

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-09 _____

DOCKET NO. UG-09 _____

DIRECT TESTIMONY OF

DAVE B. DEFELICE

REPRESENTING AVISTA CORPORATION

I. INTRODUCTION

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21

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 the Marketing/Operations Departments, as well. In 1999, I accepted the Senior Business Analyst position 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 financial analysis of numerous projects within various departments such as Engineering, Operations, Marketing/Sales and Finance.

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 2009.

Q. Are you sponsoring any exhibits?

1 A. Yes. I am sponsoring Exhibit No. ___(DBD-2) (Capital Expenditures), and Exhibit
2 No. ___(DBD-3) (2009 Capital Additions Detail), which were prepared under my direction.

3

4

II. CAPITAL INVESTMENT RECOVERY

5 **Q. What does the Company's request for rate relief include regarding new**
6 **investment in utility plant to serve customers?**

7 A. In this filing, we are proposing to include in retail rates the costs associated with
8 utility plant that is in-service, and will be used to provide energy service to our customers during
9 the 2010 pro forma rate year. This is consistent with prior ratemaking practice in the State of
10 Washington. The methodology that we use is consistent with the methodology we used in the
11 last general rate cases filed in 2008, Docket Nos. UE-080416 and UG-080417.

12 The utility plant investment that we have included in this filing represents utility plant
13 that will be "used and useful" in providing service to customers during the period that new retail
14 rates from this filing will be in effect. The costs associated with the investment will be "known
15 and measurable" prior to the time that rates go into effect, and finally, including the costs
16 associated with this investment in retail rates provides a proper "matching" of revenues from
17 customers, with the costs associated with providing service to customers (including the cost of
18 utility plant to serve customers).

19 In the WUTC's Third Supplemental Order, in Docket No. U-85-36, dated April 1986, the
20 Commission stated, at page 29, that, "a utility's rate base shown on the books is adjusted to take
21 into account known and measureable changes that will occur during the period rates will be in

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

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

1 base increased by \$80 million (new investment), and decreased by \$80 million (depreciation),
2 and ended up at the same level of \$1.5 billion at the end of the year. In this simplified example,
3 the Company's rate base is \$1.5 billion, both at the beginning of Year 1, and at the end of Year 1.

4 For ratemaking purposes, the \$1.5 billion of rate base is representative of the level of
5 plant investment used to serve customers, both at the beginning of the year and at the end of the
6 year. Over time, if depreciation expense continues to be approximately equal to new plant
7 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.

16 However, if there were known major plant additions that would be in service for the pro
17 forma rate year, such as the major transmission upgrades and the hydroelectric upgrades, then
18 rate base for the pro forma rate year is adjusted for these major investments, so that rate base for
19 the pro forma rate year is 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 from the test year to the pro forma rate year?**

1 A. Yes. Avista's investment in plant in 2009 is well above the annual depreciation
2 expense, and will result in an increase in net plant in service (rate base) that will be used to serve
3 customers in the 2010 pro forma rate year. Much of this new investment in plant for 2009 is
4 spread among many different utility plant categories, as opposed to a few major plant additions.

5 Therefore, the Company's pro forma adjustment for new investment in plant in this filing,
6 as in the previous general rate case filing, involves a more detailed analysis of the net change in
7 rate base from the historical test period to the pro forma rate year. The end result, however, is the
8 same in this case as in prior cases – to reflect in retail rates the level of net plant investment that
9 is used to serve customers during the pro forma rate year, and to have a proper matching of
10 revenues and expenses.

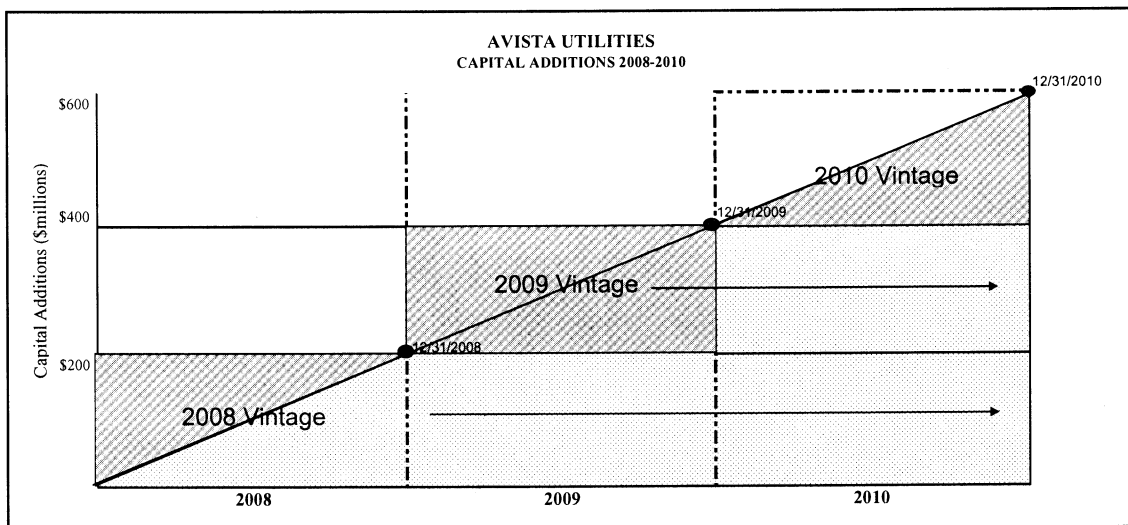
11 **Q. How was rate base for the pro forma rate year developed for this filing?**

