

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

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

DIRECT TESTIMONY OF

JONATHAN POWELL

REPRESENTING AVISTA CORPORATION

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

2           A.    My name is Jonathan Powell and I am employed as a manager within the demand-  
3 side management (DSM) department of Avista Corporation.

4           **Q.    Would you describe your educational background and professional**  
5 **experience?**

6           A.    I have a Bachelor of Arts degree in economics from the University of California,  
7 San Diego and a Master of Arts degree in economics from San Diego State University. I have  
8 also completed coursework towards a Ph.D. in economics at the University of California, Santa  
9 Barbara and towards a Master of Business Administration degree at San Diego State University.  
10 I have been employed in the utility industry since 1985 beginning with the San Diego Gas and  
11 Electric Company. I was first employed by Avista in 1990 as a Resource Analyst. Since then, I  
12 have managed the demand-side management portfolio and participated in numerous energy-  
13 efficiency and related roles within the Company. Finally, I have represented the Company in  
14 several regional organizations and forums including the Northwest Energy Efficiency Alliance  
15 and the Regional Technical Forum.

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

17           A.    Yes. Attached as Exhibit No. \_\_\_\_ (JP-2) is a sampling of materials developed  
18 and distributed under the Company's "Every Little Bit" energy efficiency campaign.

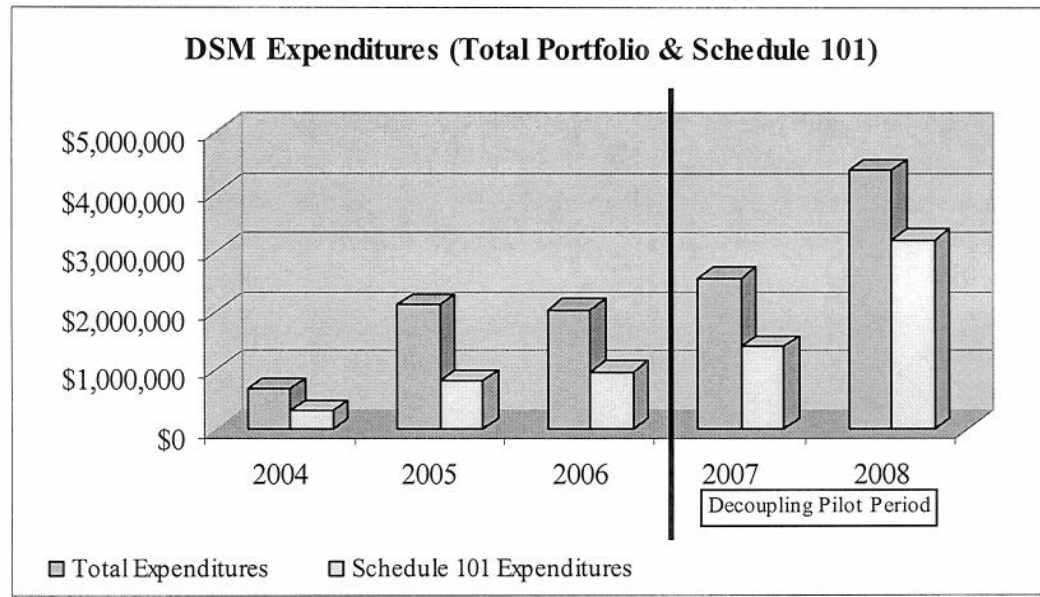
19           **Q.    What is the scope of your testimony in this proceeding?**

20           A.    I will describe the Company's natural gas DSM programs and results during the  
21 term of the natural gas Decoupling pilot. I will also address areas related to DSM programs  
22 described in the Decoupling Evaluation Report.



1 consequence of the prioritization of resource acquisition; as the avoided cost of natural gas rises,  
 2 increasingly costly demand-side resources are acquired. This leads to an overall increase in the  
 3 average cost of the DSM portfolio.

CHART 2



13 **Q. Was the overall natural gas DSM portfolio cost effective?**

14 A. Yes. But for one customer in the State of Idaho, the Company's Total Resource  
 15 Cost (TRC) would be 1.16, with any number above 1.00 being cost effective. This customer,  
 16 based on their own initiatives, spent \$4.2 million on energy efficiency projects of which Avista  
 17 contributed \$247,000. Avista's contribution of \$247,000 divided by the 104,000 therms of  
 18 savings from these projects results in a \$2.36 per first year therm utility incentive investment, in  
 19 comparison to an avoided cost value of approximately \$10 for a therm of the measure life  
 20 associated with those projects. Apart from this customer, the TRC and Utility Cost Test (UCT)  
 21 benefit cost ratios are 1.16 and 2.64 respectively. Therefore, except for the one customer, the  
 22 natural gas DSM portfolio passes both the TRC and UCT tests.

