

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-09 \_\_\_\_\_

DOCKET NO. UG-09 \_\_\_\_\_

DIRECT TESTIMONY OF

BRUCE W. FOLSOM

REPRESENTING AVISTA CORPORATION

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**I. INTRODUCTION**

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

A. My name is Bruce Folsom. I am employed by Avista as the Senior Manager of Demand Side Management (DSM). My business address is East 1411 Mission Avenue, Spokane, Washington.

**Q. Would you please describe your education and business experience?**

A. I graduated from the University of Washington in 1979 with Bachelor of Arts and Bachelor of Science degrees. I received a Masters in Business Administration degree from Seattle University in 1984.

I joined the Company in 1993 in the State and Federal Regulation Department. My duties included work associated with tariff revisions and regulatory aspects of integrated resource planning, demand side management, competitive bidding, and emerging issues. In 2002, I was named the Manager of Regulatory Compliance which added responsibilities such as implementing the Federal Energy Regulatory Commission's major changes to its Standards of Conduct rule. I began my current position in September of 2006. Prior to joining Avista, I was employed by the Washington Utilities and Transportation Commission beginning in 1984, and then served as the Electric Program Manager from 1990 to February, 1993. From 1979 to 1983, I was the Pacific Northwest Regional Director of the Environmental Careers Organization, a national, private, not-for-profit organization.

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

1           A.     I provide an overview of the Company’s DSM programs and recent  
2 results. I also provide documentation showing that Avista’s expenditures for electric  
3 and natural gas energy efficiency programs have been prudently incurred.

4           **Q.     Are you sponsoring any exhibits to be introduced in this proceeding?**

5           A.     Yes. I am sponsoring Exhibit No.\_\_(BWF-2) prepared under my  
6 direction. Exhibit No.\_\_(BWF-2) documents the results and cost-effectiveness of  
7 Avista’s DSM programs.

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9           **II.     DSM PROGRAMS AND CURRENT PERIOD RESULTS**

10          **Q.     Would you please provide a brief overview of Avista’s DSM**  
11 **programs?**

12          A.     Yes. Avista has historically had a significant and consistent commitment  
13 to energy efficiency. In the mid-1990s, while the electric industry was pulling back  
14 from offering energy efficiency services, Avista pioneered the Energy Efficiency Tariff  
15 Rider. Now in its fourteenth year, the tariff rider was the country’s first distribution  
16 charge to fund DSM and is now replicated in many other states. Schedule 91 currently  
17 has a commodity rate of 1.58% for electric service and the Schedule 191 rate is 1.46%  
18 for natural gas.

19          The Company’s approach to energy efficiency is based on two key principles.  
20 The first is to pursue all cost-effective kilowatt hours and therms by offering financial  
21 incentives for energy saving measures with a simple financial payback of over one year.  
22 The second key principle is to use the most effective “mechanism” to deliver energy

1 efficiency services to customers. These mechanisms are varied and include 1)  
2 prescriptive programs (or “standard offers” such as high efficiency appliance rebates), 2)  
3 site-specific or “customized” analyses at customer premises, 3) “market  
4 transformational”, or regional, efforts with other utilities, 4) low-income weatherization  
5 services through local Community Action Agencies, and 5) low-cost/no-cost advice  
6 through a multi-channel communication effort. These will be described later in my  
7 testimony.

8           The Company’s offerings include over 300 measures that are packaged into over  
9 30 programs for customer convenience. As part of Avista’s planning efforts, over 3000  
10 measures are considered and then examined for cost-effectiveness. The Company’s  
11 comprehensive energy efficiency outreach, the “Every Little Bit” communications  
12 campaign, received several national honors in 2008. This comprehensive  
13 communication approach helps customers reorient their thinking about energy  
14 efficiency.

15           The Company’s programs are delivered across a full customer spectrum.  
16 Virtually all customers have had the opportunity to participate and a great many have  
17 directly benefited from the program offerings. As will be described later in my  
18 testimony, all customers have indirectly benefited through enhanced cost-efficiencies as  
19 a result of this portfolio approach.