12 A. As in prior rate cases, Avista started with rate base for the historical test year,
13 which for this case is the average of monthly averages for the twelve months ended September
14 30, 2008. Adjustments were made to reflect new additions and accumulated depreciation
15 through December 2009, such that the proposed rate base reflects the net plant in service that will
16 be used to serve customers during the 2010 pro forma rate year. Later in my testimony I will
17 provide the details of the adjustments to rate base.

18 Although there is a strong case to be made that the new capital investment in 2010 will be
19 used to serve customers during the 2010 rate year, and should be reflected in this case, the
20 Company has only included new investment through December 2009, with the exception of the
21 2010 Noxon Unit #3 generation plant upgrade addition, as described by Company witness Ms.
22 Andrews.

1 The following chart illustrates the capital additions for 2008 and 2009 that will be
 2 completed and in service through December 31, 2009. Since this case reflects capital additions
 3 through only December 31, 2009, during 2010 (which is the rate year associated with the current
 4 case), new capital investment will be incurred in order to serve customers, but the costs will not
 5 be reflected in the customers' rates.

6 **Illustration 1**



15 **Q. You stated earlier that new utility investment in 2008 and 2009 will be**
 16 **substantially higher than the annual depreciation expense. What is driving the significant**
 17 **investment in new utility plant?**

18 A. As we explained in the recent general rate case, the Company is being required to
 19 add significant new transmission and distribution facilities, including strengthening the “back
 20 bone” of our system, due in part to customer growth in our service area, reliability requirements,
 21 and capacity upgrades. Other issues driving the need for capital investment include an aging
 22 infrastructure, physical degradation, and municipal compliance issues (i.e., street/highway
 23 relocations), etc.

1 In addition, although in recent months the rapid increase in the cost of materials
2 (concrete, copper, steel, etc.) has subsided, they are still orders of magnitude higher than what
3 they were even a few years ago, causing the cost of these new facilities to be significantly higher
4 than in the past. Because the cost of adding new facilities is significantly higher than the original
5 cost of existing facilities, the investment in new facilities will be significantly higher than the
6 annual depreciation expense on the existing facilities.

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

9 A. In September 2007, The Edison Foundation commissioned a study from The
10 Brattle Group titled, “Rising Utility Construction Costs: Sources and Impacts,” which identified
11 cost trends specifically related to the utility industry pertaining to critical materials and
12 equipment, as well as labor support services used for building capital infrastructure. The study
13 identifies the reasons for drastic cost increases in critical raw materials, such as global
14 competition and an aging domestic utility infrastructure as well as the need for additional
15 infrastructure to accommodate growth in the near future.

