Bob Ferguson
ATTORNEY GENERAL OF WASHINGTON
800 Fifth Avenue #2000 • Seattle WA 98104-3188

June 30, 2014

SENT VIA UTC WEB PORTAL

Steven V. King
Executive Director and Secretary
Washington Utilities and Transportation Commission
1300 S. Evergreen Pk. Dr. S.W.
P. O. Box 47250
Olympia, WA 98504-7250

Re: Avista Corporation d/b/a Avista Utilities, Report concerning its progress in meeting its conservation target during the preceding biennium, Docket UE-111882

Avista Corporation d/b/a Avista Utilities, Prudence of natural gas demand side management program expenditures during the prior two years, Docket UG-141215

Dear Mr. King:

Enclosed please find an original copy of the Comments of Public Counsel for filing in the above-entitled dockets.

Sincerely,

Mary Kimball

Mary Kimball
Senior Regulatory Analyst
Public Counsel Section
(206) 389-2529

MK:cjb

cc: Linda Gervais, Avista (E-mail)
Bradley Cebulko, UTC Staff (E-mail)

Enclosure

BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION

Avista Corporation d/b/a Avista Utilities, Report concerning its progress in meeting its conservation target during the preceding biennium	DOCKET UE-111882
Avista Corporation d/b/a Avista Utilities, Prudence of natural gas demand side management program expenditures during the prior two years	DOCKET UG-141215

COMMENTS OF PUBLIC COUNSEL

JUNE 30, 2014

I. INTRODUCTION

1. Public Counsel respectfully submits these comments pursuant to the Commission's June 6, 2014 Notice for Comments in consideration of Avista's Biennial Conservation Report (BCR) for 2012-2013, and the June 6, 2014 Notice for Comments regarding Avista's request for a finding of prudence of its conservation program expenditures for 2012-2013. The initial sections of our comments are focused on electric conservation achievement toward the Energy Independence Act (EIA) target. The remainder of our comments pertain to both the electric and natural gas portfolios, including discussion of evaluation results (impact and process), DSM prudence, and issues requiring future attention from the Company, the Commission, and Advisory Group.

Public Counsel Recommendation

Public Counsel does not have a specific recommendation at this time regarding Avista's reported conservation achievement for the 2012-2013 biennium as we are seeking further clarification from Avista regarding the company's claim of 21,179 MWh from the 2011 CFL contingency program. Even without the CFL contingency savings, however, Avista has met its 2012-2013 biennial conservation achievement target.

Public Counsel anticipates updating its recommendation, as necessary, prior to the July 25, 2014, Open Meeting based on further clarification from the Company and to address any other issues that may arise based on our review of other stakeholder comments.

With respect to Avista's request for a finding of prudence of its conservation expenditures for 2012-2013, Public Counsel is not requesting adjudication of the Company's filing. Our comments discuss issues for further attention going forward, including the reorganization of the Avista DSM group, cost-effectiveness, response to evaluation recommendations, and consultation with the Advisory Group.

II. BIENNIAL RESULTS

A. Biennial Conservation Target and Reported Achievement.

2. Avista's biennial conservation target for 2012-2013 was a range, from 108,589 MWh to 197,557 MWh. When it filed its biennial conservation plan (BCP), Avista estimated that distribution efficiency would account for approximately 30% of the conservation target, and the remaining 70% (76,202 MWh) would be achieved through electric end-use efficiency programs and regional market transformation efforts of the Northwest Energy Efficiency Alliance (NEEA). The electric efficiency portion of the target was based upon a Conservation Potential Assessment (CPA) focused on Avista's service territory.

3. Avista requested a conservation target range, citing "uncertainties inherent in the estimation process,"[1] the economic recession's adverse impact on projections, the impact of tax credits advancing efficiency opportunities in prior years, as well as "improvements in technology

[1] UE-111882, Biennial Conservation Plan (BCP), November 1, 2011, p. 6.

ATTORNEY GENERAL OF WASHINGTON
Public Counsel
800 5th Ave., Suite 2000
Seattle, WA 98104-3188
(206) 464-7744

options and implementation strategies."[2] One of the estimation uncertainties concerned the savings associated with NEEA, and as discussed below, actual savings reported by NEEA were substantially higher than estimated in Avista's 2012 DSM business plan and incorporated in the biennial conservation target.

