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IDAHO PUBLIC  
UTILITIES COMMISSION

**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**

|                                  |   |                      |
|----------------------------------|---|----------------------|
| IN THE MATTER OF THE APPLICATION | ) | CASE NO. AVU-E-08-01 |
| OF AVISTA CORPORATION FOR THE    | ) | CASE NO. AVU-G-08-01 |
| AUTHORITY TO INCREASE ITS RATES  | ) |                      |
| AND CHARGES FOR ELECTRIC AND     | ) |                      |
| NATURAL GAS SERVICE TO ELECTRIC  | ) | DIRECT TESTIMONY     |
| AND NATURAL GAS CUSTOMERS IN THE | ) | OF                   |
| STATE OF IDAHO                   | ) | BRUCE W. FOLSOM      |
|                                  | ) |                      |

FOR AVISTA CORPORATION

(ELECTRIC AND NATURAL GAS)

1 I. INTRODUCTION

2 Q. Please state your name, employer and business  
3 address.

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

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

10 A. I graduated from the University of Washington in  
11 1979 with Bachelor of Arts and Bachelor of Science degrees.  
12 I received a Masters in Business Administration degree from  
13 Seattle University in 1984.

14 I joined the Company in 1993 in the State and  
15 Federal Regulation Department. My duties included work  
16 associated with tariff revisions and regulatory aspects of  
17 integrated resource planning, demand side management,  
18 competitive bidding, and emerging issues. In 2002, I was  
19 named the Manager of Regulatory Compliance which added  
20 responsibilities such as implementing the Federal Energy  
21 Regulatory Commission's major changes to its Standards of  
22 Conduct rule. I began my current position in September of  
23 2006. Prior to joining Avista, I was employed by the  
24 Washington Utilities and Transportation Commission  
25 beginning in 1984, and then served as the Electric Program

1 Manager from 1990 to February, 1993. From 1979 to 1983, I  
2 was the Pacific Northwest Regional Director of what is now  
3 the Environmental Careers Organization, a national,  
4 private, not-for-profit organization.

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

7 A. I provide an overview of the Company's DSM  
8 programs and recent results. I also provide documentation  
9 showing that Avista's expenditures for electric and natural  
10 gas energy efficiency programs have been prudently  
11 incurred.

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

14 A. Yes. I am sponsoring Exhibit No. 16 prepared  
15 under my supervision and direction. Exhibit No. 16  
16 documents the results and cost-effectiveness of Avista's  
17 DSM programs.

18

19 **II. DSM PROGRAMS AND 2007 RESULTS**

20 **Q. Would you please provide a brief overview of how**  
21 **Avista's DSM programs are organized?**

22 A. Yes. The Company's approach focuses on educating  
23 customers about the benefits of energy efficiency and  
24 providing a financial incentive, or "rebate," for cost-  
25 effective efficiency measures installed by customers with a

