Avista is experiencing cost escalations similar**  
 17 **to that indicated in the study?**

18 A. Yes. A sample was compiled of some materials and equipment that Avista  
 19 routinely uses in order to support various infrastructure construction efforts that are part of the  
 20 Company's annual capital requirements of purchases made from 2003 through 2008. The sample  
 21 of materials was grouped into categories for typical electric and gas distribution capital projects  
 22 as well as major electric substation projects. The cost summary indicated that the cost of the

1 materials reviewed has risen sharply in most categories from 2003 to 2008. For the distribution  
2 group of materials, the average annual escalation impact from 2003 through 2007 is  
3 approximately 37%, which is equal to a cumulative increase over the four-year period of 178%.  
4 The escalation for the substation group of materials and equipment has been approximately 12%  
5 per year for the purchases Avista has made from 2003 to 2008, or a cumulative increase of 55%.

6 **Q. What is the historical and projected level of annual capital spending for**  
7 **Avista?**

8 A. Avista's capital requirements have steadily increased from approximately \$100  
9 million to \$200 million over the last several years. Exhibit \_\_\_(DBD-3) reflects this trend that  
10 Avista has experienced and what is planned for in the near future. This clearly shows that the  
11 amount of capital projects is well in excess of revenue-supported capital expenditures to connect  
12 new customers, and beyond the level of revenues that is being collected from customers related  
13 to existing plant. The difference between the total capital requirements, less the new revenue  
14 related capital, and allowed revenues represent a significant discrepancy that is negatively  
15 impacting the Company.

16 **Q. What is the likelihood that Avista's capital investment will continue at this**  
17 **level?**

18 A. There are many factors that will influence capital expenditures going forward.  
19 One factor is the cost of raw materials is expected to continue to inflate over time and the fact  
20 that there is more demand for capital projects for such things as compliance work with municipal  
21 highway and road projects, sewer projects, etc. Also, as critical systems age, there will be more  
22 utility plant that will be reaching the end of physical life and, in some cases, plant may be

1 replaced prior to the end of its physical life based on power efficiency improvements that can be  
2 recognized.

3

4 **III. DESCRIPTION OF CAPITAL PROJECTS**

5 **Q. For the 2008 capital projects pro formed in this filing, provide a description**  
6 **of the projects.**

7 A. Exhibit No. \_\_\_(DBD-4) details the capital projects that will be transferred to  
8 plant in service in 2008 and included in this filing. A short description of these projects follows:

9 **Generation:**

10 Thermal – Colstrip Capital Additions - \$3,424,000  
11 There will be a planned outage on Unit #4 so the Company can install NOX (pollution  
12 control equipment) to be in compliance with state and federal mandates. Further, there  
13 will be a replacement of a cooling tower.

14  
15 Thermal – Kettle Falls Capital Projects - \$1,131,000  
16 The primary project at the Kettle Falls Generating Station is the re-roofing of the power  
17 house. Other smaller projects include: replacement of wood screw conveyors which  
18 feeds wood into the hopper, replacement of electronic recip controllers, and replacement  
19 of the 4160 protective relays.

20  
21 Thermal – Other Small Projects - \$130,000  
22 The control system at the Northeast Combustion Turbine will be upgraded for standby  
23 reserve. Further, the failed Mark 5 controller and low voltage bus duct between the step  
24 transformer and the generator breaker will be replaced, as they failed in 2007.

25  
26 Hydro – Cabinet Gorge Bypass Tunnel Project - \$5,353,000  
27 Feasibility study pertaining to the Company's FERC mandated license obligation  
28 regarding gas super-saturation issues within the Clark Fork River License Agreement for  
29 the Cabinet Gorge Dam. This study will be completed in August 2008. Company witness  
30 Mr. Vermillion discusses this study further in his testimony.

31  
32 Hydro – Clark Fork Implement PME Agreement - \$2,243,000  
33 Over twenty projects are planned for 2008 as part of the protection, mitigation and  
34 enhancement (PME) plan. These projects were agreed to as part of the settlement  
35 agreement and FERC license received in 2001.

1 Hydro – Noxon Capital Projects - \$1,628,000

2 Projects include finishing the replacement of the stator frame, stator core, and stator  
3 windings on unit #5. Further, after spring runoff, the #1 turbine will be upgraded,  
4 including a complete mechanical overhaul, upgraded high efficiency turbine, stator core  
5 and stator winding.