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

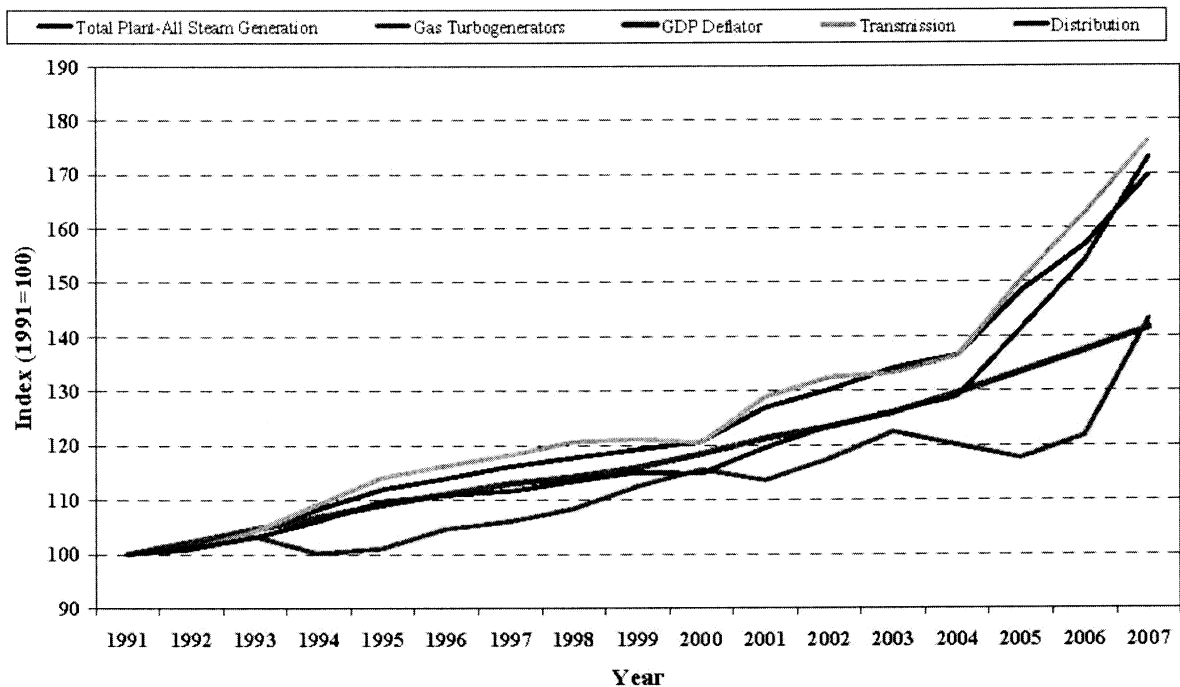
17 A. The study, at page 16, cites four major cost drivers, “(1) material input costs,
18 including the cost of raw physical inputs, such as steel and cement as well as increased costs of
19 components manufactured from these inputs (e.g., transformers, turbines, pumps); (2) shop and
20 fabrication capacity for manufactured components (relative to current demand); (3) the cost of
21 construction field labor, both unskilled and craft labor; and (4) the market for large construction
22 project management, i.e., the queuing and bidding for projects.” The study goes on to compare

1 cost trends for various raw materials, critical equipment and labor services relative to the general
 2 inflation rate (GDP deflator). In addition, a cost trend is summarized by three key utility
 3 functional plant categories, including generation, transmission, and distribution plant. The study
 4 concludes that these inflation impacts have been outside the utility industry’s control and there
 5 are no immediate indications of cost relief in the near future.

6 Illustration 2 below depicts what has occurred to infrastructure costs nationally. From the
 7 chart, it is apparent that starting in 2003, costs of distribution, transmission and generation
 8 infrastructure increased at a far more significant rate than the overall economy, as measured by
 9 the GDP deflator.

10 **Illustration 2**

11 **National Average Utility Infrastructure Cost Indices**



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

15
16
17
18
19
20
21
22

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

3 A. Yes. As we explained in the recent general rate case, a sample was compiled of
4 some materials and equipment that Avista routinely uses in order to support various
5 infrastructure construction efforts that are part of the Company's annual capital requirements of
6 purchases made from 2003 through 2008. The sample of materials was grouped into categories
7 for typical electric and gas distribution capital projects as well as major electric substation
8 projects. The cost summary indicated that the cost of the materials reviewed has risen sharply in
9 most categories from 2003 to 2008. For the distribution group of materials, the average annual
10 escalation impact from 2003 through 2008 is approximately 34%, which is equal to a cumulative
11 increase over the five-year period of 170%. The escalation for the substation group of materials
12 and equipment has been approximately 12% per year for the purchases Avista has made from
13 2003 to 2008, or a cumulative increase of approximately 55%.

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

16 A. Avista's capital requirements have steadily increased from approximately \$100
17 million to over \$200 million over the last several years. Exhibit No. ___(DBD-2) reflects this
18 trend that Avista has experienced and what is planned for in the near future.

19 This chart not only shows the total magnitude of capital expenditures, but also clearly
20 shows that the amount of capital projects is well in excess of revenue-supported capital
21 expenditures to connect new customers, and beyond the level of revenues that is being collected
22 from customers related to existing plant. The difference between the total capital requirements,

1 less the new revenue related capital, and allowed revenues represent a significant discrepancy
2 that is negatively impacting the Company.

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

5 A. There are many factors that will influence capital expenditures going forward.
6 One factor is the cost of raw materials is expected to continue to inflate over time and the fact
7 that there is more demand for capital projects for such things as compliance work with municipal
8 highway and road projects, sewer projects, etc. Also, as critical systems age, there will be more
9 utility plant that will be reaching the end of physical life and, in some cases, plant may be
10 replaced prior to the end of its physical life based on power efficiency improvements that can be
11 recognized.

12

13 **III. DESCRIPTION OF CAPITAL PROJECTS**

14 **Q. For the 2009 capital projects pro formed in this filing, please provide a**
15 **description of the projects.**

16 A. Exhibit No. ___(DBD-3) details the capital projects that will be transferred to
17 plant in service in 2009 and included in this filing. A short description of these projects and their
18 system costs follows:

19 **Generation (\$37.9 million):**

20 Thermal – Kettle Falls Capital Projects - \$1,735,000

21 The primary project at the Kettle Falls Generating Station is the replacement of the steam
22 turbine control system. Other smaller projects include the replacement of wood screw
23 conveyors which feeds wood into the hopper, the replacement of ash screws in the ash
24 removal system, and a continuation of a project to replace the travelling grate in the
25 boiler.