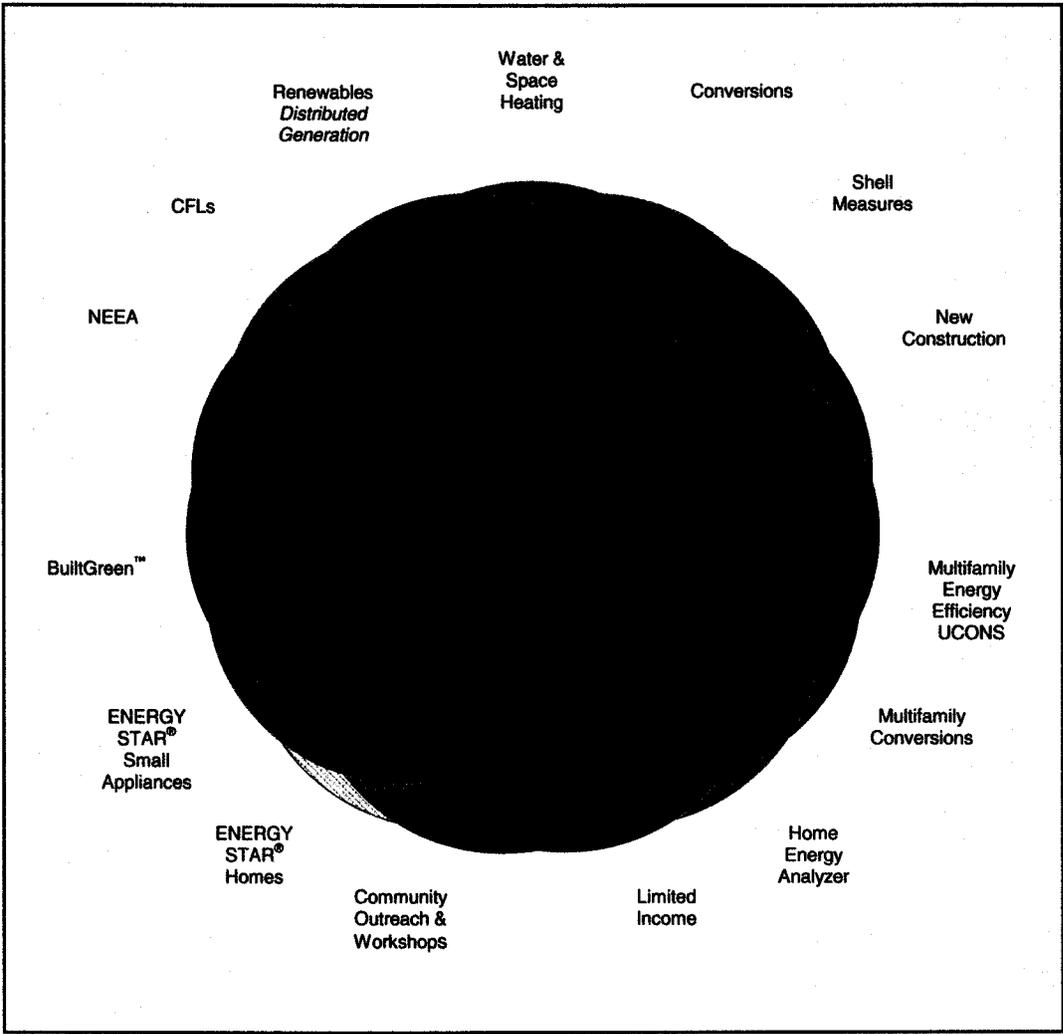
1 simple pay-back of greater than one year. This includes  
2 over 300 measures that are packaged into over 30 programs  
3 for customer convenience. In 2007, the Company enhanced  
4 its energy efficiency outreach efforts through our new  
5 "Every Little Bit" communications campaign. This  
6 comprehensive communication approach helps customers  
7 reframe their thinking about energy efficiency and steers  
8 them to our menu of rebates.

9 The Company's programs are delivered across a full  
10 customer spectrum. Virtually all customers have had the  
11 opportunity to participate and a great many have directly  
12 benefited from the program offerings. As will be described  
13 later in my testimony, all customers have indirectly  
14 benefited through enhanced cost-efficiencies of both the  
15 public and private sectors as a result of this portfolio.

16 The following illustration depicts Avista's  
17 residential program offerings:  
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**Illustration 1:**

