

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-100176

DIRECT TESTIMONY OF

LORI B. HERMANSON

REPRESENTING AVISTA CORPORATION

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

I. INTRODUCTION

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

A. My name is Lori Hermanson. I am employed by Avista as a Senior Utility Resource Analyst. My business address is 1411 East Mission Avenue, Spokane, Washington.

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

A. I graduated from Walla Walla University in 1994 with Bachelor of Science in Business Administration, with a concentration in Accounting. I received a Masters in Business Administration degree from Eastern Washington University in 1999.

I joined the Company in 1997 in the Budget, Forecasting and Analysis Department. My duties included work associated with corporate Operations and Maintenance as well as Capital budgets. In 2000, I transferred to the Energy Delivery Accounting Department, where my responsibilities included financial and accounting lead for Demand-Side Management (DSM). I joined the DSM team in June 2004 to assist in cost-effectiveness analysis and reporting. I am now managing external Evaluation, Measurement and Verification (EM&V) activities to include process, impact and market studies.

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

A. I will report on regulatory prudence of the 2010-2011 electric and natural gas DSM portfolio, Schedules 91 and 191 tariff rider balances along with annual true-up adjustments, the retention and management of external EM&V activities, internal

1 evaluations and finally, the resulting cost-effectiveness based on the external,
2 independent evaluation.

3 **Q. Are you sponsoring any exhibits in this proceeding?**

4 A. Yes. I am sponsoring Exhibit No. ____ (LBH-2), which summarizes DSM
5 energy savings and levelized costs as well as Washington-specific cost-effectiveness by
6 regular and low income. I am also sponsoring Exhibit No. ____ (LBH-3), the Company's
7 2011 DSM Annual Report¹ and Exhibit No. ____ (LBH-4), a memo from NEEA
8 summarizing Avista's share of the "Draft 2010 & 2011 6th Power Plan Savings Report."

9

10 **II. PRUDENCE OF INCURRED DSM COSTS**

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

13 A. Yes. When the Commission approved the Company's energy efficiency
14 programs in 1995 (in Docket Nos. UE-941377 and UG-941379), Avista committed to
15 demonstrating the prudence of program expenditures in future general rate cases. In the
16 Company's 2010 general electric and natural gas rate cases (Docket Nos. UE-100467
17 and UG-100468), the Commission issued a finding in Order No. 7 that electric and
18 natural gas expenditures through December 31, 2009 were prudently incurred.

19 The Energy Independence Act, RCW Chapter 19.285 (EIA or I-937), requires
20 large electric utilities, such as Avista, to set and meet targets for the conservation of
21 electricity. In Order 01 in Docket UE-100176, the Commission found that it was in the

¹ The 2010 Annual Report, filed in Docket No. UE-100176 in December 2010 is provided as part of the Company's workpapers.

1 public interest to approve Avista's Revised Ten-Year Achievable Conservation
2 Potential and 2010-2011 Biennial Conservation Target, subject to certain conditions, as
3 consistent with the requirements of the EIA. As part of the conditions approved by the
4 Commission in Docket No. UE-100176, Order No. 01, paragraph 62 (a) "Avista must
5 demonstrate the prudence and cost-effectiveness of its conservation programs to the
6 Commission after the savings are achieved. "The Commission granted a "Motion
7 Clarifying Forum for Resolution of DSM Prudence," in Docket Nos. UE-110876 and
8 UG-110877 (consolidated), Order 05, paragraph 4, stating "On June 1, 2012, Avista
9 would file testimony and supporting evidence in separate dockets to demonstrate the
10 prudence of its electric and natural gas DSM expenditures for the prior two years."

11 At this time, the Company requests that the Commission issue a finding that
12 electric and natural gas energy efficiency expenditures from January 1, 2010 through
13 December 31, 2011 were prudently incurred.

14 **Q. Would you please summarize the Company's Washington energy efficiency**
15 **expenditures for this time period.**

16 A. Yes. During the 2010-2011 Biennium, the Company incurred over \$29.4
17 million in electric expenditures and more than \$11.1 million in natural gas expenditures,
18 for a total of more than \$40.5 million supporting energy efficiency. Of this amount,
19 more than \$2.2 million was contributed to the Northwest Energy Efficiency Alliance in
20 support of its market transformation ventures. Approximately, 71% of electric
21 expenditures and 79% of natural gas expenditures were returned to ratepayers in the
22 form of incentives. In addition, over \$1.6 million, or 4.3% of \$37.6 million Washington

1 electric and natural gas DSM budget, was spent on evaluation of our energy efficiency
2 programs in an effort to continually improve on the design and implementation of our
3 program offerings. Specific to I-937, over \$1.1 million, or 3.9% of the \$26.8 million
4 Washington electric budget was spent on EM&V.