4. Avista has reported conservation achievement of 192,749 MWh for the biennium.[3] The reported savings are allocated across the Company's programs as shown in Table 1 below.[4]

Table 1: Avista 2012-2013 Conservation Achievement

Sector	MWh	% of Total Savings
Residential	45,036	23%
Commercial & Industrial	70,994	37%
NEEA	34,427	18%
Distribution Efficiency	42,292	22%
TOTAL	**192,749**	**100%**

5. Avista's reported results are substantially higher than the low-end or EIA penalty target, as discussed below.

B. Expenditures.

6. Avista reported total expenditures for the biennium of $35.5 million, including expenses for distribution efficiency of $4.0 million.[5] Further detail regarding expenditures across major program areas is shown in Table 2 below.

[2] Avista BCP, p. 7.
[3] Testimony of Mr. Bruce W. Folsom, Exhibit No. BWF-1T, p. 7.
[4] Avista Corp. Report of Conservation Achievement for 2012-2013 filed with Dept. of Commerce, May 30, 2014.
[5] Avista Corp. Report of Conservation Achievement for 2012-2013 filed with Dept. of Commerce, May 30, 2014.

Public Counsel
800 5th Ave., Suite 2000
Seattle, WA 98104-3188
(206) 464-7744

7.

Table 2: Avista 2012-2013 Conservation Expenditures

Sector	Dollars	% of Total Costs
Residential	$6,726,974	19%
Commercial & Industrial	$16,874,768	47%
NEEA	$2,977,549	8%
Distribution Efficiency	$4,031,731	11%
General Expenses	$4,965,818	14%
TOTAL	**$35,576,840**	**100%**

8. Avista reported total expenditures of $31.5 million to acquire electric efficiency savings in Washington for 2012-2013 (this does not include expenses for distribution efficiency savings).[6] Expenditures for electric efficiency were nearly identical to the amount spent in the prior 2010-2011 biennium ($31.2 million). Of the $31.5 million total expenditures, about 19 million (60%) was returned to customers in the form of incentive payments, and the remaining $12.5 million (40%) was allocated to program administration, including labor, evaluation, and marketing costs.[7]

C. Reported Savings Substantially Higher than Biennial Target.

9. Avista's reported conservation achievement is 178% higher than the conservation target (low-end, or EIA penalty target). The primary drivers of these higher than anticipated results include the following:

[6] Testimony of Mr. Bruce W. Folsom, Exhibit No. BWF-1T, p. 2. This does not include funds spent to implement distribution efficiency savings.

[7] Avista's 2014 budget for the Washington electric energy efficiency portfolio is lower ($10.8 million, as compared with the $14.9 million spent in 2013, for example), with a lower portion of the budget allocated to incentives (44%). UE-111882, Revised 2014 DSM Business Plan, April 15, 2014, Table 5, p. 18. A primary driver of the lower budget appears to be reduced expected incentive payments for the non-residential sector. *Id.* Avista has indicated that one factor is the higher incentive payments made in 2012-2013 for the successful T-12 to T-8 lighting program.

Public Counsel
800 5th Ave., Suite 2000
Seattle, WA 98104-3188
(206) 464-7744

- NEEA's reported regional market transformation savings were 234% of the original forecast amount included in Avista's biennial conservation target.
- Behavior measures had not been analyzed and included in Avista's biennial conservation target, but the company launched a residential behavior program in 2013 resulting in 6,220 MWh of savings, or 8% of the biennial target for electric efficiency measures.
- Distribution efficiency measures achieved savings of 42,292 MWh, 130% of the original forecast.
- Avista has also reported savings for 2012 from the CFL contingency program that sent eight CFLs to Avista's customers in 2011, but the program was not incorporated in the Biennial Conservation Plan (BCP) or the 2012 DSM Business Plan.

1. NEEA.

10. At the time of the company's biennial conservation plan and 2012 DSM business plan filing, Avista projected 14,716 MWh of savings from NEEA for the biennium.[8] This was based upon forecasted savings provided by NEEA, of 1.2 aMW (10,512 MWh) for 2012, in Avista's Washington and Idaho service territory.[9] Avista projected this same level of savings for 2013.[10] Applying the 70% allocation factor that Avista and NEEA have used to allocate savings to Avista's Washington service territory results in estimated savings of 7,358 MWh each year, or 14,716 MWh for the 2012-2013 biennium from NEEA's regional market transformation efforts.

