BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-100176

DIRECT TESTIMONY OF

LORI B. HERMANSON

REPRESENTING AVISTA CORPORATION

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

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

A. Yes. I am sponsoring Exhibit No.\_\_\_ (LBH-2), which summarizes DSM energy savings and levelized costs as well as Washington-specific cost-effectiveness by regular and low income. I am also sponsoring Exhibit No.\_\_\_(LBH-3), the Company’s 2011 DSM Annual Report[[1]](#footnote-1) and Exhibit No.\_\_\_(LBH-4), a memo from NEEA summarizing Avista’s share of the “Draft 2010 & 2011 6th Power Plan Savings Report.”

##### II. PRUDENCE OF INCURRED DSM COSTS

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

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

The Energy Independence Act, RCW Chapter 19.285 (EIA or I-937), requires large electric utilities, such as Avista, to set and meet targets for the conservation of electricity. In Order 01 in Docket UE-100176, the Commission found that it was in the public interest to approve Avista’s Revised Ten-Year Achievable Conservation Potential and 2010-2011 Biennial Conservation Target, subject to certain conditions, as consistent with the requirements of the EIA. As part of the conditions approved by the Commission in Docket No. UE-100176, Order No. 01, paragraph 62 (a) “Avista must demonstrate the prudence and cost-effectiveness of its conservation programs to the Commission after the savings are achieved. “The Commission granted a “Motion Clarifying Forum for Resolution of DSM Prudence,” in Docket Nos. UE-110876 and UG-110877 (consolidated), Order 05, paragraph 4, stating “On June 1, 2012, Avista would file testimony and supporting evidence in separate dockets to demonstrate the prudency of its electric and natural gas DSM expenditures for the prior two years.”

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

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

A. Yes. During the 2010-2011 Biennium, the Company incurred over $29.4 million in electric expenditures and more than $11.1 million in natural gas expenditures, for a total of more than $40.5 million supporting energy efficiency. Of this amount, more than $2.2 million was contributed to the Northwest Energy Efficiency Alliance in support of its market transformation ventures. Approximately, 71% of electric expenditures and 79% of natural gas expenditures were returned to ratepayers in the form of incentives. In addition, over $1.6 million, or 4.3% of $37.6 million Washington electric and natural gas DSM budget, was spent on evaluation of our energy efficiency programs in an effort to continually improve on the design and implementation of our program offerings. Specific to I-937, over $1.1 million, or 3.9% of the $26.8 million Washington electric budget was spent on EM&V.

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

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

Please refer to Exhibit No.\_\_\_(LBH-3), 2011 DSM Annual Report for more detail on the Company’s 2011 energy efficiency operations.

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

A. Yes. Washington electric programs have been cost-effective from both Total Resource Cost (TRC) test and Program Administrator Cost (PAC) test perspectives. Page 2 of Exhibit No.\_\_\_(LBH-2) shows that the 2010-2011 TRC benefit-to-cost ratio of 1.58, for the Washington electric DSM program portfolio, is cost-effective, with a net TRC benefit to customers of over $33.6 million. The 2010-2011 PAC benefit-to-cost ratio of 3.6 is also cost-effective, with a net PAC benefit of over $65.4 million. The levelized TRC and PAC costs are $42.48 and $18.33 per MWh, respectively, as shown on Page 1 of Exhibit No.\_\_\_(LBH-2). The overall portfolio of measures has a weighted average measure life of 12 years for 2010-2011. (Please note that Program Administrator costs reported in Exhibit No.\_\_\_(LBH-2) are net of NEEA expenditures and for those projects completed during 2010-2011 and, therefore, differ from the expenditures actually incurred during 2010-2011 as shown on page 3 of my testimony and page 8 of Mr. Folsom’s testimony.)

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

For cost-effectiveness, the Company includes only those non-energy benefits that are documented and quantifiable and is, therefore, a conservative estimate. There are a number of legitimate non-energy TRC benefits that the Company was unable to quantify with sufficient rigor in order to include within the cost-effectiveness analysis.

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

**Q. Please summarize the Company’s conclusions on prudence and cost-effectiveness.**

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

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

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

**III. TARIFF RIDER BALANCES**

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

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

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

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

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

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

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

A. Yes. During this review process, the Company met with its Advisory Group, comprised of stakeholders from ten different organizations, through in person meetings, webinars, conference calls, newsletters and email updates. At Advisory Group meetings, stakeholders were provided updates by the independent evaluators on the progress of EM&V activities. Stakeholders were also given opportunities to comment on work plans for each year as well as other components of the evaluation (e.g. whether or not to perform a detailed impact evaluation on residential window replacement program scheduled for termination).

Please refer to Mr. Folsom’s Exhibit No.\_\_\_(BWF-3) for additional information regarding the level of communication and involvement of stakeholders.

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

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

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

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

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

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

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

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

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

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

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

A. Yes, it does.

1. The 2010 Annual Report, filed in Docket No. UE-100176 in December 2010 is provided as part of the Company’s workpapers. [↑](#footnote-ref-1)