1 Thermal - Colstrip Capital Additions- \$6,200,000

2 The Colstrip capital additions for 2009 include major emission control projects for units 3
3 & 4. Boiler modifications are being made to reduce Mercury emissions on units 3 & 4 to
4 comply with Montana state law. Also Low NOx burners are being installed on unit 4 to
5 comply with Montana DEQ requirements. These NOx modifications were previously
6 installed on unit 3. 2009 is a regular overhaul year with additional major capital work
7 scheduled for unit 4 including cooling tower fill replacement, an LP turbine overhaul, an
8 air pre-heater overhaul, a generator rewind kit, and a variety of additional smaller capital
9 projects to be completed during the outage.

10
11 Thermal – Other Small Projects - \$84,000

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

13
14 Hydro – Cabinet Gorge Capital Project - \$804,000

15 Replace a major component of the Cabinet Unit 1 Turbine (discharge ring).

16
17 Hydro – Little Falls Capital Project - \$525,000

18 Replace the roof at the Little Falls HED.

19
20 Hydro – Long Lake Capital Project - \$597,000

21 Replace the scroll case drain system and installation of dam safety monitoring systems for
22 the forebay, tailrace, and sump.

23
24 Hydro – Noxon Capital Project - \$1,295,000

25 Replacement of the Generator Step Up Transformers (GSU) needed to accommodate the
26 increased power due to the turbine improvements.

27
28 Hydro – Upper Falls Capital Projects - \$1,910,000

29 This project will replace the old plant control and locate all new equipment from the Post
30 Street Substation to the Upper Falls plant. In addition, new equipment will be installed to
31 both modernize the unit, enhance the protection schemes, and to automate the plant from
32 the Generation Control Center.

33
34 Hydro – Noxon Capital Projects - \$17,171,000

35 Projects include finishing the replacement of the Unit 1 stator core and stator windings,
36 installation of a new high efficiency turbine runner, and mechanical overhaul on unit #1.

37
38 Hydro – Clark Fork Implement PME Agreement - \$2,107,000

39 Multiple projects are planned for 2009 as part of the protection, mitigation and
40 enhancement (PME) plan. These projects were agreed to as part of the settlement
41 agreement and FERC license received in 2001.

1 Hydro – Other Small Projects - \$1,142,000

2 There are a number of project improvements planned for 2009. These include beginning
3 a system station sump control and monitoring systems to facilitate anticipated license
4 conditions, and other small projects. Please refer to the workpapers of Mr. DeFelice for
5 detailed listing of projects.

6
7 Other – Northeast Combustion Turbine - \$944,000

8 The control system at the Northeast Combustion Turbine will be upgraded for standby
9 reserve. This project is a continuation from 2008 in that air permit issues prevented this
10 item from being completed.

11
12 Other - Coyote Springs 2 (CS2) Capital Projects - \$575,000

13 In 2009, capital costs include a spare GSU transformer. The previous spare was installed
14 after a transformer failed in the spring of 2008. The capital cost of the new spare will
15 largely be offset by an insurance settlement. Other smaller projects planned for 2009
16 include the purchase of a spare station serviced transformer (reliability), duct burner fuel
17 system upgrades (capacity increase), steam turbine control upgrades (reliability), and
18 several smaller PGE/Avista shared projects (safety/reliability).

19
20 Other - Coyote Springs 2 (CS2) LTSA - \$2,000,000

21 LTSA (Long Term Service Agreement) costs are apportioned between capital and O&M
22 based on predicted gas turbine hardware replacement schedules for the duration of the
23 contract. These costs cover the maintenance agreement with General Electric and cover
24 the gas turbine and auxiliaries.

25
26 Other Small Projects - \$819,000

27 This work is primarily to install an Uninterruptable Power Supply (UPS) system at the
28 Boulder Park power station to protect the engine generators and other station auxiliaries.
29 Currently when there is a loss of station service, most of the control system will shut
30 down after only a few minutes. This system will allow for an orderly control of the
31 equipment during these events. Please refer to the workpapers of Mr. DeFelice for
32 detailed listing of other projects.