11. NEEA's actual reported savings for Avista for the 2012-2013 biennium were 34,427 MWh, 234% higher than the original forecast for the biennium. Our understanding is that this is due in large part to NEEA's successful television initiative, which accounted for about 55% of reported savings for the biennium.[11]

---

[8] Illustration No. 1 in the testimony of Mr. Folsom (Exhibit No. BWF-1T) is somewhat misleading inasmuch as it suggests that regional market transformation was not included in the 2012-2013 conservation target. However, regional market transformation savings were included in Avista's 2012-2013 biennial conservation plan (BCP) as well as the 2012 Business Plan.

[9] UE-111882, Revised 2012 DSM Business Plan, December 7, 2011, p. 34.

[10] UE-111882, Avista response to informal discovery regarding BCP and 2012 Business Plan, November 18, 2011.

[11] UE-111882, Avista response to Public Counsel informal data request No. 2, Memo from NEEA to Avista reporting savings for the biennium, dated May 15, 2014.

2. Residential Home Energy Reports (HER) Program.

12. Avista's conservation potential assessment (CPA) that developed the 2012-2013 biennial target did not include behavioral measures in the analysis of cost-effective achievable conservation potential. However, subsequent to the Commission's approval of the 2012-2013 biennial conservation targets, Avista determined that residential behavior-based measures had in fact become cost-effective, and the program was incorporated in the 2013 annual DSM business plan, although at that time the program design was still being developed.[12]

13. Avista launched its Home Energy Reports (HER) behavior program in 2013, administered by Opower. Avista has reported 6,220 MWh savings in 2013, based on the impact evaluation by Cadmus.[13] While this measure was not evaluated in the CPA that developed the biennial conservation target, Public Counsel supports Avista's proposal to claim these savings in 2013. In our view, the company's decision to pursue this cost-effective program is consistent with the expectation that Avista adaptively manage its energy efficiency portfolio, including implementation of new measures that become cost-effective, or potentially terminating or modifying programs or measures that are no longer cost-effective. Avista also appropriately included this program in the 2013 DSM Business Plan. For the 2014-2015 biennium, the projected HER savings have been included in the establishment of the biennial conservation target.

3. Distribution efficiency.

14. Avista's pursuit and achievement of distribution efficiency savings is one of the highlights of the 2012-2013 biennium. The company's biennial conservation target included

[12] Exhibit No. BWF-1T, p. 10. *See also*, 2013 DSM Business Plan, November 1, 2011, Appendix A, pp. 84-86.
[13] UE-111882, Direct Testimony of Bruce W. Folsom (BWF-1T), p. 10. *See also* Exhibit No. MSK-2, pp. 73-88.

ATTORNEY GENERAL OF WASHINGTON
Public Counsel
800 5th Ave., Suite 2000
Seattle, WA 98104-3188
(206) 464-7744

substantial projected savings from distribution efficiency (32,387 MWh) and therefore the Commission's approval of the target required Avista to conduct an independent third-party impact evaluation of distribution efficiency savings.[14] This evaluation was performed by Navigant Consulting.[15] Avista implemented a conservation voltage reduction (CVR) as part of its two smart grid projects in Spokane and Pullman. The Spokane smart circuits project included upgrades to substations and feeders, and the Pullman Smart Grid Demonstration Project included distribution system updates and advanced meter infrastructure. Both projects utilized Integrated Volt Var Control (IVVC) and began in September, 2013 and concluded on December 31, 2013. The IVVC module issues commands to stations and midline regulators to maintain voltage at minimum levels within a specified deadband range.[16]

15. Navigant evaluated the CVR savings using two methods, the RTF's CVR Protocol 1, as well as Navigant's regression method. Interestingly, both methods found nearly identical savings estimates (statistically identical). Avista's reported results of 42,292 MWh, or 130% of the original minimum savings projection, utilized the RTF's CVR Protocol. However, Navigant recommends the RTF consider adopting the alternative regression approach that Navigant also used to evaluate savings for automated CVR programs because it produces similar results, and is less burdensome to implement.[17] This is an excellent example of promising evaluation results that may have significant benefit not only for Avista, but the region.

---

[14] UE-111882, Order 01, condition (6)(g) at ¶ 28.
[15] The impact evaluation is included in the BCR filing in Exhibit No. BWF-2, pp. 70-104.
[16] Exhibit No. BWF-2, p. 78.
[17] Exhibit No. BWF-2, p. 77.