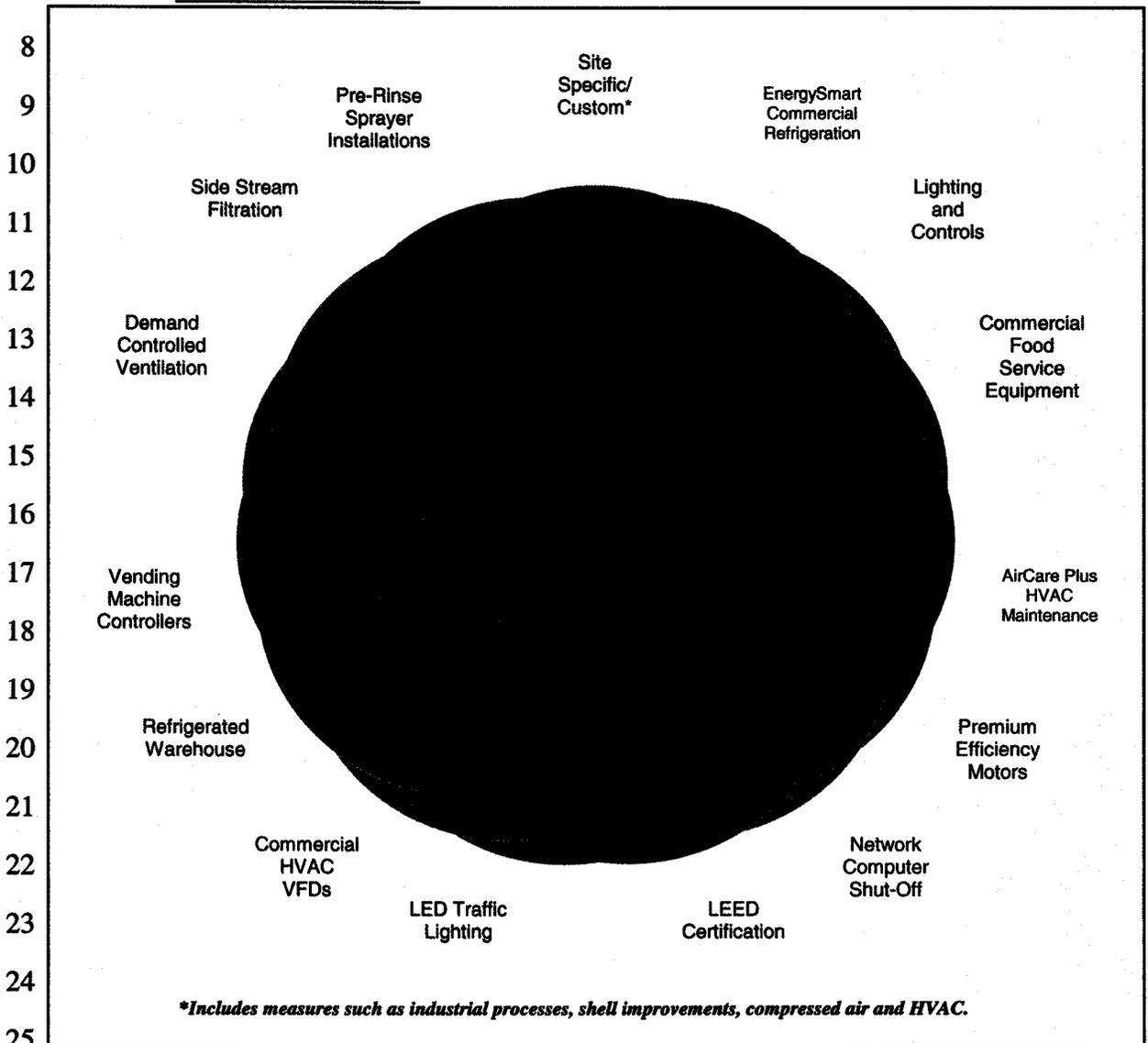


The residential programs shown above are standard offerings or what we call "prescriptive programs." These represent a menu of rebates on selected measures (e.g., lighting, weatherization, appliances, etc.).

For commercial customers, in addition to prescriptive programs, Avista offers "site specific" programs. Site-specific programs are customized to the customer premise. The site specific offering provides incentives on any cost-

1 effective commercial and industrial energy efficiency  
2 measure. This is implemented through site analyses,  
3 customized diagnoses, and incentives determined for savings  
4 generated specific to the customer's premise or process.  
5 The following illustration shows the programs available to  
6 Avista's commercial and industrial customers.

7 **Illustration 2**



1           These programs are supported by twenty three full-time  
2 equivalents (FTE) spread over 34 staff. (This does not  
3 include Company support from the Contact Center, Corporate  
4 Communications, Accounting and other direct and indirect  
5 support.) The 2007 DSM budget was over \$12 million. Of  
6 the Company's revenues collected under Schedules 91  
7 (electric tariff rider) and 191 (natural gas tariff rider)  
8 in 2007, 72.3% was paid out to customers in direct  
9 incentives pursuant to the cost-effectiveness tests  
10 described below. This does not include additional benefits  
11 such as technical analyses provided to customers by the  
12 Company's DSM engineering staff.

13           **Q. What were the Company's energy efficiency targets**  
14 **and results for 2007?**

15           A. The Company's energy efficiency targets are  
16 established in the process of developing the Electric and  
17 Natural Gas Integrated Resource Plans (IRPs). The electric  
18 IRP efficiency goal for Idaho and Washington in 2007 was  
19 47.5 million kwhs. The achieved savings amount was 53.7  
20 million kwhs or 113% of the annual target. This is  
21 approximately 6 aMW. Over 130 aMW of cumulative savings  
22 have been achieved through Avista's energy efficiency  
23 efforts in the past thirty years; 103 aMW of DSM is  
24 currently in place on the Company's system.