6  
7 Hydro – Other Small Projects - \$1,461,000

8 Other small hydro projects primarily relates to the initial scope and study of the  
9 replacement of the #1 and #2 turbines at the Nine Mile Generating Facility. The funds  
10 will be used for the feasibility study as well as determination of costs and engineering.

11  
12 Coyote Springs 2 (CS2) Joint Share Projects - \$2,200,000

13 The primary Joint Share project is the hot gas path overhaul. This includes the  
14 replacement of the 1<sup>st</sup> stage rotating and stationary blades and 1<sup>st</sup> stage nozzles. This  
15 work is part of the long term service agreement with General Electric.

16  
17 Coyote Springs 2 (CS2) Capital Projects - \$1,400,000

18 The primary project is the replacement of duct burners on the heat recovery steam  
19 generator, which will result in more generation output from the turbine.

20  
21 Other Small Projects - \$807,000

22 The primary other small project involves the replacement of the duct bank that runs from  
23 the Post Street Substation to the Upper Falls Generating Facility. Further, the 80 year old  
24 cables which have had two recent failures will be replaced.

25  
26 **Electric Transmission:**

27 West Plains Transmission Reinforcement Project - \$1,993,000

28 This item includes constructing 4.7 miles of 115 kV transmission lines from the Airway  
29 Heights substation to the existing South Fairchild tap west of Spokane. The line is  
30 required to reduce thermal loading on area transmission lines and is the first phase of a  
31 multi-phase project.

32  
33 Power Transformer – Transmission - \$1,595,000

34 The primary project in this category is the purchase and installation of a new 230/115 kV  
35 auto-transformer at the Benewah Substation. The existing auto-transformer as reached its  
36 end of life.

37  
38 Spokane/Coeur d'Alene 115 kW Line Relay Upgrades - \$1,247,000

39 Improvements to the Spokane-Coeur d'Alene area 115 kV line protection schemes are  
40 required in order to improve system reliability. This project includes the installation of  
41 high speed communications between area substations and the replacement of protective  
42 relays for improved fault clearing.

1 Nez Perce 115 kV Sub-Inst Capacitor Bank - \$751,000

2 This project involves the installation of a 15 MVAR capacitor bank at the Nez Perce  
3 substation and the installation of a 15 MVAR capacitor bank at the Grangeville  
4 substation. These capacitor banks are needed to provide area voltage support during peak  
5 load conditions.

6  
7 Beacon 230 Bus Convert to DB-DB - \$750,000

8 This project will add a sectionalizing breaker at the Beacon 230 kV substation to meet  
9 national reliability compliance standards. Currently there is a 230 kV bus tie breaker,  
10 which could be a single point of failure for the entire substation.

11  
12 Lolo 230 – Rebuild 230 kV Yard - \$737,000

13 As a result of the West of Hatwai transmission projects, fault duties at the Lolo substation  
14 have increased. The substation is being rebuilt to meet Company operating standards.

15  
16 Transmission Air Switch Ground Mat - \$697,000

17 This safety project involves the installation of above ground switch platforms to all 115  
18 kV line air switches. The platforms will allow company personnel to operate switches  
19 safely.

20  
21 Other Small Projects - \$4,316,000

22 Please refer to the workpapers of Mr. DeFelice for detailed listing of projects.

23  
24 **Electric Distribution:**

25 Electric Distribution Minor Blanket Projects - \$5,800,000

26 Replace crossarms and poles on distribution lines as required, due to storm damage, fires,  
27 or obsolescence.

28  
29 Wood Pole Mgmt Capital - \$4,923,000

30 The distribution wood-pole management program is the strength evaluation of a certain  
31 percentage of the pole population each year. Depending on the test results for a given  
32 pole, that pole is either considered satisfactory, reinforced with a steel stub, or replaced.

33  
34 Electric Underground Replacement - \$3,000,000

35 Replace high and low voltage underground cable as required.

36  
37 T&D Line Replacement - \$2,250,000

38 Relocation of transmission and distribution lines as required.

39  
40 Power Transformer – Distribution - \$1,755,000

41 Installation of distribution power transformers as required.

1 Failed Electric Plant - \$1,750,000  
2 Installation of distribution plant for failed plant as required.

3  
4 Distribution Reliability and Energy Efficiency Program (DREEP) - \$1,500,000  
5 This new process at Avista analyzes many aspects of the distribution system, including  
6 distribution feeder lengths, optimum amperage levels, phase balancing, conservation  
7 voltage reduction, etc., in order to evaluate how the system can be made more efficient.