33
34 **Electric Transmission (\$15.1 million):**

35 The electric transmission projects that will transfer to plant in service are described in
36 detail in Mr. Kinney's direct testimony at pages 12 through 15. A listing of these projects
37 follows:

38
39 Lolo 230-Rebuild 230 kV Yard - \$2,050,000

40 Spokane-CDA 115 kV Line Relay Upgrades - \$1,250,000

41 Power Circuit Breakers - \$540,000

42 SCADA Replacement - \$740,000

43 Noxon-Pinecreek 230kV: Ready Fiber Optic - \$650,000

- 1 System-Replace/Install Capacitor Banks - \$800,000
- 2 Benawah-Shawnee 230 kV Construction - \$560,000
- 3 Mos23-N Moscow 115 Recond - \$585,000
- 4 Burke 115 kV Protection & Metering - \$525,000
- 5 Beacon Storage Yard Oil Containment - \$527,000
- 6 Other small specific transmission projects - \$936,000
- 7 Transmission Minor Rebuild - \$1,069,000
- 8 System Rebuild Transmission - \$928,000
- 9 Interchange and Borderline Metering Upgrades - \$642,000
- 10 Pine Creek - \$350,000
- 11 Replacement Programs - \$2,234,000
- 12 Other small transmission projects - \$670,000
- 13

14 **Electric Distribution (\$46.7 million):**

15 The electric distribution projects that will transfer to plant in service are described in
16 detail in Mr. Kinney's direct testimony at pages 16 through 18. A listing of these projects
17 follows:

- 18
- 19 Electric Distribution Minor Blanket - \$7,922,000
- 20 Capital Distribution Feeder Repair Work - \$4,100,000
- 21 Wood Pole Management - \$3,700,000
- 22 Electric Underground Replacement - \$3,156,000
- 23 T&D Line Relocation - \$2,297,000
- 24 Failed Electric Plant - \$1,987,000
- 25 Spokane Electric Network Capacity - \$1,615,000
- 26 Sys-Dist Reliability-Improve Fdrs - \$1,100,000
- 27 Open Wire Secondary Elimination - \$1,000,000
- 28 Terre View 115-Sub Construct (WSU) - \$1,962,000
- 29 Otis Orchards Substation - \$980,000
- 30 Othello Transformer Replacement - \$665,000
- 31 Northeast Substation - \$225,000
- 32 Valley Mall Transfer Capacity - \$200,000
- 33 Distribution Feeder Reconductor - WA - \$1,050,000
- 34

35 The electric distribution projects specific to the Idaho jurisdiction that are not described
36 in detail in Mr. Kinney's direct testimony follows:

- 37
- 38 Plummer-Increase Capacity/Rebuild - \$1,525,000
- 39 Idaho Road Sub/Rathdrum - \$4,896,000
- 40 System Wood Substation Rebuilds - \$3,600,000
- 41 Distribution Feeder Reconductor - ID - \$727,000
- 42 Network Transformers & Network Protectors - \$800,000
- 43 ID AMR - \$600,000

1 Additional distribution projects follows:
2

3 Power Transformer-Distribution - \$680,000
4 Installation of distribution power transformers as required.
5

6 WSDOT Highway Franchise Consolidation - \$800,000
7 In order to operate our electric system within State highway rights of way, the Company
8 needs to establish new Franchises. Existing franchises have expired and Avista must seek
9 new agreements with the State or risk penalties or non-approval by the State.
10

11 Other small distribution projects - \$1,083,000
12 Please refer to the workpapers of Mr. DeFelice for detailed listing of projects.
13

14 **General (\$14.8 million):**

15 Security Initiative - \$508,000
16 Various security measures including cameras and access controls for the office and
17 branch facilities.
18

19 Next Generation Radio System - \$1,500,000
20 Antiquated Radio system technology necessary to operate the business is being refreshed
21 to comply with changing FCC regulation.
22

23 Structures and Improvements - \$3,360,000
24 This is a group of capital maintenance projects that Facilities Management coordinates at
25 the Spokane Central Operating Facilities and Avista branch facilities - offices and service
26 centers. For 2009, some of the projects include: roof replacements, land acquisition for
27 facility expansion, HVAC system replacement at some branch offices, energy efficiency
28 projects, security projects, emergency generators, asphalt overlays and replacement, and
29 office furniture additions and replacement.
30

31 Stores Equipment - \$598,000
32 Equipment utilized in warehouses and/or investment recovery operations throughout the
33 service territory. This includes equipment such as forklifts, man lifts, shelving,
34 cutting/binding machines, etc.
35

36 Tools, Lab & Shop Equipment - \$1,285,000
37 Expenditures in this category include all large tools and instruments used throughout the
38 company for gas and/or electric construction and maintenance work, distribution,
39 transmission, or generation operations, telecommunications, and some fleet equipment
40 (hoists, winch, etc) not permanently attached to the vehicle.
41

42 Productivity Initiative - \$1,147,000
43 Various initiatives that increase productivity benefits based on future avoided costs.