20           Avista offers the following residential programs:

1 **Illustration No. 1:**

2 **RESIDENTIAL**

- 3 High Efficiency Furnace/Boiler
- 4 High Efficiency Heat Pump
- 5 High Efficiency Variable Speed Motor
- 6 High Efficiency Tank Water Heater
- 7 High Efficiency Tankless Water Heater
- 8 High Efficiency Ground Source Heat Pump
- 9 High Efficiency Replacement Air Conditioning
- 10 Space Heat Conversion (Direct Use of Natural Gas)
- 11 Water Heat Conversion (Direct Use of Natural Gas)
- 12 Heat Pump Conversion (Direct Use of Natural Gas)
- 13 Ceiling, Attic, Floor, Wall Insulation
- 14 High Efficiency Windows
- 15 Fireplace Damper
- 16 Multifamily (UCONS)
- 17 BuiltGreen™ (New Construction Energy Star®)
- 18 Something for Everyone
  - 19 Energy Star® Appliances
  - 20 CFL (and CFL Recycling) Promotions
  - 21 Warm Homes, Warm Hearts
  - 22 "Second" Refrigerator Recycling Program
  - 23 "Geographic Saturation"
  - 24 Community Events and Workshops
  - 25 Low-cost/no-cost information
  - 26 Direct Use of Nat Gas: Multi-Family Housing Conversion
  - 27 Regional Market Transformation (NEEA)
  - 28 On-line Home Audits

29 **LIMITED INCOME RESIDENTIAL**

- 30 Limited Income Weatherization with Community Action Programs
- 31 *(Note: All residential programs above are also available)*

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35 The residential programs shown above are standard offerings or what we call

36 “prescriptive programs.” These involve a menu of rebates on selected measures (e.g.,

37 lighting, weatherization, appliances, etc.).

1 For commercial customers, in addition to prescriptive programs, Avista offers  
 2 “site-specific” programs. Site-specific programs are customized to the customer’s  
 3 premises. The site-specific offering provides incentives on any cost-effective  
 4 commercial and industrial energy efficiency measure. This is implemented through site  
 5 analyses, customized diagnoses, and incentives determined for savings generated  
 6 specific to the customer’s premises or process. The following illustration shows the  
 7 programs available to Avista’s commercial and industrial customers.

8 **Illustration 2:**

9 **NON-RESIDENTIAL (COMMERCIAL & INDUSTRIAL)**

10 Site-Specific

11 *(Note: Incentives offered for any measure with > 1 year payback)*

12 Air Care Plus (Rooftop HVAC Maintenance)

13 EnergySmart Commercial Refrigeration

14 LEED Certification Incentives

15 Power Management for PC Networks

16 Premium Efficiency Motors

17 Food Service

18 LED Traffic Signals

19 Refrigerated Warehouse

20 Commercial HVAC Variable Frequency Drives

21 Retro-Commissioning

22 Clothes Washers

23 Side Steam and Demand Filtration

24 Vending Machine Controllers

25 Lighting and Controls

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28 These programs are supported by twenty-one full-time equivalents (FTE) spread  
 29 over 34 staff. (This does not include Company support from the Contact Center,  
 30 Corporate Communications, Accounting and other direct and indirect support.) The  
 31 2008 DSM budget (system) was over \$18 million, representing an increase of \$6 million

1 over 2007. Of the Company's revenues collected under Schedules 91 (electric tariff  
2 rider) and 191 (natural gas tariff rider) in 2008, 70.9% was paid out to customers in  
3 direct incentives pursuant to the cost-effectiveness tests described below. This does not  
4 include additional benefits such as technical analyses provided to customers by the  
5 Company's DSM engineering staff.

6 **Q. What were the Company's energy efficiency targets and results for**  
7 **2008?**

8 A. The Company's energy efficiency targets are established in the process of  
9 developing the Electric and Natural Gas Integrated Resource Plans (IRPs). These  
10 targets are revisited and adjusted to take into account new programs as part of our  
11 ongoing business planning process.

12 The results of Avista's energy efficiency programs continue to exceed the targets  
13 established as part of the IRP process. The current estimate of local energy efficiency  
14 savings for January through November 2008 is 62.1 million kWhs (approximately 7  
15 amW) or 117% of the Company's annual target. These preliminary results will be  
16 revised based upon ongoing verification of the data by the Company.

17 These are preliminary, unaudited results that will be updated. Over 137 aMW  
18 of cumulative savings have been achieved through Avista's energy efficiency efforts in  
19 the past thirty years; over 110 aMW of DSM is currently in place on the Company's  
20 system. By comparison Avista's 2008 total electric retail load was 1098 aMW. The  
21 2008 natural gas savings targets for Washington and Idaho is 1.425 million therms.