8  
9 Plummer – Increase Capacity/Rebuild - \$1,425,000  
10 This project is required to replace the existing deteriorated wood substation, and increase  
11 transformer capacity to meet system demand during all operating conditions.

12  
13 C & W Kendall Project - \$3,050,000  
14 This project involves the relocation and replacement of transmission and distribution  
15 facilities for the Kendall Yards project in Downtown Spokane from the Post Street  
16 substation to the College and Walnut substation.

17  
18 Indian Trail 115-13kV Sub-Construct New Sub - \$2,275,000  
19 This project involves the construction of a new 115-13 kV substation in the Indian Trail  
20 area to meet capacity demands in northwestern Spokane. This will be a 20 MVA, 2  
21 feeder (13 kV) substation.

22  
23 Critchfield 115 Sub-Construct - \$1,614,000  
24 This project involves the construction of a new South Clarkston 115-13 kV substation (20  
25 MVA transformer and 2 feeders) to reduce loading on other area transformers, which are  
26 reaching full capacity.

27  
28 Spokane Electric Network Incr Capacity - \$1,445,000  
29 These projects are associated with the Downtown Spokane electric network. The projects  
30 involve the installation of vaults, cables, network transformers and protectors as required  
31 to serve new network customers, and maintain service to existing customers by replacing  
32 overloaded and deteriorated equipment.

33  
34 WSDOT Highway Franchise Consolidation - \$800,000  
35 In order to operate our electric system within State highway rights of way, the Company  
36 needs to establish new Franchises. Existing franchises have expired and Avista must seek  
37 new agreements with the State or risk penalties or non-approval by the State.

38  
39 Other Small Projects - \$4,737,000  
40 Please refer to the workpapers of Mr. DeFelice for detailed listing of projects.

41  
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1           **General:**

2           Computer/Network Hardware/Software - \$9,225,000

3           Projects for replacement of obsolete technology according to Avista's refresh cycles that  
4           are generally driven by hardware/software manufacturer and industry trends. Further  
5           investment includes hardware and software investments that address capacity and  
6           performance constraints due to technology consumption and growth. Finally, the  
7           Company will have technology investments that support business initiatives generally  
8           relating to back-office automation, reliability/safety/compliance for electric and gas  
9           infrastructure, and systems that service the Customer.

10  
11          HVAC Renovation Project - \$4,990,000

12          The heating, ventilating, and air conditioning systems throughout the Spokane Central  
13          Operating Facilities are approximately fifty years old and are in need of replacement. The  
14          project involves replacing central air handling units and distribution systems in three  
15          buildings - the Spokane Service Center, the general office building, and the cafeteria  
16          auditorium building. The building envelope of the general office building will also be  
17          renovated with high efficiency glass and insulation. New controls will also be installed  
18          which will enable energy conservation.

19  
20          Backup Control Center - \$1,911,000

21          This project involves creating a redundant control center to meet NERC reliability  
22          standard for transmission and operations groups.

23  
24          Tools Lab and Shop Equipment - \$1,200,000

25          This request is for general replacement and additions required for capital projects.

26  
27          Structures and Improvements – \$1,174,000

28          This is a group of capital maintenance projects that Facilities Management coordinates at  
29          the Spokane Central Operating Facilities and Avista branch facilities - offices and service  
30          centers. For 2008, some of the projects include; paving employee parking at Coeur  
31          d'Alene, constructing a vehicle storage building at Pullman Service Center, remodel the  
32          Spokane Meter Shop, new carpet on General Office 4th floor, remodel of the  
33          Cafeteria/Auditorium building, and multiple small capital maintenance projects across  
34          Avista's service territory.

35  
36          Other Small Projects - \$4,205,000

37          These projects include communication and security initiatives, radio equipment, SCADA  
38          controls, telephone systems, office and other general facility upgrades.

39  
40

41



1           **Transportation:**

2           Transportation Equipment - \$5,985,000

3           Capital additions in transportation include the purchase of new fleet vehicles and heavy  
4           equipment for on-road and off-road applications.

5

6           **Gas Distribution:**

7           Gas Non-Revenue Blanket - \$2,297,000

8           This annual project will replace sections of existing gas piping that require replacement to  
9           improve the operation of the gas system but are not directly linked to new revenue. The  
10          project includes relocation of main related to overbuilds, improvement in equipment  
11          and/or technology to improve system operation and/or maintenance, replacement of  
12          obsolete facilities, replacement of main to improve cathodic performance, and projects to  
13          improve public safety and/or improve system reliability.