4. CFL contingency.

16. Avista's reported conservation achievement for the biennium includes 21,179 MWh of savings in 2012 based upon the company's 2011 CFL contingency program that mailed eight CFLs to residential and small business customers in Washington.[18] The general basis for the savings claim is that because the bulbs were delivered in July through November, 2011, some bulbs will likely be installed in 2012 and thus the "first year savings" occur partly in 2011 and partly in 2012. The 2012 savings claim of 21,179 MWh is based on an engineering review by Cadmus, and is calculated using a methodology and key assumptions that differ from those used to calculate savings for 2011.[19] The savings for 2012 were developed by calculating savings using the new methodology and assumptions, and subtracting the savings already claimed for 2011.[20] While the 2012 methodology is based on engineering review, the 2011 CFL contingency savings were based on impact evaluation by Cadmus and approved by the Commission.[21]

17. Public Counsel has significant concerns with Avista's proposal to claim savings in 2012 for the 2011 CFL contingency program, both in terms of the methodological issues raised, and in terms of the process and compliance with the Commission's conditions approving the 2012-2013 biennial conservation target. Ultimately, the Company could have provided greater clarity and transparency on this issue by identifying it in relevant filings with the Commission and consulting with the Advisory Group regarding this new approach to measure savings from the CFL contingency program.

---

[18] Exhibit No. BWF-1T, pp. 9-10.
[19] Exhibit No. MSK-2, pp. 121-124.
[20] Exhibit No. MSK-2, p. 121, Section 5.1.
[21] UE-100176, Order 03, September 27, 2012. The Commission did not approve Avista's proposal to claim savings for the *retail* CFL program, Simple Steps™, using a three-year projected installation rate, and instead required utilization of RTF approved savings for the *retail* CFL program. The CFL contingency program, however, was

Public Counsel
800 5th Ave., Suite 2000
Seattle, WA 98104-3188
(206) 464-7744

18. At this time we are not yet convinced it is appropriate for Avista to claim these savings, but we are still seeking clarification from the company on certain aspects of the proposal. Our methodological concerns include that the approach proposed by Avista is extremely unique in several ways. First, we are not aware of a precedent for claiming savings in 2012 for a measure delivered in 2011. While we understand the logic of 'first year savings,' and the timing of the CFL contingency program, allocation of reported savings across multiple years is not typically done, so in this regard the proposal is without precedent.[22] Second, the new methodology and assumptions used to calculate 2012 savings appears to utilize assumptions for an in-service rate for CFLs adopted by the RTF in October, 2013, but may not incorporate updated baseline assumptions that were also adopted by the RTF at that same time. If that is the case, we would need to consider whether it is appropriate to utilize some, but not all, of the RTF's updated decisions for CFLs. Third, the RTF's updated residential lighting workbook for CFLs that Cadmus relies upon appears to limit application of those assumptions to unsolicited mail delivery of no more than four bulbs per household, and Avista's program sent eight bulbs.[23]

19. Public Counsel also has concerns regarding compliance with the Commission's conditions, including those that call for "a high degree of transparency, and communication and consultation with external stakeholders"[24] and specify that the Advisory Group shall advise on evaluation, measurement, and verification protocols.[25] While Avista did have discussions with

based upon impact evaluation, as the RTF did not have an approved savings value at the time the program was launched, and the Commission accepted Avista's proposed savings for the 2011 CFL contingency.

[22] For reporting utility conservation savings, for example, standard practice has been that a retail CFL or LED purchased in December will be reported as having 'annual savings' for the calendar year in which it was purchased or delivered, while technically the bulk of savings will accrue the subsequent calendar year.

[23] *See* RTF Residential Lighting Workbook (v 3.2), 'StorageTakebackRemoval' worksheet: http://rtf.nwcouncil.org//measures/measure.asp?id=141

[24] UE-111882, Order 01, condition (2) at ¶ 24.