1 HVAC Renovation Project - \$4,159,000

2 The heating, ventilating, and air conditioning systems throughout the Spokane Central
3 Operating Facilities are approximately fifty years old and are in need of replacement. The
4 project involves replacing central air handling units and distribution systems in three
5 buildings - the Spokane Service Center, the general office building, and the cafeteria
6 auditorium building. The building envelope of the general office building will also be
7 renovated with high efficiency glass and insulation. New controls will also be installed
8 which will enable energy conservation.
9

10 Spokane Central Operating Facility Crescent Realignment - \$1,500,000

11 Vacate a city street that bisects the Spokane campus to eliminate public traffic across
12 parking lots and operating facilities, improving facility safety and security.
13

14 Other Small Projects - \$750,000

15 These projects include communication and security initiatives, radio equipment,
16 telephone systems, office and other general facility upgrades.
17

18 **Transportation (\$9.6 million):**

19 Transportation Equipment - \$9,635,000

20 Expenditures are for the scheduled replacement of trucks, off-road construction
21 equipment and trailers that meet the company's guidelines for replacement including age,
22 mileage, hours of use and overall condition. In addition, includes additions to the fleet
23 for new positions or crews working to support the maintenance and construction of our
24 electric and gas operations.
25

26 **Technology (\$11.5 million):**

27
28 Information Technology Refresh Blanket - \$4,410,000

29 A program to replace obsolete technology according to Avista's refresh cycles that are
30 generally driven by hardware/software manufacturer and industry trends to maintain
31 business operations.
32

33 Information Technology Expansion Blanket - \$981,000

34 A program to deliver technology associated with expansion of existing solutions.
35

36 AFM Product Development Program - \$1,115,000

37 Deliver enhancements to the electric and natural gas Facility Management technology
38 system.
39

40 Nucleus Product Development Program - \$556,000

41 Deliver enhancements to the Nucleus energy resource management technology system.
42
43

1 Web Product Development Program - \$627,000
2 A program to deliver enhancements to the Customer based Web technology system.

3
4 Mobile Dispatch Upgrade - \$800,000
5 Upgrade the Mobile Dispatch application system from V7.7 to V8.

6
7 Mobile Dispatch 2 - \$1,372,000
8 Implement Mobile Dispatch application for electric service and meter shop processes.

9
10 Other Small Technology Projects - \$1,655,000
11 These projects include various small technology projects including, technology to provide
12 for field office use of Learning Management System, a Meter Data Management solution,
13 a work management technology system to the Generation Production and Substation
14 Support organization, and replacement of existing Real Estate permits application which
15 is end-of-life with Valuation Contract Management System.

16
17 **Jackson Prairie Storage (\$0.3 million):**

18 Jackson Prairie Storage Project - \$306,000
19 This completes the capital project that Avista and its partners started for an expansion
20 project at Jackson Prairie for deliverability that was in service in the fall of 2008.

21
22 **Natural Gas Distribution (\$22.2 million):**

23 Replace Deteriorated Pipe - \$1,000,000
24 This annual project will replace sections of existing gas piping that are suspect for failure
25 or have deteriorated within the gas system. This project will address the replacement of
26 sections of gas main that no longer operate reliably and/or safely. Sections of the gas
27 system require replacement due to many factors including material failures,
28 environmental impact, increase leak frequency, or coating problems. This project will
29 identify and replace sections of main to improve public safety and system reliability.

30
31 Gas Replacement Street and Highways - \$1,200,000
32 This annual project will replace sections of existing gas piping that require replacement
33 due to relocation or improvement of streets or highways in areas where gas piping is
34 installed. Avista installs many of its facilities in public right-of-way under established
35 franchise agreements. Avista is required under the franchise agreements, in most cases,
36 to relocate its facilities when they are in conflict with road or highway improvements.

37
38 Gas Non-Revenue Blanket - \$2,500,000
39 This annual project will replace sections of existing gas piping that require replacement to
40 improve the operation of the gas system but are not directly linked to new revenue. The
41 project includes relocation of main related to overbuilds, improvement in equipment
42 and/or technology to improve system operation and/or maintenance, replacement of

1 obsolete facilities, replacement of main to improve cathodic performance, and projects to
2 improve public safety and/or improve system reliability.

3
4 East Medford Reinforcement Project - \$4,451,000

5 This Oregon gas distribution project is not included in this filing.

6
7 Replace Gas ERT's w/ Batteries >10yrs - \$2,700,000

8 This project will replace Gas ERT's that are greater than 10 years old, which is their
9 economic life. ERT battery life is finite and although that life is greater than 10 years, it
10 is cost effective to replace the ERTS's prior to them failing in the field. This project will
11 ensure continued reliable metering operation by ensuring the ERT technology operates
12 properly. Approximately 12,000 ERT's will be replaced in Washington and 21,000 in
13 Oregon.

14
15 Kettle Falls Relocation - \$5,198,000

16 This multi-phased project installed a new gate station in 2008 on the west side of
17 Spokane to serve the existing high pressure (HP) distribution and future replacement pipe
18 that is part of the Kettle Falls HP main. The existing Kettle Falls Gate Station and HP
19 Kettle Falls main have experienced significant encroachment due to growth in the north
20 Spokane area. Sections of the main will be relocated to ensure continued safe reliable
21 operation of the pipe system. The new gate station will improve the safety and reliability
22 of operating the high pressure main and improve the gate station delivery capacity into
23 the Kettle Falls HP system. Future phases of this project will re-route sections of the
24 existing HP Kettle Falls main to improve system capacity and public safety.