14

15          Gas Replacement Street and Highways - \$2,060,000

16          This annual project will replace sections of existing gas piping that require replacement  
17          due to relocation or improvement of streets or highways in areas where gas piping is  
18          installed. Avista installs many of its facilities in public right-of-way under established  
19          franchise agreements. Avista is required under the franchise agreements, in most cases,  
20          to relocate its facilities when they are in conflict with road or highway improvements.

21

22          Replace Deteriorated Pipe - \$1,339,000

23          This annual project will replace sections of existing gas piping that is suspect for failure  
24          or has deteriorated within the gas system. This project will address the replacement of  
25          sections of gas main that no longer operate reliability and/or safety. Sections of the gas  
26          system require replacement due to many factors including material failures,  
27          environmental impact, increase leak frequency, or coating problems. This project will  
28          identify and replace sections of main to improve public safety and system reliability.

29

30          Reinforce Gate Station Post Falls, ID - \$1,500,000

31          This project will build a larger Gate Station at the existing Post Fall, ID Tap. New  
32          metering, regulation, and a line heater will be installed. Due to system growth, demand  
33          for gas in the Post Falls area has exceeded the capacity of the current Gate Station. The  
34          existing facilities are inadequate during high system demand. Rebuilding the gate station  
35          will insure continued reliable operation of the gate station facilities.

36

37          East Medford /Roseburg /Sutherlin HP Reinforcement Projects - \$10,020,000

38          These Oregon gas distribution projects are not included in this filng.

39

40

41

1 Kettle Falls Relocation/Gate - \$1,300,000

2 This multi-phased project will install a new gate station on the west side of Spokane to  
3 serve the existing HP distribution and future replacement pipe that is part of the Kettle  
4 Falls HP main. The existing Kettle Falls Gate Station and high pressure (HP) Kettle Falls  
5 main has experienced significant encroachment due to growth in the north Spokane area.  
6 Sections of the main will be relocated to ensure continued safe reliable operation of the  
7 pipe system. The new gate station will improve the safety and reliability of operating the  
8 high pressure main and improve the gate station delivery capacity into the Kettle Falls HP  
9 system. Future phases of this project will re-route sections of the existing HP Kettle Falls  
10 main to improve system capacity and public safety.

11  
12 Qualchan Reinforcement - \$1,200,000

13 This project will reinforce the southeast Spokane area west of Hwy 195 by looping the  
14 existing distribution system. The southeast Spokane distribution system experiences low  
15 pressures during high system demand in the winter. The area fails the gas planning model  
16 for a design day. Growth in the area has reduced Avista's ability to reliably serve gas  
17 from its existing distribution system during a design day. This project will improve  
18 delivery pressure and position the system for future growth.

19  
20 Other Small Projects - \$4,981,000

21 Please refer to the workpapers of Mr. DeFelice for detailed listing of projects.  
22

23 **Jackson Prairie Storage:**

24 Jackson Prairie Storage Project - \$18,056,000

25 Avista and its partners started an expansion project at Jackson Prairie for deliverability  
26 that will be in service in the Fall of 2008. Mr. Vermillion describes this project is his  
27 testimony in this case.  
28  
29

30 **IV. ADJUSTMENT METHODOLOGY**

31 **Q. What was the general approach to computing the pro forma adjustments for**  
32 **investment in capital projects?**

33 A. The Company felt it was important to track the 2007 and 2008 capital investments  
34 separately to simplify the computation and to make it easier to follow. For each vintage, capital  
35 additions, depreciation and DFIT were computed to derive rate base at December 31, 2007 and  
36 December 31, 2008 and to compute operating expenses in the pro forma rate year.

1           **Q.     What reports or data were used in the computation?**

2           A.     The Company maintains results of operations reports that are prepared for each  
3 service and jurisdiction on an average of monthly averages (AMA) basis and on an end of period  
4 (EOP) basis that were used in this computation. Actual 2007 plant additions were used from the  
5 plant accounting system to determine the month of addition and the amount of additions that  
6 were for revenue producing projects. Capital additions for 2008 were based on specific capital  
7 requirements for 2008. Capital additions for 2008 that were for revenue producing projects were  
8 separated out and excluded. Exhibit No. \_\_\_(DBD-4) details the capital projects that will be  
9 transferred to plant in service in 2008 and included in this filing. The Company did not include  
10 any 2009 capital additions in this filing.

11           **Q.     Are the computations for all services and jurisdictions the same?**

12           A.     Yes, they are. Because of this, only the Washington electric data will be used  
13 below to describe the methodology for computing the adjustments. The adjustments for  
14 Washington gas were computed in a similar manner.