1           The savings targets contained in the natural gas IRP  
2 for Idaho and Washington for 2007 was 1.062 million therms.  
3 Over 1.5 million therms were saved which is 141% of the  
4 2007 target.

5           **Q. Do the 2007 results reflect Avista's**  
6 **participation in regional energy efficiency efforts?**

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

22           The results from NEEA programs for 2007 have not been  
23 reported as of the date of the submittal of this testimony.  
24 Historically, Avista has received approximately 1 to 1½ aMW  
25 of savings in its service territory from NEEA programs.

1           **Q. Has the Company expanded its efficiency efforts?**

2           A. Yes, in 2006 the leadership of Avista requested  
3 that all efficiency acquisition options—on the customer  
4 side of the meter as well as on the Company's side—be re-  
5 examined. The Company's recent Integrated Resource Plans  
6 showed a need for a large baseload generated facility in  
7 the next ten years. Thus, we are examining all  
8 sustainable, cost-effective efficiencies including demand  
9 response to reduce load during peak periods and efficiency  
10 enhancements to transmission and distribution facilities.

11

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

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

15           A. Yes. The Company's electric energy efficiency  
16 revenues are collected under the Schedule 91 tariff rider,  
17 and its electric programs are offered through Schedule 90.  
18 Natural gas energy conservation is funded by revenues  
19 collected through Schedule 191 and programs are offered  
20 under Schedule 190. As the Commission is aware, Avista's  
21 tariff riders were the first non-bypassable distribution  
22 charges in the United States to fund energy efficiency.  
23 The electric energy efficiency tariff rider is a 1.25%  
24 surcharge to all rate classes; the natural gas tariff rider  
25 is a 1.50% distribution surcharge.

1           When the Commission approved the Company's energy  
2 efficiency programs in 1995 (in Case Nos. WWP-E-94-12 and  
3 WWP-G-94-6), Avista committed to demonstrating the prudence  
4 of program expenditures in future general rate cases. In  
5 the Company's last general electric and natural gas rate  
6 cases (Case Nos. AVU-E-04-1 and AVU-G-04-1), the Commission  
7 issued a finding in Order No. 29602 that electric and  
8 natural gas expenditures through October 31, 2003 were  
9 prudently incurred. At this time, the Company respectfully  
10 requests that the Commission issue a finding that electric  
11 and natural gas energy efficiency expenditures from  
12 November 1, 2003 through December 31, 2007 were prudently  
13 incurred.

14           **Q.    Would you please summarize the Company's energy**  
15 **efficiency-related programs for this time period?**

16           A.    Yes. The Company's tariff riders under Schedules  
17 91 (electric) and 191 (gas) are system benefit charges to  
18 fund energy efficiency.

19           From November 1, 2003 through December 31, 2007,  
20 202,405,611 kWh and 4.28 million therms of energy savings  
21 were obtained. Page 1 of Exhibit No. 16 details the energy  
22 savings by regular and low-income portfolios for both  
23 electric and natural gas DSM programs.

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

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

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

10          A.    Yes.  The programs have been cost-effective from  
11 both a Total Resource Cost (TRC) and Utility Cost Test  
12 (UCT) perspective.  Page 2 of Exhibit No. 16 shows that the  
13 TRC benefit-to-cost ratio of 1.57 for the overall electric  
14 DSM program portfolio is cost-effective, with a net TRC  
15 benefit to customers of over \$48 million.  The UCT benefit  
16 to cost ratio is cost-effective with a net UCT benefit of  
17 over \$65 million.  The levelized TRC and UCT cost is 4.3  
18 cents and 1.3 cents per kWh, respectively.  The overall  
19 portfolio of measures has a weighted average measure life  
20 of 18.01 years.  The comparable levelized electric avoided  
21 cost for a measure of this life is 6.8 cents per kWh.  
22 The electric DSM programs were also cost-effective under  
23 the Participant Test.