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

7 A. Yes. As shown in Exhibit No. ____ (LBH-2), from January 1, 2010 through
8 December 31, 2011, over 172,341 first-year MWh and over 2.5 million first-year therms
9 of energy savings were acquired from Washington DSM projects. The 172,341 MWh
10 includes the Company's Washington portion of NEEA savings of 47,129 MWh for this
11 time period. All local acquisition amounts are evaluated as gross savings amounts
12 consistent with I-937 and the *6th Power Plan*. Pages 2 and 3 of Exhibit No. ____ (LBH-
13 2) details the energy savings by regular and low-income portfolios for both Washington
14 electric and natural gas DSM programs.

15 Please refer to Exhibit No. ____ (LBH-3), 2011 DSM Annual Report for more
16 detail on the Company's 2011 energy efficiency operations.

17 **Q. Were the Company's DSM programs cost-effective?**

18 A. Yes. Washington electric programs have been cost-effective from both
19 Total Resource Cost (TRC) test and Program Administrator Cost (PAC) test
20 perspectives. Page 2 of Exhibit No. ____ (LBH-2) shows that the 2010-2011 TRC
21 benefit-to-cost ratio of 1.58, for the Washington electric DSM program portfolio, is
22 cost-effective, with a net TRC benefit to customers of over \$33.6 million. The 2010-

1 2011 PAC benefit-to-cost ratio of 3.6 is also cost-effective, with a net PAC benefit of
2 over \$65.4 million. The levelized TRC and PAC costs are \$42.48 and \$18.33 per
3 MWh, respectively, as shown on Page 1 of Exhibit No. ____ (LBH-2). The overall
4 portfolio of measures has a weighted average measure life of 12 years for 2010-2011.
5 (Please note that Program Administrator costs reported in Exhibit No. ____ (LBH-2) are
6 net of NEEA expenditures and for those projects completed during 2010-2011 and,
7 therefore, differ from the expenditures actually incurred during 2010-2011 as shown on
8 page 3 of my testimony and page 8 of Mr. Folsom's testimony.)

9 Page 3 of Exhibit No. ____ (LBH-2) illustrates Washington natural gas DSM
10 program portfolio cost-effectiveness under both the TRC and PAC tests. The
11 Company's 2010-2011 TRC benefit-cost ratio was 1.19. The 2010-2011 PAC benefit
12 cost ratio is 3.02. Therefore, the Washington natural gas DSM portfolio passes the PAC
13 test in 2010-2011. The levelized TRC and PAC costs are \$1.07 and 41.5 cents per
14 therm, respectively, as shown on Page 1 of Exhibit No. ____ (LBH-2). The overall
15 portfolio of measures has a weighted average measure life of 21 years for 2010-2011.
16 (Please note that Program Administrator costs reported in Exhibit No. ____ (LBH-2) are
17 for those projects completed during 2010-2011 and, therefore, differ from the
18 expenditures actually incurred during 2010-2011 as shown on page 3 of my testimony
19 and page 8 of Mr. Folsom's testimony.)

20 For cost-effectiveness, the Company includes only those non-energy benefits
21 that are documented and quantifiable and is, therefore, a conservative estimate. There

1 are a number of legitimate non-energy TRC benefits that the Company was unable to
2 quantify with sufficient rigor in order to include within the cost-effectiveness analysis.

3 Electric and natural gas cost-effectiveness results are based on evaluated results
4 of the 2010-2011 Biennium portfolio. Past DSM cost-effectiveness reporting has been
5 due in the first quarter of each year and included realization rates from the most recent
6 impact evaluations on some individual programs. With the implementation of I-937,
7 the Company's annual report due date has been moved to June 1st enabling the
8 Company to provide cost-effectiveness on verified savings of the entire portfolio.