25
26 US2 North Spokane HP Reinforcement (Kaiser Property) - \$1,199,000

27 This project will reinforce the north central portion of Spokane near US2 by extending
28 the existing HP piping system and installing a new regulator station to reinforce the
29 existing distribution system. The north Spokane distribution system experiences low
30 pressures during high system demand in the winter. The area fails the gas planning model
31 for a design day. Growth in the area has reduced Avista's ability to reliably serve gas
32 from its existing distribution system during a design day. This project will improve
33 delivery pressure and reliability.

34 Other Small Projects - \$3,901,000

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

36
37
38 **IV. ADJUSTMENT METHODOLOGY**

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

1 A. The Company used the same general approach that was used in the previous
2 general rate case. The 2008 and 2009 capital investments were tracked separately to simplify the
3 computation and to make it easier to follow. For each vintage, capital additions, depreciation and
4 DFIT were computed to derive rate base at December 31, 2008 and December 31, 2009 and to
5 compute operating expenses in the pro forma rate year.

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

7 A. The Company maintains results of operations reports that are prepared for each
8 service and jurisdiction on an average of monthly averages (AMA) basis and on an end of period
9 (EOP) basis that were used in this computation. Actual 2008 plant additions were used from the
10 plant accounting system to determine the month of addition and the amount of additions that
11 were for revenue producing projects. Capital additions for 2009 were based on specific capital
12 requirements for 2009. Capital additions for 2009 that were for revenue producing projects were
13 separated out and excluded. Exhibit No. ____ (DBD-3) details the capital projects that will be
14 transferred to plant in service in 2009 and included in this filing. The Company did not include
15 any 2010 capital additions in this filing with the exception of the Noxon Unit No. 3 upgrade
16 project, as described by Ms. Andrews.

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

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

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

1 A. There are three steps to determine the rate base adjustment at December 31, 2008
2 and December 31, 2009, as follows:

3 **Step 1 – Adjust AMA September 30, 2008 to EOP December 31, 2008 (Pro Forma Capital**
4 **Additions 2008 Adjustment)**

5
6 The first step was to determine an adjusted December 31, 2008 EOP net plant balance
7 that includes only the AMA revenue producing capital through September 30, 2008. The
8 Company's December 31, 2007 EOP results of operations reports was the starting point.

9 The gross plant at December 31, 2007 at EOP includes all revenue producing capital
10 added in 2007. Since the test period begins with October 1, 2007, it is necessary to remove the
11 average of monthly averages of those additions for the last three months of 2007, since 2007 test
12 year includes AMA customers and revenue (this is explained further below). The 2008 capital
13 additions, excluding all revenue producing capital, were added. In addition, the average of
14 monthly averages of the revenue producing capital for the nine months ended September 30,
15 2008 was also added.

16 The EOP gross plant at December 31, 2008 was computed as follows:

	<u>(\$000's)</u>
EOP Gross Plant at 12/31/07 per Results of Operations	\$1,591,814
Add: 2008 Capital Additions (Excluding Revenue Producing)	\$72,032
Less: October – December 2007 Revenue Producing Capital Additions	(\$1,550)
Add: January – September 2008 AMA Revenue Producing Capital Additions	<u>\$5,857</u>
EOP Adjusted Gross Plant at 12/31/08	<u>\$1,668,153</u>

17

1 The pro forma capital additions 2008 adjustment in Ms. Andrews' testimony at Exhibit
2 No. ___(EMA-2), page 8, for gross plant of \$63,833,000 was computed by subtracting the AMA
3 gross plant balance used in the filing of \$1,604,320,000 from the calculated EOP adjusted gross
4 plant balance of \$1,668,153,000. Additional details regarding these adjustments are provided in
5 Ms. Andrews' workpapers.

6 This same process was used for both accumulated depreciation and deferred income
7 taxes, to arrive at EOP adjusted amount at December 31, 2008 for the 2008 vintage plant assets.
8 The pro forma capital additions adjustment for accumulated depreciation of \$35,387,000 was
9 computed by subtracting the AMA accumulated depreciation balance used in the filing of
10 \$550,492,000 from the calculated EOP adjusted accumulated depreciation balance of
11 \$585,879,000. The pro forma capital additions adjustment for DFIT of (\$7,001,000) was
12 computed by subtracting the AMA DFIT balance used in the filing of (\$142,713,000) from the
13 calculated EOP adjusted DFIT balance of (\$149,714,000).