24          Page 3 of Exhibit No. 16 illustrates that the natural  
25 gas DSM program portfolio is cost-effective under both the

1 TRC and UCT tests. The natural gas DSM programs are cost-  
2 effective with a 1.08 TRC benefit/cost ratio. The UCT  
3 benefit to cost ratio is cost-effective with a net benefit  
4 of \$16.9 million. The levelized TRC and UCT cost is 67.6  
5 cents and 25.9 cents per therm, respectively, for a  
6 weighted average measure life of 22.53 years. The  
7 comparable levelized avoided cost per annual therm is  
8 approximately 63.2 cents and 69.6 cents per winter therm  
9 using the most recent natural gas avoided costs. The  
10 levelized avoided cost calculations reflect only the  
11 avoided cost value of the natural gas savings of the  
12 project. The full TRC benefit is composed not only of this  
13 natural gas avoided cost value, but also the electric  
14 avoided cost and non-energy benefits associated with the  
15 portfolio. The levelized TRC cost calculations do reflect  
16 the entire costs of the project. The natural gas DSM  
17 portfolio passes the Participant Test.

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

19 A. The Company's expenditure of tariff rider revenue  
20 has been reasonable and prudent. A portfolio of programs  
21 covering all customer classes have been offered with a  
22 total savings of over 200 million annual kWhs and 4 million  
23 therms during November 1, 2003 through December 31, 2007.  
24 An 18-year levelized utility cost per saved kilowatt hour  
25 of 4.3 cents per kWh has been achieved. The levelized

1 avoided costs during this similar period has been 6.8 cents  
2 per kWh. The 22 year levelized utility cost per saved  
3 therm has averaged 67.6 cents per therm.

4 The Tariff Rider and programs have been very  
5 successful. Participating customers have benefited through  
6 lower bills. Non-participating customers have benefited  
7 from the Company having acquired lower cost resources as  
8 well as maintaining the energy efficiency message and  
9 infrastructure for the benefit of our service territory.  
10 Over 130 aMW and 6 million therms have been saved through  
11 the Company's energy efficiency programs since 1995.

12 Pursuant to prior Commission authorization of  
13 Schedules 91 and 191, Avista respectfully requests that the  
14 Commission issue a finding of prudence for energy  
15 efficiency expenditures from November 1, 2003 through  
16 December 31, 2007.

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

19 A. Yes, it does.

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IN THE MATTER OF THE APPLICATION ) CASE NO. AVU-E-08-01  
OF AVISTA CORPORATION FOR THE ) CASE NO. AVU-G-08-01  
AUTHORITY TO INCREASE ITS RATES )  
AND CHARGES FOR ELECTRIC AND )  
NATURAL GAS SERVICE TO ELECTRIC ) EXHIBIT NO. 16  
AND NATURAL GAS CUSTOMERS IN THE )  
STATE OF IDAHO ) BRUCE W. FOLSOM  
)

FOR AVISTA CORPORATION

(ELECTRIC AND NATURAL GAS)

**Avista Utilities**  
**Summary of Demand-Side Management Energy Savings and Levelized Costs**  
**November 1, 2003 to December 31, 2007**

|                       | Regular income portfolio |                  | Limited income portfolio |                |
|-----------------------|--------------------------|------------------|--------------------------|----------------|
|                       | kWh savings              | Therm savings    | kWh savings              | Therm savings  |
| Electric DSM programs | 191,613,021              | (639,079)        | 8,335,958                | 1,598          |
| Gas DSM programs      | 2,362,589                | 4,679,959        | 94,043                   | 239,490        |
| <b>Total</b>          | <b>193,975,610</b>       | <b>4,040,880</b> | <b>8,430,001</b>         | <b>241,088</b> |

|                       | Total portfolio    |                  |
|-----------------------|--------------------|------------------|
|                       | kWh savings        | Therm savings    |
| Electric DSM programs | 199,948,979        | (637,481)        |
| Gas DSM programs      | 2,456,632          | 4,919,449        |
| <b>Total</b>          | <b>202,405,611</b> | <b>4,281,968</b> |

**Note:** Electric savings derived from gas DSM programs include the impact of electric to natural gas conversions as well as interactive savings resulting from natural gas DSM projects. Therm savings derived from electric DSM projects recognize interactive impacts of electric DSM measures.