1           **Q.     Please describe Avista’s DSM program portfolio.**

2           A.     Avista operates electric DSM programs in Washington and Idaho and natural gas  
3 DSM programs in Washington, Idaho and Oregon. The Washington DSM portfolio consists of a  
4 series of prescriptive rebates for residential measures, an enhanced incentive program for limited  
5 income customers, and a non-residential program applicable to any measure that saves electric or  
6 natural gas energy. Additionally, the Company is an active participant in regional market  
7 transformation efforts. The Company’s DSM portfolio also includes a recently developed  
8 energy-efficiency customer outreach effort under the name “Every Little Bit”. Much of the  
9 outreach campaign focuses upon efficiency measures that are not part one specific program.

10           The Every Little Bit campaign includes a significant emphasis on the adoption of low-  
11 cost and no-cost measures that are not part of any programmatic savings tracked and reported as  
12 part of Avista’s DSM portfolio. A substantial component of the outreach effort is designed to  
13 educate and encourage customers to adopt highly cost-effective low-cost and no-cost energy-  
14 efficiency measures, many of which are not formalized as part of incentive-based DSM  
15 programs. Examples of these measures include caulking, weatherstripping and closing draperies.  
16 The impact of this outreach effort falls almost entirely within the residential customer segment.  
17 The Company has attached examples of the media outreach campaign as Exhibit No. \_\_\_(JP-2).

18           **Q.     Could you please describe what is included in Avista’s “claimed” or reported**  
19 **natural gas energy savings?**

20           A.     Avista claims savings for defined DSM programs, such as the high-efficiency  
21 furnace program, weatherization and the non-residential site-specific program. The Company  
22 does not include in its savings calculations the savings that are achieved through outreach efforts

1 or that are not a part of a defined DSM program. Even though these energy savings are very real,  
2 they are difficult to quantify and are not included in our DSM savings results.

3 **Q. Does the Decoupling Mechanism properly address fixed cost recovery for energy**  
4 **savings achieved through these outreach efforts?**

5 A. Yes. The Decoupling Mechanism provides fixed cost recovery related to reduced  
6 customer energy usage in response these outreach efforts. In contrast, a mechanism that would  
7 provide fixed cost recovery for only quantifiable programmatic energy savings would not provide  
8 fixed cost recovery for therm savings resulting from outreach efforts. Thus, the Decoupling  
9 Mechanism provides an incentive for the Company to pursue energy savings from not only  
10 programmatic DSM measures, but also to aggressively pursue these outreach efforts. Customers  
11 benefit from having increased opportunity to manage their energy bill.

12 **Q. What was the Company's therm acquisition goal under the Integrated**  
13 **Resource Plan and did the Company achieve those goals?**

14 A. The Integrated Resource Plan goal for 2006 and 2007 was 1.06 million therms,  
15 increasing to 1.425 million therms in 2008. An annual independent verification of the  
16 Company's energy savings concluded that the Company achieved 99% of this goal in 2006 and  
17 137% of the goal in both 2007 and 2008. Table 1 below summarizes the verification results:

<i>Table 1 - DSM Verified WA/ID Savings (therms) versus Goals<sup>3</sup></i>			
	2006	2007	2008
IRP DSM Savings Goal	1,062,000	1,062,000	1,425,070
Independent Verified DSM Savings	1,052,390	1,455,678	1,956,939
% of Goal	99.1%	137.1%	137.3%

18  
19 **Q. How was this independent verification performed?**

1           A.     Through an RFP process, Research Into Action and their partner Nexant were  
2 selected to perform the three annual independent verifications. Research Into Action and Nexant  
3 were given unlimited access to all DSM data. The independent verifiers selected and reviewed  
4 the engineering calculations behind Avista's energy savings claims for both prescriptive and site-  
5 specific programs. Several customers were randomly selected for a more in-depth review with  
6 particular attention to the larger non-residential projects.

7           **Q.     What was the overall conclusion within the Decoupling Evaluation Report**  
8 **regarding the independent verification(s)?**

9           A.     The Decoupling Evaluation Report, at page 5, concluded that the assumptions and  
10 methods used in the independent verification(s) were reasonable.

11          **Q.     What concerns were expressed in the Decoupling Evaluation Report with**  
12 **regard to either the independent verification(s) or the Company's reporting of DSM**  
13 **savings.**

14          A.     The Decoupling Evaluation Report, at page 5, noted that no independent field  
15 measurements were taken nor were post-project bill analysis performed. Additionally, it was  
16 noted that the practice of revising the Company's DSM database to incorporate measurement and  
17 verification findings made it more difficult to determine the annual activity that was necessary to  
18 complete the Evaluation Report. It was also noted that the independent verification lacked a final  
19 summarization of the report findings.

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<sup>3</sup> Id.

1           **Q. Did the Evaluation Report make any recommendations for improvement in the**  
2 **independent verification process?**

3           A.     Yes. The Decoupling Evaluation Report, at page 63, recommended the use of  
4 Professional Engineers or Certified Energy Managers to perform pre and/or post installation  
5 audits and energy usage measurement.