[25] UE-111882, Order 01, condition (3)(a)(i) at ¶ 25.

the Advisory Group regarding alignment between Avista's savings estimates for various measures and RTF approved savings, the company did not directly consult with the Advisory Group regarding this proposal to calculate 2012 savings for the CFL contingency program using a new methodological approach. Given the unique, unprecedented and complex nature of the proposal, and in light of the large scope of the CFL contingency program, Avista should have consulted with the Advisory Group. These savings were also not included in any DSM planning documents filed with the Commission, such as the biennial conservation plan (BCP), 2012 Business Plan, or the 2013 DSM Business Plan.[26] Similarly, 2012 savings from the CFL contingency were not reported in the 2012 Annual Report on Conservation.[27] The Company has indicated that is because the program was not delivered in 2012, but again, this reveals the unique nature of the proposal because typically the annual reports include reporting of conservation acquired that year. Plans for evaluating 2012 savings from the CFL contingency were also not specifically discussed in the 2013 Annual EM&V Plan.[28]

D. Compliance.

20. Avista timely filed its Biennial Conservation Report (BCR) on May 30, 2014, identifying its progress toward meeting its conservation target, in compliance with RCW 19.285.070 and WAC 480-109-040. As noted above, we are still seeking clarification regarding Avista's reported conservation achievement of 2012 savings claims from the 2011 CFL contingency program. Therefore, Public Counsel does not have a specific recommendation at this time

[26] Public Counsel recognizes that the BCP and 2012 Business Plan were filed prior to the Commission's decision referenced in Mr. Folsom's testimony regarding use of the RTF savings. Exhibit No. BWF-1T, p. 9. However, the Commission's decision regarding use of RTF approved savings concerned Avista's proposal for savings from the *retail* CFL program, Simple Steps™ and not the CFL contingency program. UE-100176, Order 03, September 27, 2012.

[27] UE-111882, Order 01, condition (8)(c) requires the filing of a 2012 Annual Report on Conservation Acquisition.

ATTORNEY GENERAL OF WASHINGTON
Public Counsel
800 5th Ave., Suite 2000
Seattle, WA 98104-3188
(206) 464-7744

regarding Avista's reported conservation achievement for the biennium. We anticipate providing a recommendation at the Commission's July 25, 2014 Open Meeting, once we have had an opportunity to review the comments of other stakeholders and upon further clarification from the company. Even without the 2012 CFL contingency savings, however, Avista has met its 2012-2013 biennial conservation achievement target. We applaud the company on this significant achievement in support of cost-effective conservation acquisition.

21. Avista has reported that the Company complied with the Commission's conditions set forth in Order 01, approving the biennial conservation target. Mr. Folsom discusses this in his testimony and provides an Exhibit with further detail.[29] With respect to independent third-party evaluation required by Order 01, the distribution efficiency savings were evaluated by Navigant, and electric efficiency programs were evaluated by Cadmus. As discussed earlier, our only concern at this point regarding compliance with conditions pertains to the lack of direct consultation with the Advisory Group regarding the new approach and proposal to claim 2012 savings for the CFL contingency program.

III. EVALUATION, MEASUREMENT, AND VERIFICATION

22. The Commission's approval of Avista's biennial conservation target included several conditions to ensure the company's acquisition of this least-cost resource is supported by rigorous evaluation, measurement, and verification. As described above, independent third-party evaluation of distribution efficiency savings, as required in Order 01, was performed by Navigant and yielded promising results. The independent third-party evaluation of electric efficiency programs was performed by Cadmus, as discussed below.

[28] UE-111882, 2013 Energy Efficiency Evaluation, Measurement & Verification (EM&V) Annual Plan, November 1, 2012.

23. The reports completed by Cadmus regarding the electric end-use efficiency portfolio and included with Avista's May 30, 2014 conservation compliance filing are as follows:

1. 2012-2013 Washington Electric Impact Evaluation Report (Exhibit No. MSK-2)
2. 2012 Washington Gas Portfolio Impact Evaluation Report (Exhibit No. MSK-3)
3. 2013 Washington Gas Portfolio Impact Evaluation Report (Exhibit No. MSK-4)
4. Avista 2012-2013 Process Evaluation Report (Exhibit No. MSK-5)

24. The portfolio impact evaluation reports provide verified savings results for 2012 and 2013, and are discussed below. All of the evaluations (process and impact) outline key findings and recommendations that may inform program design modifications, new internal protocols or systems, or future evaluation activities. The findings and recommendations are too numerous to repeat in these comments, but in our discussion below we highlight certain issues of particular relevance to the Commission and the stakeholder advisory group. We look forward to robust discussion with the company and the Advisory Group regarding these recommendations in the months ahead.