**DSM Program Portfolio Levelized Cost Calculations**

**Electric DSM Program Portfolio**

|                               |                 |
|-------------------------------|-----------------|
| Total Resource Cost (TRC)     | \$ 85,461,542   |
| Weighted average measure life | 18.01           |
| Discount rate                 | 7.08%           |
| kWh energy savings            | 199,948,979     |
| TRC levelized cost            | <b>\$ 0.043</b> |

|                               |                 |
|-------------------------------|-----------------|
| Utility Cost Test (UCT) cost  | \$ 26,253,699   |
| Weighted average measure life | 18.01           |
| Discount rate                 | 7.08%           |
| kWh energy savings            | 199,948,979     |
| UCT levelized cost            | <b>\$ 0.013</b> |

|   |                 |
|---|-----------------|
| Comparative electric levelized avoided cost | <b>\$ 0.068</b> |
|---|-----------------|

**Natural Gas DSM Program Portfolio**

|                               |                 |
|-------------------------------|-----------------|
| Total Resource Cost (TRC)     | \$ 36,904,128   |
| Weighted average measure life | 22.53           |
| Discount rate                 | 7.08%           |
| Therms energy savings         | 4,919,449       |
| TRC levelized cost            | <b>\$ 0.676</b> |

|                               |                 |
|-------------------------------|-----------------|
| Utility Cost Test (UCT) cost  | \$ 14,158,606   |
| Weighted average measure life | 22.53           |
| Discount rate                 | 7.08%           |
| Therms energy savings         | 4,919,449       |
| UCT levelized cost            | <b>\$ 0.259</b> |

|   |                 |
|---|-----------------|
| Comparative natural gas levelized annual avoided cost | <b>\$ 0.632</b> |
|---|-----------------|

|   |                 |
|---|-----------------|
| Comparative natural gas levelized winter avoided cost | <b>\$ 0.696</b> |
|---|-----------------|