14 **Step 2 – Adjust 2008 Vintage Plant to EOP December 31, 2009**
15 **(Pro Forma Capital Additions 2009 Adjustment – Part A)**

16 The second step was to determine rate base at December 31, 2009 for the 2008 vintage
17 plant assets. Only accumulated depreciation and deferred taxes are impacted. Depreciation
18 expense of \$46,351,000 was computed on gross plant at December 31, 2008, adjusted for
19 projected 2009 retirements, using the average effective depreciation rates by functional plant
20 group. Depreciation expense on the 2008 revenue producing capital additions has been excluded.
21 The deferred tax impact on the 2008 vintage plant assets, was (\$6,306,000). These changes to
22 rate base at December 31, 2009 are added to the 2009 vintage plant additions (discussed below)
23 to derive the pro forma capital additions adjustment for 2009, detailed in Ms. Andrews'

1 testimony at Exhibit No. ____ (EMA-2), page 8. Additional details regarding these adjustments
2 are provided in Ms. Andrews' workpapers.

3 **Step 3 – Add 2009 Vintage Plant to EOP December 31, 2009**
4 **(Pro Forma Capital Additions 2009 Adjustment – Part B)**

5 The capital additions for 2009 were summarized by functional plant categories and either
6 directly assigned or allocated to the services and jurisdictions based on standard Company
7 practices. The amount of revenue producing capital additions in 2009 by service and jurisdiction
8 was excluded. The additions were further summarized by the month they are expected to be
9 transferred to plant in service. Using the average effective depreciation rates by functional plant
10 group, AMA depreciation expense was computed in order to include the partial year convention
11 of depreciation that will actually be recorded in 2009.

12 For the Washington electric service, plant additions were \$78,450,000, depreciation
13 expense was \$1,516,000 and DFIT was (\$1,341,000). These 2009 costs are added to the 2008
14 vintage plant 2009 costs (discussed above) to derive the pro forma capital additions adjustment to
15 rate base for 2009.

16 A summary of the pro forma capital additions 2009 adjustment follows:

<u>(\$000's)</u>	Part A 2008 Vintage <u>Plant</u>	Part B 2009 Vintage <u>Plant</u>	Total Adjustment to <u>Rate Base</u>
Plant in Service	\$0	\$78,450	\$78,450
Accumulated Depreciation	\$46,351	\$1,516	\$47,867
DFIT	(\$6,306)	(\$1,341)	(\$7,647)

17
18 **Q. What other impact does the 2008 and 2009 capital additions have on this case**
19 **in addition to the rate base impact?**

1 A. Depreciation expense and property taxes have been computed for the 2008 and
2 2009 plant vintages for the pro forma rate year.

3 The pro forma capital additions 2007 pre-tax depreciation adjustment of \$728,000 is
4 computed as follows:

	<u>(\$000's)</u>
Estimated full-year of depreciation expense on the 2008 vintage plant balance at December 31, 2009	\$46,150
12 Months Ended September 30, 2008 test year depreciation expense, adjusted for the depreciation true-up adjustment.	<u>\$45,422</u>
Pro forma Capital Additions 2007 Adjustment – Depreciation Expense	<u>\$728</u>

6
7 The pro forma capital additions 2009 pre-tax depreciation and property tax adjustment of
8 \$4,471,000 is computed as follows:

	<u>(\$000's)</u>
Estimated full-year of depreciation expense on the 2009 vintage plant balance at December 31, 2009	\$3,316
Estimated full-year of property taxes on the 2009 vintage plant balance at December 31, 2009	<u>\$1,155</u>
Pro Forma Capital Additions 2009 Adjustment - Depreciation and Property Tax Expense	<u>\$4,471</u>

V. OTHER CONSIDERATIONS

11
12 **Q. What is the rationale behind the removal of capital expenditures for**
13 **connecting new customers?**

14 A. The pro forma capital expenditures for 2009 that the Company included in this
15 filing excludes distribution related capital expenditures made that are associated with connecting

1 new customers to the Company's system. The Company recognizes the fact that new customers
2 provide incremental revenue that helps offset the revenue requirements of the distribution related
3 capital additions that the Company incurs to provide service to those customers. These
4 adjustments completely eliminated the AMA 2008 and EOP 2009 capital activity related to new
5 customer connections in order to avoid an unintended mismatch of revenues exceeding the cost
6 to serve customers.

7 **Q. In addition to excluding new customer related capital additions, does the**
8 **Company address the 2009/2008 revenue difference in other ways?**

9 A. Yes. The production property adjustment (discussed in Ms. Andrews' testimony)
10 addresses the production and transmission related retail revenue that would be produced by the
11 change in retail load expected in 2009/2010 compared to the 2008 normalized test year. All pro
12 forma production and transmission rate base and related expenses from these capital additions
13 adjustments, are reduced in order to reflect the amount needed to be recovered from 2008 sales
14 volumes.

15 **VI. CONCLUSION**

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

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

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

22 A. Yes, it does.