A. Third-Party Verification of Reported Electric Conservation Savings.

25. The Electric Impact Evaluation Report found an overall realization rate of 97 percent, comparing Washington reported savings to gross verified savings. This verification rate is higher than the verification rate of 89% for the prior biennium (2010-2011). One of the main factors causing adjustments to savings last biennium was the application of modifications to Avista's original unit energy savings (UES) values due to the development of the Technical Reference Manual (TRM) compilation of measures and UES values. To some extent this continued in the 2012-2013 biennium as well, as Dr. Khawaja observed: "[s]ignificant effort by

[29] Exhibit No. BWF-1T, and Exhibit No. BWF-2, pp. 35-63.

ATTORNEY GENERAL OF WASHINGTON
Public Counsel
800 5th Ave., Suite 2000
Seattle, WA 98104-3188
(206) 464-7744

Cadmus engineers and senior staff went into modifying unit energy savings (UES) values in the TRM where necessary."[30]

26. For the 2012-2013 biennium, verification methods varied by sector (residential, non-residential, low income). The residential sector evaluation included billing analysis of certain programs, savings analysis, telephone surveys to verify measure installation, record review, and database review.[31] The non-residential sector evaluation included site visits, metering, project level billing analysis, and general engineering calculations.[32] The low income sector impact evaluation included billing analysis.[33]

27. *Residential.* The residential electric efficiency sector was found to have a realization rate of 90%.[34] The realization rates by program varied from a low of 19% for the EnergyStar products program, where reported savings were adjusted to match RTF-approved savings[35], to a high of 152% for the weatherization/shell program, analyzed through billing analysis. The largest residential program, retail upstream lighting (Simple Steps), accounting for 67% of sector savings (16,059,081kwh), was verified at 100%. The second largest residential program, manufactured home duct sealing (2,815,805 kwh; 12% of sector savings) had a realization rate of 74%, analyzed through billing analysis and energy-savings estimation.[36]

28. *Non-residential.* The non-residential sector was found to have total evaluated savings of 67,649,637 kwh, with a realization rate of 95.5%. Of the 6,476 measures installed through the

---

[30] Direct Testimony of M. Sami Khawaja (Exhibit No. MSK-1T), p. 5.
[31] Exhibit No. MSK-2, pp. 17-18.
[32] Exhibit No. MSK-2, p. 92.
[33] Exhibit No. MSK-2. p. 110.
[34] Exhibit No. MSK-2, Table 57, p.71.
[35] Exhibit No. MSK-2, p. 46. The large difference between reported and RTF-approved savings is due to the RTFs' use of a current practice baseline, consistent with Council methodology.
[36] Exhibit No. MSK-2, Table 57, p. 71.

program, 142 were evaluated, representing 16% of sector savings.[37] Adjustments were made to reported savings for a variety of reasons including changes to baseline, operating hours, controls, heating or cooling loads, metering data, or data entry errors.[38] With respect to the site-specific (custom) projects, Cadmus observed that the projects tend to be more complex and difficult to estimate, and further, "the calculations often rely on participant-supplied building, equipment, and operations data, which may vary from parameters identified during an on-site verification visit."[39] Recommendations included creating a quality control system, streamlining project files to facilitate verification and review, and conducting follow-up on a random sample of projects.[40]

29. *Low Income.* The low income sector was evaluated through billing analysis, examining savings at the household level. The evaluation found a realization rate of 136%, with total evaluated savings of 1.5 million kwh for the biennium.[41] One reason for the higher realization rate was lower average reported savings this period as compared with prior years.[42]

30. *Residential Behavior.* The evaluation of the residential behavior program, administered by Opower, was also included in the electric impact evaluation. Because of the design of this program, billing analysis must be performed each year to determine differences in usage between the treatment group that receives reports about energy consumption, and the control group. Avista's program targeted residential customers with above-average electricity use. The process evaluation (Exhibit No. MSK-5) explains that "'based on initial cost-effectiveness analysis for program planning, Avista set a minimum energy consumption threshold of 18,000 kwh per year

[37] Exhibit No. MSK-2, p. 107
[38] *See* Exhibit No. MSK-2, pp. 98-107 for discussion of adjustments to non-residential prescriptive and site-specific program savings.
[39] Exhibit No. MSK-2, p. 101.
[40] Exhibit No. MSK-2, p. 108.
[41] Exhibit No. MSK-2, p. 115.