Avista Utilities

Summary of Electric Demand-Side Management Cost-Effectiveness

November 1, 2003 to December 31, 2007

| <b>TOTAL RESOURCE COST TEST</b>             | Regular income portfolio | Limited income portfolio | Overall portfolio      |
|---|--------------------------|--------------------------|------------------------|
| Electric program electric avoided cost      | \$ 90,449,286            | \$ 4,140,559             | \$ 94,589,845          |
| Electric program gas avoided cost           | \$ (2,880,551)           | \$ 12,548                | \$ (2,868,003)         |
| Electric program non-energy benefits        | \$ 42,006,835            | \$ 71,878                | \$ 42,078,713          |
| <b>TOTAL TRC BENEFITS</b>                   | <b>\$ 129,575,570</b>    | <b>\$ 4,224,985</b>      | <b>\$ 133,800,555</b>  |
| Electric program non-incentive utility cost | \$ 6,883,601             | \$ 246,580               | \$ 7,130,181           |
| Electric program customer cost              | \$ 76,043,123            | \$ 2,288,238             | \$ 78,331,361          |
| <b>TOTAL TRC COSTS</b>                      | <b>\$ 82,926,724</b>     | <b>\$ 2,534,818</b>      | <b>\$ 85,461,542</b>   |
| <b>NET TRC BENEFITS</b>                     | <b>\$ 46,648,846</b>     | <b>\$ 1,690,167</b>      | <b>\$ 48,339,013</b>   |
| <b>TRC BENEFIT / COST RATIO</b>             | <b>1.56</b>              | <b>1.67</b>              | <b>1.57</b>            |
| <b>UTILITY COST TEST</b>                    |                          |                          |                        |
| Electric program electric avoided cost      | \$ 90,449,286            | \$ 4,140,559             | \$ 94,589,845          |
| Electric program gas avoided cost           | \$ (2,880,551)           | \$ 12,548                | \$ (2,868,003)         |
| <b>TOTAL UCT BENEFITS</b>                   | <b>\$ 87,568,735</b>     | <b>\$ 4,153,107</b>      | <b>\$ 91,721,842</b>   |
| Electric program non-incentive utility cost | \$ 6,883,601             | \$ 246,580               | \$ 7,130,181           |
| Electric program incentive utility cost     | \$ 16,869,211            | \$ 2,288,238             | \$ 19,157,449          |
| <b>TOTAL UCT COSTS</b>                      | <b>\$ 23,752,812</b>     | <b>\$ 2,534,818</b>      | <b>\$ 26,287,630</b>   |
| <b>NET UCT BENEFITS</b>                     | <b>\$ 63,815,923</b>     | <b>\$ 1,618,289</b>      | <b>\$ 65,434,212</b>   |
| <b>UCT BENEFIT / COST RATIO</b>             | <b>3.69</b>              | <b>1.64</b>              | <b>3.49</b>            |
| <b>PARTICIPANT TEST</b>                     |                          |                          |                        |
| Electric program lost utility revenue PV    | \$ 89,410,003            | \$ 5,684,083             | \$ 95,094,086          |
| Non-energy benefits                         | \$ 42,006,835            | \$ 71,878                | \$ 42,078,713          |
| <b>TOTAL PARTICIPANT BENEFITS</b>           | <b>\$ 131,416,838</b>    | <b>\$ 5,755,961</b>      | <b>\$ 137,172,799</b>  |
| Customer project cost                       | \$ 76,043,023            | \$ 2,288,238             | \$ 78,331,261          |
| Electric program incentive utility cost     | \$ (16,869,211)          | \$ (2,288,238)           | \$ (19,157,449)        |
| <b>TOTAL PARTICIPANT COSTS</b>              | <b>\$ 59,173,812</b>     | <b>\$ -</b>              | <b>\$ 59,173,812</b>   |
| <b>NET PARTICIPANT BENEFITS</b>             | <b>\$ 72,243,026</b>     | <b>\$ 5,755,961</b>      | <b>\$ 77,998,987</b>   |
| <b>PARTICIPANT BENEFIT / COST RATIO</b>     | <b>2.22</b>              | <b>NA</b>                | <b>2.32</b>            |
| <b>NON-PARTICIPANT TEST</b>                 |                          |                          |                        |
| Electric program electric avoided cost      | \$ 90,449,286            | \$ 4,140,559             | \$ 94,589,845          |
| <b>TOTAL NON-PARTICIPANT BENEFITS</b>       | <b>\$ 90,449,286</b>     | <b>\$ 4,140,559</b>      | <b>\$ 94,589,845</b>   |
| Electric program lost electric revenue PV   | \$ 94,229,039            | \$ 5,663,317             | \$ 99,892,356          |
| Electric program non-incentive utility cost | \$ 6,883,601             | \$ 246,580               | \$ 7,130,181           |
| Electric program incentive utility cost     | \$ 16,869,211            | \$ 2,288,238             | \$ 19,157,449          |
| <b>TOTAL NON-PARTICIPANT COSTS</b>          | <b>\$ 117,981,851</b>    | <b>\$ 8,198,135</b>      | <b>\$ 126,179,986</b>  |
| <b>NET NON-PARTICIPANT BENEFITS</b>         | <b>\$ (27,532,565)</b>   | <b>\$ (4,057,576)</b>    | <b>\$ (31,590,141)</b> |
| <b>NON-PARTICIPANT BENEFIT / COST RATIO</b> | <b>0.77</b>              | <b>0.51</b>              | <b>0.75</b>            |