9 **Q. Please summarize the Company's conclusions on prudence and cost-**
10 **effectiveness.**

11 A. The Company's expenditure of tariff rider revenue has been reasonable
12 and prudent. The Washington portfolio of programs covering all customer classes has
13 been offered with a total savings of over 172,341 MWh (169,467 MWh Washington
14 gross achieved from local and NEEA programs, plus 2,874 MWh from fuel conversions
15 beyond the 2,621 MWh maximum allowed toward I-937 acquisition) and over 2.5
16 million therms during this biennium. This was achieved at a levelized TRC cost of
17 \$42.48 per MWh and \$1.07 per therm.

18 The Tariff Rider and energy efficiency programs have been successful.
19 Participating customers have benefited through lower energy bills. Non-participating
20 customers have benefited from the Company having acquired lower cost resources in
21 the form of DSM, as well as maintaining the energy efficiency message and
22 infrastructure for the benefit of our service territory.

1 Avista respectfully requests that the Commission issue a finding of prudence for
2 energy efficiency expenditures for this period of January 1, 2010 through December 31,
3 2011.

4 **III. TARIFF RIDER BALANCES**

5 **Q. What are the current Schedule 91 and 191 tariff rider balances?**

6 A. The Company's tariff rider mechanism is designed to match future
7 revenue with budgeted expenditures. To ensure appropriate recovery, the mechanism
8 includes a true-up feature that reconciles the previous periods' actual expenditures and
9 collections.

10 As of March 31, 2012, the current Schedule 91 (electric) and 191 (natural gas)
11 tariff rider balances were over \$2.4 million overfunded and \$741,000 overfunded
12 respectively. Overfunded balances indicate that more tariff rider funding was collected
13 than necessary to fund the on-going DSM operations. In addition, for Schedule 91, the
14 Company incurs a 10 percent interest on any overfunded balances.

15 In the past, the increase to Schedules 91 and 191 allowed for adequate revenue
16 to both fund current energy efficiency operations as well as reduce the accumulation of
17 underfunded tariff rider balances for these Schedules. The tariff rider adjustments
18 proposed in a separate filing would, but coincident with this filing, reduce the
19 overfunded balance, and provide for approximately \$12.3 million and \$4.4 million in
20 annual revenue to fund on-going electric and natural gas efficiency, respectively.

21

22

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

IV. EVALUATION, MEASUREMENT & VERIFICATION

Q. Mr. Folsom described in his testimony the Company’s 2010 EM&V Collaborative and the resulting EM&V Framework. Please describe how the Company’s EM&V Framework was implemented.

A. The Company’s EM&V Framework was filed on September 1, 2010, after an EM&V Collaborative (per Docket No. UG-090135) consisting of eight all-day meetings as well as numerous conference calls with ten stakeholder organizations. This Framework is an overarching forty-page document that defines methods used to perform EM&V on the Company’s DSM programs and is provided in the Company’s workpapers. Consequently, industry standard principles of operation and best practices are used by internal or external evaluators in order to evaluate, verify and document savings acquired through the Company’s energy efficiency programs and the processes used to acquire those savings. The Framework guides the development of annual EM&V and research plans for specific evaluation activities. It also provides a mechanism for the Commission and interested parties to understand and comment on the Company’s overall evaluation approach.

The EM&V Framework provides that the Company will work closely with its Advisory Group to establish its annual EM&V Plans. The Framework also provides that evaluations will be performed by external, independent evaluators working through an independent, internal evaluation team to determine savings resulting from the Company’s electric and natural gas DSM portfolio. This entire process is highly transparent, providing stakeholders with numerous opportunities to review EM&V

1 processes and the annual EM&V plan, as well as specific EM&V activities at
2 appropriate times. In addition, the Framework recognized that the Company would
3 develop and utilize a Technical Reference Manual (TRM) to include Unit Energy
4 Savings (UES), assumptions and documented sources for prescriptive-type measures.

5 The Company's 2011 EM&V Plan was filed with the Commission on November
6 1, 2010. Following the filing of its EM&V Annual Plan, the Company issued a
7 comprehensive Request for Proposal (RFP) for EM&V services for its 2010-2011
8 electric and natural gas DSM portfolio. Over twenty prospective bidders participated in
9 a conference call, with five bidders actually submitting proposals by the December 27,
10 2010 due date. The Company conducted detailed interviews by phone with two bidders
11 being selected for second interviews on-site. The Cadmus Group (Cadmus) was the
12 awarded the independent EM&V contract based on its detailed evaluation approach
13 following best practices, coupled with its strong regional and national reputation. In
14 addition, Cadmus had a sizeable and diverse complement of employees which made it
15 possible for multiple teams to be immediately deployed on various tasks, such as the
16 TRM review and natural gas measurement and verification, in order to meet regulatory
17 deadlines.