1 Over 1.75 million therms have been saved through November of 2008, which is 123%  
2 of the 2008 annual target.

3 **Q. Do the 2008 results reflect Avista's participation in regional energy**  
4 **efficiency efforts?**

5 A. No. In addition to Avista's prescriptive and site-specific programs, the  
6 Company funds and participates in the activities of the Northwest Energy Efficiency  
7 Alliance (NEEA). NEEA focuses on using a regional approach to obtain electric  
8 efficiency through the transformation of markets for efficiency measures and services.  
9 An example of NEEA-sponsored programs that benefit Avista customers are efforts to  
10 decrease the cost of compact fluorescent light bulbs (CFLs) and high-efficiency  
11 appliances by working through manufacturers. For some measures, a large-scale, cross-  
12 utility approach is the most cost-effective means to achieve energy efficiency savings.  
13 This approach seems particularly effective for markets composed of large numbers of  
14 smaller usage consumers, such as the residential and small commercial markets.

15 The results from NEEA programs for 2008 have not been reported as of the date  
16 of the submittal of this testimony. Historically, however, Avista has received  
17 approximately 1.5 aMW of savings in its service territory from NEEA programs.

18 **Q. How do you increase customer participation in your DSM**  
19 **programs?**

20 A. Our focus on the residential side is to increase customer understanding of  
21 our programs and how our programs can help customers reduce their bills. We do this  
22 through bill inserts and communications to drive customers to our website with a "call-



1 to-action” to use our financial rebates. The following depicts a recent enhancement to  
2 our website, [www.EveryLitteBit.com](http://www.EveryLitteBit.com). This is an interactive tool to engage customers  
3 and allows customers to quickly view programs that they can use, by “clicking on”  
4 particular features of the dwelling:

5 **Illustration No. 3:**



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1           **Q.     What is the status of the tariff rider balance?**

2           A.     The tariff rider balance - both Washington and Idaho, electric and natural  
3 gas - is a negative \$9,982,000 (i.e. dollars expended exceed dollars collected through the  
4 Tariff Rider). By jurisdiction and fuel, the negative rider balances are, as of November  
5 2008: (\$5,499,000) - Washington electric; and (\$2,476,000) - Washington natural gas;  
6 (\$1,149,000) - Idaho electric; (\$858,000) – Idaho natural gas.

7           **Q. What are the causes of these increasing negative balances?**

8           A.     The Company has leveraged the high level of public interest in ‘green’  
9 technologies to enhance the acquisition of cost-effective energy-efficiency measures.  
10 These leveraging opportunities and the customer response to the Company’s efficiency  
11 programs have exceeded our expectations.

12          **Q.     What is the Company’s plan to address these balances?**

13          A.     The largest negative balances, or over 78%, are in Washington. On  
14 December 31, 2008, we filed tariff rider revisions in Washington to reduce the  
15 Washington tariff rider balances to zero. We will submit revised tariff riders in Idaho to  
16 do the same in February 2009.

17          **Q.     What plans does the Company have in the future to address these**  
18 **tariff rider balances?**

19          A.     Schedules 91 and 191 should be the equivalent of a “true-up mechanism”  
20 that is revised annually to reflect expenditures to fund energy efficiency programs. In  
21 the past few years, customer demand for energy efficiency programs has been greater  
22 than available funding, which has resulted in the need for increased energy efficiency

1 funding. Avista remains committed to expeditiously responding to customer requests  
2 for funding where the cost-effectiveness tests are satisfied.

3 **Q. What kind of external oversight does the Company have regarding**  
4 **DSM?**

5 A. The Company established a non-binding oversight group, the External  
6 Energy-Efficiency (Triple-E) board in 1999 to provide for improved opportunities for  
7 communication, input and oversight of Avista's DSM portfolios. Avista currently  
8 facilitates meetings of the board twice per year, provides a full analysis of the results of  
9 DSM operations on an annual or more frequent basis, discloses (with appropriate  
10 concern for customer confidentiality) large projects and projects benefiting Avista  
11 facilities, and provides the Triple-E with a quarterly update of DSM activities.  
12 Additionally, the Triple-E board can initiate additional meetings of the board at their  
13 own request. Board membership has included representatives from regulatory,  
14 governmental, environmental, nationally recognized energy-efficiency experts, customer  
15 advocates for limited income and industrial segments as well as end-use customer  
16 participants.

17 **Q. Does the Company propose to increase its low-income**  
18 **weatherization funding as part of this filing?**

19 A. Yes. The Company proposes to increase its low-income weatherization  
20 funding for electric and natural gas service by a percentage amount equal to the  
21 percentage rate increase granted in this case for residential customers (net of the ERM

1 surcharge reduction for electric service). The additional funding would be provided  
2 through the DSM tariff riders, Schedules 91 and 191.