Avista Utilities

Summary of Gas Demand-Side Management Cost-Effectiveness

November 1, 2003 to December 31, 2007

| <b>TOTAL RESOURCE COST TEST</b>             | Regular income portfolio | Limited income portfolio | Overall portfolio      |
|---|--------------------------|--------------------------|------------------------|
| Gas program gas avoided cost                | \$ 27,338,535            | \$ 1,894,774             | \$ 29,233,309          |
| Gas program electric avoided cost           | \$ 1,901,799             | \$ 20,158                | \$ 1,921,957           |
| Gas program non-energy benefits             | \$ 8,792,915             | \$ -                     | \$ 8,792,915           |
| <b>TOTAL TRC BENEFITS</b>                   | <b>\$ 38,033,249</b>     | <b>\$ 1,914,932</b>      | <b>\$ 39,948,181</b>   |
| Gas program non-incentive utility cost      | \$ 2,111,151             | \$ 104,419               | \$ 2,215,570           |
| Gas program customer cost                   | \$ 32,961,382            | \$ 1,727,176             | \$ 34,688,558          |
| <b>TOTAL TRC COSTS</b>                      | <b>\$ 35,072,533</b>     | <b>\$ 1,831,595</b>      | <b>\$ 36,904,128</b>   |
| <b>NET TRC BENEFITS</b>                     | <b>\$ 2,960,716</b>      | <b>\$ 83,337</b>         | <b>\$ 3,044,053</b>    |
| <b>TRC BENEFIT / COST RATIO</b>             | <b>1.08</b>              | <b>1.05</b>              | <b>1.08</b>            |
| <b>UTILITY COST TEST</b>                    | Regular income portfolio | Limited income portfolio | Overall portfolio      |
| Gas program gas avoided cost                | \$ 27,338,535            | \$ 1,894,774             | \$ 29,233,309          |
| Gas program electric avoided cost           | \$ 1,901,799             | \$ 20,158                | \$ 1,921,957           |
| <b>TOTAL UCT BENEFITS</b>                   | <b>\$ 29,240,334</b>     | <b>\$ 1,914,932</b>      | <b>\$ 31,155,266</b>   |
| Gas program non-incentive utility cost      | \$ 2,111,151             | \$ 104,419               | \$ 2,215,570           |
| Gas program incentive utility cost          | \$ 10,247,109            | \$ 1,695,927             | \$ 11,943,036          |
| <b>TOTAL UCT COSTS</b>                      | <b>\$ 12,358,260</b>     | <b>\$ 1,800,346</b>      | <b>\$ 14,158,606</b>   |
| <b>NET UCT BENEFITS</b>                     | <b>\$ 16,882,074</b>     | <b>\$ 114,586</b>        | <b>\$ 16,996,660</b>   |
| <b>UCT BENEFIT / COST RATIO</b>             | <b>2.37</b>              | <b>1.06</b>              | <b>2.20</b>            |
| <b>PARTICIPANT TEST</b>                     | Regular income portfolio | Limited income portfolio | Overall portfolio      |
| Gas program lost utility revenue PV         | \$ 37,983,824            | \$ 2,155,481             | \$ 40,139,305          |
| Non-energy benefits                         | \$ 8,792,925             | \$ -                     | \$ 8,792,925           |
| <b>TOTAL PARTICIPANT BENEFITS</b>           | <b>\$ 46,776,749</b>     | <b>\$ 2,155,481</b>      | <b>\$ 48,932,230</b>   |
| Customer project cost                       | \$ 32,961,382            | \$ 1,727,176             | \$ 34,688,558          |
| Gas program incentive utility cost          | \$ (6,628,758)           | \$ (1,695,927)           | \$ (8,324,685)         |
| <b>TOTAL PARTICIPANT COSTS</b>              | <b>\$ 26,332,624</b>     | <b>\$ 31,249</b>         | <b>\$ 26,363,873</b>   |
| <b>NET PARTICIPANT BENEFITS</b>             | <b>\$ 20,444,125</b>     | <b>\$ 2,124,232</b>      | <b>\$ 22,568,357</b>   |
| <b>PARTICIPANT BENEFIT / COST RATIO</b>     | <b>1.78</b>              | <b>68.98</b>             | <b>1.86</b>            |
| <b>NON-PARTICIPANT TEST</b>                 | Regular income portfolio | Limited income portfolio | Overall portfolio      |
| Gas program gas avoided cost                | \$ 27,338,535            | \$ 1,894,774             | \$ 29,233,309          |
| <b>TOTAL NON-PARTICIPANT BENEFITS</b>       | <b>\$ 27,338,535</b>     | <b>\$ 1,894,774</b>      | <b>\$ 29,233,309</b>   |
| Gas program lost gas revenue PV             | \$ 35,863,988            | \$ 2,130,227             | \$ 37,994,215          |
| Gas program non-incentive utility cost      | \$ 2,111,151             | \$ 104,419               | \$ 2,215,570           |
| Gas program incentive utility cost          | \$ 6,628,758             | \$ 1,695,927             | \$ 8,324,685           |
| <b>TOTAL NON-PARTICIPANT COSTS</b>          | <b>\$ 44,603,897</b>     | <b>\$ 3,930,573</b>      | <b>\$ 48,534,470</b>   |
| <b>NET NON-PARTICIPANT BENEFITS</b>         | <b>\$ (17,265,362)</b>   | <b>\$ (2,035,799)</b>    | <b>\$ (19,301,161)</b> |
| <b>NON-PARTICIPANT BENEFIT / COST RATIO</b> | <b>0.61</b>              | <b>0.48</b>              | <b>0.60</b>            |