6           **Q. How does Avista currently verify the installation of measures funded**  
7 **through the natural gas DSM tariff rider?**

8           A.     Avista incorporates into contracts and rebate forms for all DSM programs the  
9 right to perform on-site verification of the installation of incentivized measures. Nearly all large  
10 non-residential projects are physically post-verified. A sample of smaller prescriptive non-  
11 residential and residential projects are subject to verification dependent upon the Company's  
12 assessment of the incentive funding provided, the program planning value, and the costs of  
13 verification.

14           **Q. How does Avista currently measure the savings from their natural gas DSM**  
15 **programs?**

16           A.     A variety of methods are used, all of which are compliant with the International  
17 Performance Measurement and Verification Protocol (IPMVP) standards. These methods  
18 include engineering estimates applying industry-standard energy end-use models. These are  
19 augmented by actual field measurements when useful and achievable. Additional post-project  
20 analysis is often performed to validate pre-project measurements or estimates. Actual pre- and  
21 post-project energy usage is often measured when it is possible to do so without interference  
22 from multiple end-uses being operated from the same meter.



1 Avista is in the process of developing a revised measurement and verification strategy for  
2 review in the fall 2009 Triple-E board and incorporation into the 2010 DSM Business Plan.

3 **Q. What other steps is the Company taking to address the concerns raised in the**  
4 **Evaluation?**

5 A. The Company is undertaking a review and revision of record keeping and  
6 reporting processes. Based upon what we have learned during this pilot, we have established  
7 improved mechanisms for tracking, documenting and reporting DSM savings with a  
8 categorization that better meets the needs of a decoupling mechanism.

9 **Q. Is Avista proposing an independent verification process as part of the**  
10 **Decoupling Mechanism that it is now requesting?**

11 A. Yes. The Company will continue to retain a qualified consulting firm to act as  
12 independent verifiers of the DSM savings claimed under the Mechanism. The independent  
13 verifiers will be requested to develop a verification methodology that will address the concerns  
14 and recommendations identified in the Evaluation Report.

15 **Q. Why was there less of an increase in the limited income DSM segment than**  
16 **overall Washington DSM and Washington Schedule 101 DSM acquisition?**

17 A. Avista implements limited income DSM programs through annual contracts with  
18 six Community Action Agencies in Washington. The Company provides as much flexibility as  
19 possible to these Agencies to permit the best possible use of these funds, but in doing so, the  
20 Company has also accepted limitations on our control of the disbursement of those funds. Avista

1 increased expenditures within this category by 43% during the 2007 and 2008 decoupling period<sup>4</sup>  
 2 in comparison to the 2004 and 2005 pre-pilot period, as shown in Table 2 below.

	2004	2005	2006	2007	2008
DSM Savings (therms)	5,012	110,788	57,503	58,549	71,983
DSM Expenditures	\$184,784	\$496,534	\$492,477	\$436,032	\$536,338

3  
 4 In order to address the concerns expressed by the Commission staff, Avista has been  
 5 working closely with the Agencies to ensure that the increase in expenditures does not adversely  
 6 impact the cost-effectiveness of the limited income portfolio or of the overall Avista DSM  
 7 portfolio. These precautions have limited the speed at which the limited income programs can  
 8 grow.

9 **Q. Could you further describe how the limited income DSM funds are dispersed**  
 10 **by the Agencies?**

11 A. The six Washington Community Action Agencies receive annual contracts that  
 12 permit them to expend their allotted funds for pre-qualified energy-efficiency measures.  
 13 Measures that are not pre-qualified are subject to pre-project individual approval from Avista.  
 14 The contracts give the agencies a considerable amount of flexibility in the expenditures of these  
 15 funds on a number of electric or natural gas projects. Agencies are also permitted to expend up  
 16 to 15% of the funds on health and human safety measures to ensure the continued habitability of  
 17 the home and persistence of the energy-efficiency measures installed. The contract also provides  
 18 for a 15% reimbursement to the agency for administrative costs. In addition to this work, the

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<sup>4</sup>Id.

1 agencies may also use the DSM funding to incorporate energy-efficiency into educational efforts  
2 touching a much larger number of customers.

3 **Q. What was the impact of the Decoupling Mechanism upon Avista's limited**  
4 **income customer base?**

5 A. The Evaluation Report concluded that the average annual decoupling surcharge in  
6 the November 2007 through October 2010 time period is \$0.40 per month (\$4.74<sup>5</sup> annually)  
7 based upon the typical consumption within this customer class. Applying this amount to the  
8 estimated limited income population the total annual cost to this customer segment was  
9 \$83,614<sup>6</sup>. As noted earlier, the limited income customer base saw a 13% increase in DSM  
10 savings during the period, with a 43% increase in expenditures.

11 **Q. Does this conclude your prefiled direct testimony?**

12 A. Yes.

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<sup>5</sup> Decoupling Evaluation Report, Page 83, Table K-11C

<sup>6</sup> Id., Page 90, Table K-18