15           **Q.     Please explain in detail the computation of the adjustment as it relates to rate**  
16 **base.**

17           A.     There are three steps to determine the rate base adjustment at December 31, 2007  
18 and December 31, 2008, as follows:

19           **Step 1 – Adjust AMA 2007 to EOP December 31, 2007**  
20 **(Pro Forma Capital Additions 2007 Adjustment)**

21           The first step was to determine an adjusted December 31, 2007 EOP net plant balance  
22 that includes only the AMA revenue producing capital. The Company's December 31, 2007 EOP  
23 results of operations reports was the starting point.

1           The gross plant at December 31, 2007 at EOP includes all revenue producing capital  
 2 added in 2007. It is necessary to remove only the average of monthly averages of those  
 3 additions, since 2007 test year includes AMA customers and revenue (this is explained further  
 4 below). To accomplish this, all revenue producing capital additions were deducted from the EOP  
 5 balance and then the AMA additions were added back. The EOP gross plant at December 31,  
 6 2007 was computed as follows:

	<u>(\$000's)</u>
EOP Gross Plant at 12/31/07 per Results of Operations	\$1,591,814
Less: EOP 2007 Revenue Producing Capital Additions	(\$10,068)
Add: AMA 2007 Revenue Producing Capital Additions	<u>\$4,525</u>
EOP Adjusted Gross Plant at 12/31/07	<u>\$1,586,271</u>

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8           The pro forma capital additions 2007 adjustment in Company witness Ms. Andrews'  
 9 testimony at Exhibit No. \_\_\_\_ (EMA-2), page 8, for gross plant of \$50,096,000 was computed by  
 10 subtracting the AMA gross plant balance used in the filing of \$1,536,175,000 from the calculated  
 11 EOP adjusted gross plant balance of \$1,586,271,000. Additional details regarding these  
 12 adjustments are provided in Ms. Andrews' workpapers.

13           This same process was used for both accumulated depreciation and deferred income  
 14 taxes, to arrive at EOP adjusted amount at December 31, 2007 for the 2007 vintage plant assets.  
 15 The pro forma capital additions adjustment for accumulated depreciation of \$14,227,000 was  
 16 computed by subtracting the AMA accumulated depreciation balance used in the filing of  
 17 \$526,307,000 from the calculated EOP adjusted accumulated depreciation balance of

1 \$540,534,000. The pro forma capital additions adjustment for DFIT of (\$3,060,000) was  
2 computed by subtracting the AMA DFIT balance used in the filing of (\$139,032,000) from the  
3 calculated EOP adjusted DFIT balance of (\$142,092,000).

4 **Step 2 – Adjust 2007 Vintage Plant to EOP December 31, 2008**  
5 **(Pro Forma Capital Additions 2008 Adjustment – Part A)**

6 The second step was to determine rate base at December 31, 2008 for the 2007 vintage  
7 plant assets. Only accumulated depreciation and deferred taxes are impacted. Depreciation  
8 expense of \$44,094,000 was computed on gross plant at December 31, 2007, adjusted for  
9 projected 2008 retirements, using the average effective depreciation rates by functional plant  
10 group. Depreciation expense of \$281,000 on the 2007 revenue producing capital additions was  
11 removed, for a net increase to accumulated depreciation of \$43,813,000. The deferred tax impact  
12 on the 2007 vintage plant assets, adjusted for the revenue producing capital additions, was  
13 (\$6,534,000). These changes to rate base at December 31, 2008 are added to the 2008 vintage  
14 plant additions (discussed below) to derive the pro formal capital additions adjustment for 2008,  
15 detailed in Ms. Andrews' testimony at Exhibit No. \_\_\_(EMA-2), page 8. Additional details  
16 regarding these adjustments are provided in Ms. Andrews' workpapers.

17 **Step 3 – Add 2008 Vintage Plant to EOP December 31, 2008**  
18 **(Pro Forma Capital Additions 2008 Adjustment – Part B)**

19 The capital additions for 2008 were summarized by functional plant categories and either  
20 directly assigned or allocated to the services and jurisdictions based on standard Company  
21 practices. The amount of revenue producing capital additions in 2008 by service and jurisdiction  
22 was excluded. The additions were further summarized by the month they are expected to be  
23 transferred to plant in service. Using the average effective depreciation rates by functional plant

1 group, AMA depreciation expense was computed in order to include the partial year convention  
2 of depreciation that will actually be recorded in 2008.