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4 **III. PRUDENCE OF INCURRED DSM COSTS**

5 **Q. Would you please explain the Company's request for a finding of**  
6 **prudence in this case?**

7 A. Yes. When the Commission approved the Company's energy efficiency  
8 programs in 1995 (in Docket Nos. UE-941377 and UG-941379), Avista committed to  
9 demonstrating the prudence of program expenditures in future general rate cases. In the  
10 Company's last general electric and natural gas rate cases (Docket Nos. UE-080416 and  
11 UG-080417), the Commission issued a finding in Order No. 8 that electric and natural  
12 gas expenditures through December 31, 2007 were prudently incurred. At this time, the  
13 Company requests that the Commission issue a finding that electric and natural gas  
14 energy efficiency expenditures from January 1, 2008 through November 30, 2008 were  
15 prudently incurred.

16 **Q. Would you please summarize the Company's energy efficiency-**  
17 **related savings for this time period?**

18 A. Yes. The Company's tariff riders under Schedules 91 (electric) and 191  
19 (natural gas) are system benefit charges to fund energy efficiency.

20 As shown in Exhibit No. \_\_\_(BWF-2), from January 1, 2008 through November  
21 30, 2008, 62.1 million kWh and 1.75 million therms of energy savings were obtained.

1 Page 1 of Exhibit No. \_\_\_(BWF-2) details the energy savings by regular and low-income  
2 portfolios for both electric and natural gas DSM programs.

3 **Q. Has there been ongoing review of the Company's programs?**

4 A. Yes, as previously discussed, the Company has regularly convened a  
5 stakeholders forum known as the External Energy Efficiency Board. These meetings  
6 have included customer representatives, Commission staff members, and individuals  
7 from the environmental communities. These stakeholder meetings review the  
8 Company's program offerings as well as the underlying cost-effectiveness tests and  
9 results.

10 **Q. Have the Company's DSM programs been cost-effective?**

11 A. Yes. The electric programs have been cost-effective from both a Total  
12 Resource Cost (TRC) and Utility Cost Test (UCT) perspective. Page 2 of Exhibit No.  
13 \_\_\_(BWF-2) shows that the TRC benefit-to-cost ratio of 1.94 for the overall electric  
14 DSM program portfolio is cost-effective, with a net TRC benefit to customers of over  
15 \$23 million. The UCT benefit-to-cost ratio is cost-effective with a net UCT benefit of  
16 over \$32 million. The levelized TRC and UCT cost is 4.8 cents and 2.3 cents per kWh,  
17 respectively. The overall portfolio of measures has a weighted average measure life of  
18 13 years. The comparable levelized electric avoided cost for a measure of this life is 8.7  
19 cents per kWh. The electric DSM programs were also cost-effective under the  
20 Participant Test.

1           Page 3 of Exhibit No. \_\_\_(BWF-2) illustrates the natural gas DSM program  
2 portfolio cost-effectiveness under both the TRC and UCT tests. But for one customer,  
3 the Company's TRC would be 1.16, with any number above 1.00 being cost effective.  
4 This customer, based on their own initiatives, spent \$4.2 million on energy efficiency  
5 projects of which Avista contributed \$247,000. Avista's contribution of \$247,000  
6 divided by the 104,000 therms of savings from these projects results in a \$2.36 per first  
7 year therm utility incentive investment, in comparison to an avoided cost value of  
8 approximately \$10 for a therm of the measure life associated with those projects. Apart  
9 from this customer, the TRC and UCT benefit cost ratios are 1.16 and 2.64 respectively.  
10 Therefore, except for the one customer, the natural gas DSM portfolio passes both the  
11 TRC and UCT tests.

12           **Q.     Please summarize the Company's conclusions.**

13           A.     The Company's expenditure of tariff rider revenue has been reasonable  
14 and prudent. A portfolio of programs covering all customer classes has been offered  
15 with a total savings of over 62.1 million annual kWhs and 1.7 million therms during  
16 January 1, 2008 through November 30, 2008. A 13-year levelized utility cost per saved  
17 kilowatt hour of 2.3 cents per kWh has been achieved. The levelized avoided costs  
18 during this similar period has been 8.7 cents per kWh. The 15 year levelized utility cost  
19 per saved therm has averaged 37.1 cents per therm.

20           The Tariff Rider and programs have been very successful. Participating  
21 customers have benefited through lower bills. Non-participating customers have  
22 benefited from the Company having acquired lower cost resources as well as

1 maintaining the energy efficiency message and infrastructure for the benefit of our  
2 service territory.

3 In closing, Avista respectfully requests that the Commission issue a finding of  
4 prudence for energy efficiency expenditures from January 1, 2008 through November  
5 30, 2008.

6 **Q. Does that complete your pre-filed direct testimony?**

7 A. Yes, it does.

8