for targeted households." However, in order to fully populate the participant and control groups, this threshold was reduced to approximately 16,000 kwh.[43] It appears from the impact evaluation, however, that some participating households have consumption below 16,000 kwh, including usage below 13,340 kwh per year.[44] Public Counsel will clarify the specific eligibility criteria with Avista and Cadmus. The impact evaluation estimates savings per home of 135 kwh for program year 2013, or 1.6%. After accounting for net increase in participation in Avista's rebate programs (to avoid double counting of savings), the evaluation found savings of 6,220 MWh.[45]

31. Public Counsel has two suggestions for future evaluations of the HER program. We observed that the 2013 evaluation included a test for balance between the treatment and control groups that only examined pre-treatment consumption. The evaluations of the PSE HER program, in contrast, have typically included a test for balance that also examines household characteristics (e.g. square feet, bedrooms, bathrooms, age of house).[46] A more comprehensive test for balance is something to consider in future evaluations. In addition, another research area to consider in future evaluations is analysis of savings based on pre-treatment usage, such as by quartile, from lower to higher usage customers. Avista's HER program participants have a wide range of consumption patterns, and thus such analysis may help inform future program design or expansion. PSE's recent evaluation examined this and found that the top quartile (highest

---

[42] Exhibit No. MSK-2, p. 119.
[43] Exhibit No. MSK-5, p. 45
[44] Exhibit No. MSK-2, p. 73. The impact evaluation indicates that average consumption (mean) per home was 17,509 kwh in 2012, but the median usage was 15,950 kwh, and the 25th and 75th percentiles were 13,340 kwh and 20,170 kwh, respectively. *See* footnote 25.
[45] Exhibit No. MSK-2, Table 61 (135 kwh), Table 62 (1.6%) and Table 65 (net savings), pp. 83-87.
[46] Puget Sound Energy Home Energy Report Program, 2013 Impact Evaluation, DNV-GL, April, 2014, p. 6 and Appendix 7.1. Docket UE-111881, PSE Biennial Conservation Report, May 29, 2014, Attachment 6.

ATTORNEY GENERAL OF WASHINGTON
Public Counsel
800 5th Ave., Suite 2000
Seattle, WA 98104-3188
(206) 464-7744

consumption households) saved 4.1%, whereas the lower two quartiles saved 0.9% and 1.7%.[47] Both of these suggestions may be particularly relevant for Avista, given the range of customer usage and the inclusion of high-use multi-family customers. We will discuss these issues with Avista and the Advisory Group.

B. Third-Party Verification of Reported Natural Gas Conservation Savings.

32. Avista's May 30, 2014 filing also included impact evaluations of natural gas efficiency programs in Washington for 2012 and 2013. These evaluations examine Avista's reported savings and determine verified, or evaluated, natural gas energy efficiency savings for each year.

33. The 2012 natural gas impact evaluation found total savings in Washington of 604,708 therms, which represented 35% of the IRP target. The overall realization rate for the gas portfolio was 98.5%.[48] About half of the savings were from the residential and low-income sectors, and half from the non-residential sector. The residential evaluation included customer surveys and record review for a randomly selected sample of program participants. The 2012 review found that all measures in the residential sample were in place and operable, and only one measure was determined to be non-qualified out of the entire verification sample.[49] Further, Avista's residential program and tracking databases were found to be reliable and accurate, and adequate for evaluation purposes.[50] Residential high-efficient furnaces was the largest measure in terms of savings, with 226,524 therms in 2012 (37% of the entire gas portfolio).[51]

---

[47] Puget Sound Energy Home Energy Report Program, 2013 Impact Evaluation, DNV-GL, April, 2014, Figure 5-3, p. 14. Docket UE-111881, PSE Biennial Conservation Report, May 29, 2014, Attachment 6. Cadmus indicated in response to informal discovery that they had asked Opower for this data in the past, but that Opower is not allowed to share this with Cadmus or other third parties.

[48] Exhibit No. MSK-3, p. 8. The 2012 IRP target was established in the 2009 IRP, Docket UG-090015.

[49] Exhibit No. MSK-3, p. 15.

[50] Exhibit No. MSK-3, p. 8.

[51] Exhibit No. MSK-3, p. 19.