18 **Q. Your testimony notes "transparency along with numerous**
19 **opportunities for stakeholders to review EM&V activities and processes." Can**
20 **you please elaborate on this transparency for stakeholders?**

21 A. Yes. During this review process, the Company met with its Advisory
22 Group, comprised of stakeholders from ten different organizations, through in person

1 meetings, webinars, conference calls, newsletters and email updates. At Advisory
2 Group meetings, stakeholders were provided updates by the independent evaluators on
3 the progress of EM&V activities. Stakeholders were also given opportunities to
4 comment on work plans for each year as well as other components of the evaluation
5 (e.g. whether or not to perform a detailed impact evaluation on residential window
6 replacement program scheduled for termination).

7 Please refer to Mr. Folsom's Exhibit No. ____ (BWF-3) for additional information
8 regarding the level of communication and involvement of stakeholders.

9 **Q. Please describe the evaluation activities that The Cadmus Group**
10 **was hired to conduct.**

11 A. Cadmus was hired to conduct independent process and impact
12 evaluations on calendar years 2010 and 2011 electric and natural gas DSM portfolio,
13 evaluate the deemed savings and underlying assumptions of the Company's TRM, and
14 provide a high-level assessment of the Company's EM&V resources, and provide a gap
15 analysis of potential areas that may need strengthening through increased evaluation in
16 future years.

17 Cadmus' evaluation efforts included billing analysis, as appropriate, and actual
18 field measurement, where necessary and feasible. In addition, the team provided
19 process evaluation on the portfolio and market evaluation of some key programs.

20 **Q. Can you describe additional EM&V activities performed during this**
21 **time frame?**

1 A. Yes. In addition to the work performed by Cadmus, the Company also
2 retained Global Energy Partners to perform an independent electric and natural gas
3 Conservation Potential Assessment (CPA) as requested by Washington Utilities and
4 Transportation Commission (UTC) staff. In addition, the Company participated in the
5 Northwest Energy Efficiency Alliance's (NEEA) Residential Building Stock
6 Assessment (RBSA). The natural gas CPA and the RBSA are still in progress. Moss
7 Adams, an accounting firm, conducted a portfolio-level evaluation of data management
8 practices in 2010, Ecotope executed impact evaluations on specific residential and low
9 income measures, and the Company completed a comprehensive review of its rebate
10 processing all in response to settlement stipulations from the 2009 General Rate Case
11 (GRC). The results of these evaluations are provided in the Company's workpapers
12 included in this filing.

13 Between the time of the development of the 2010 Annual EM&V Plan and the
14 issuance of the RFP for Evaluation, Measurement and Verification on the Company's
15 DSM programs, it was deemed to be preferable to complete a comprehensive review of
16 all programs, rather than schedule individual programs for review every three years.
17 This entailed an increased number of site visits and metering for larger programs but
18 allowed for evaluation of all programs regardless of size. Due to this change in
19 approach, some smaller internal evaluations were not pursued, since Cadmus would be
20 evaluating them within the scope of the external third-party evaluation.

21 **Q. For residential fuel conversions, does the Company report (cross-**
22 **fuel) interactive effects, as it does for other energy efficiency measures?**

1 A. Yes. Cadmus' review of the Company's TRM revealed that cross-fuel
2 interactive effects were not being reported on residential fuel conversions as they had
3 been for non-residential. For this biennium, the Company has included cross-fuel
4 interactive effects for this residential measure as well as included its impact in cost-
5 effectiveness.

6 **Q. What is the Company's policy when a project from a previous year
7 is discovered to not have been claimed?**

8 A. Occasionally, a project is discovered that was not marked "completed" in
9 the tracking database and consequently savings were not claimed. The Company's
10 policy has always been to include these in the annual report and cost-effectiveness of
11 the year discovered. This is a clean approach rather than having to "reopen" and
12 "restate" previous years' annual reports. In addition, due to the size of the Company's
13 portfolio, when these projects have been discovered they have not materially impacted
14 cost-effectiveness or savings claims. Finally, these anomalies are noted and have been
15 provided to the evaluation team.

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

17 A. Yes, it does.