3 For the Washington electric service, plant additions were \$59,744,000, depreciation  
4 expense was \$1,109,000 and DFIT was (\$996,000). These 2008 costs are added to the 2007  
5 vintage plant 2008 costs (discussed above) to derive the pro forma capital additions adjustment to  
6 rate base for 2008.

7 A summary of the pro forma capital additions 2008 adjustment follows:

<u>(\$000's)</u>	Part A 2007 Vintage <u>Plant</u>	Part B 2008 Vintage <u>Plant</u>	Total Adjustment to <u>Rate Base</u>
Plant in Service	\$0	\$59,744	\$59,744
Accumulated Depreciation	\$43,813	\$1,109	\$44,922
DFIT	(\$6,534)	(\$996)	(\$7,530)

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9 **Q. What other impact does the 2007 and 2008 capital additions have on this case**  
10 **in addition to the rate base impact?**

11 A. Depreciation expense and property taxes have been computed for the 2007 and  
12 2008 plant vintages for the pro forma rate year.

13 The pro forma capital additions 2007 pre-tax depreciation adjustment of \$532,000 is  
14 computed as follows:

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	<u>(\$000's)</u>
Estimated full-year of depreciation expense in 2009 on the 2007 vintage plant balance at December 31, 2008	\$43,798
Less: Depreciation expense on 2007 revenue producing capital additions	<u>(\$280)</u>
Total Depreciation Expense	\$43,518
2007 test year depreciation expense, adjusted for the depreciation true-up adjustment.	<u>\$42,986</u>
Pro forma Capital Additions 2007 Adjustment – Depreciation Expense	<u>\$532</u>

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3 The pro forma capital additions 2008 pre-tax depreciation and property tax adjustment of  
4 \$3,145,000 is computed as follows:

	<u>(\$000's)</u>
Estimated full-year of depreciation expense in 2009 on the 2008 vintage plant balance at December 31, 2008, net of revenue producing capital additions	\$2,266
Estimated full-year of property taxes in 2009 on the 2008 vintage plant balance at December 31, 2008, net of revenue producing capital additions	<u>\$879</u>
Pro Forma Capital Additions 2008 Adjustment - Depreciation and Property Tax Expense	<u>\$3,145</u>

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#### V. OTHER CONSIDERATIONS

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**Q. Did the Company consider the impact of 2009 capital additions?**

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A. Yes, it did. A similar process was used by the Company to compute the

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adjustment that would be necessary to include the AMA capital additions for 2009, and to adjust

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both the 2007 and 2008 vintage plant to June 30, 2009 (which represents an AMA 2009 net rate

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base balance for all plant through 2009.) Although there is a case to be made that the AMA 2009

1 level of net rate base will be used and useful and providing service to customers (i.e. customers  
2 will be receiving benefit from the investment) and therefore should be reflected in this case, the  
3 Company has opted to only include the net effect of adjusting net rate base to a pro forma  
4 December 31, 2008 level.

5 **Q. What is the rationale behind the removal of capital expenditures for**  
6 **connecting new customers?**

7 A. The pro forma capital expenditures for 2008 that the Company included in this  
8 filing excludes distribution related capital expenditures made that are associated with connecting  
9 new customers to the Company's system. The Company recognizes the fact that new customers  
10 provide incremental revenue that helps offset the revenue requirements of the distribution related  
11 capital additions that the Company incurs to provide service to those customers. These  
12 adjustments completely eliminated the AMA 2007 and EOP 2008 capital activity related to new  
13 customer connections in order to avoid an unintended mismatch of revenues exceeding the cost  
14 to serve customers.

15 **Q. In addition to excluding new customer related capital additions, does the**  
16 **Company address the 2009/2007 revenue difference in other ways?**

17 A. Yes. The production property adjustment (discussed in Company witness Ms.  
18 Knox's testimony) addresses the production and transmission related retail revenue that would be  
19 produced by the change in retail load expected in 2009 compared to the 2007 normalized test  
20 year. All production and transmission rate base and operating expenses, including those from  
21 these capital additions adjustments, are reduced in order to reflect the amount needed to be  
22 recovered from 2007 sales volumes.



1

**VI. CONCLUSION**

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**Q. What is the impact of the pro forma adjustment?**

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**A.** The proposed adjustment will result in a closer matching of revenues to cost of service to customers at the time new rates go into effect at the conclusion of this general rate proceeding. Without the proposed adjustment, the Company would not have the opportunity to earn its allowed rate of return on investment during the rate year.

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

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**A.** Yes, it does.