34. The 2013 impact evaluation found total natural gas efficiency savings in Washington of 613,788 therms, which represented 69% of the IRP goal. The overall portfolio realization rate was 96%.[52] As with the prior year, about half the savings were from the residential and low-income sectors, and half from non-residential programs. Again, the largest single measure in terms of savings achievement was residential efficient natural gas furnaces, representing 207,854 therms, or 34% of the entire gas portfolio.

35. The natural gas impact evaluations found that Avista's programs were generally implemented well. Residential tracking systems were found to be accurate and reliable, with sufficient information for evaluation purposes.[53] Many of the key findings and recommendations are identical to those in the electric impact evaluation report, particularly with respect to the non-residential sector. Those include recommendations for the non-residential sector that Avista: (1) streamline the file structure to enable easy identification of the latest documentation, (2) perform follow-up confirmation or site visits on a random sample of projects (at least 10%), and (3) flag projects for additional scrutiny of the paid invoice does not list installation labor.[54]

C. Cadmus Process Evaluation Findings and Recommendations.

36. In addition to the electric and natural gas impact evaluations, Avista contracted with Cadmus to conduct a portfolio-wide process evaluation of the 2012-2013 energy efficiency programs. The process evaluation included interviews with various stakeholders (Avista staff, third-party implementers, contractors), surveys of participants and non-participants, and review

---

[52] Exhibit No. MSK-4, pp. 9-10. The 2013 IRP goal was established in the 2012 IRP, Docket UG-121421.

[53] One exception noted in the 2013 impact evaluation was missing Avista account numbers on the Manufactured Home Duct Sealing project files (Exhibit No. MSK-4, p. 10), but Avista staff completed a matching analysis to determine account numbers (Exhibit No. MSK-4, p. 30).

[54] Exhibit No. MSK-4, p. 46. Regarding the need for streamlined file structure, the evaluators found that in some cases projects evolved over time, as the customer considered various iterations of measures, possibly depending

of tracking databases, program documentation and marketing materials.[55] The findings and recommendations in the process evaluation are listed in the testimony of Dr. Khawaja, thus we will highlight those of particular relevance to the operations and delivery of DSM programs.

37. A significant recent change at Avista is a newly announced reorganization of the DSM group. This reorganization has emerged in part as a result of what the process evaluation identified as "persistent organization challenges" and internal communications issues. These issues are discussed in the portion of the process evaluation regarding "program design, management, and implementation," both for the residential and non-residential portfolios, while noting that many of the issues "have primarily affected the nonresidential program internal review processes."[56] Cadmus observed that the 2011 process evaluation found a disconnect and confusion among Avista DSM staff as to whether DSM planning resided with DSM implementation staff, or with the Policy, Planning, and Analysis (PPA) group. While Avista took steps to examine and sought to address these issues in 2013, Cadmus found communication and collaboration challenges remained among Avista staff.[57] In April, 2014, Avista announced that the DSM program implementation and PPA staff would be placed under one common Senior Director (Mr. Kevin Christie), and in June, 2014, Avista announced that Dan Johnson would be Senior Manager, Energy Efficiency, with oversight of implementation staff and policy, planning

---

upon capital availability or interest. In these cases the final project measures and savings were not clearly documented. Exhibit No. MSK-4, p. 41.

[55] Exhibit No. MSK-5, p. 9.

[56] Exhibit No. MSK-5, p. 78 (nonresidential) and p. 43 (residential).

[57] Exhibit No. MSK-5, p. 43.

and analyst staff.[58] Public Counsel supports the company's efforts to ensure clear leadership and accountability, and greater clarity in roles and responsibilities.

38. Another major finding and area for improvement concerned verification protocols and quality assurance/quality controls for the non-residential portfolio.[59] Avista has implemented new procedures including "Top Sheets" checklists as described in the testimony of Mr. Chris Drake, to provide enhanced project documentation.[60] Yet, some concerns remain regarding the sufficiency of the new "Top Sheets" procedures, among Avista staff,[61] and with Idaho Commission Staff as articulated in comments filed in a recent prudency review proceeding of 2010-2012 DSM program expenditures.[62] The Cadmus process evaluation also recommends creation of a quality control system, in addition to the "Top Sheets," as well as additional follow-up measure confirmation and/or site visits, other documentation and tracking improvements, and an external third-party review of the Top Sheets.[63]

39. The process evaluation recommended that in addition to reorganization under central leadership, Avista should "develop standardized processes within the DSM group, including clear delineation of roles and precise description and assignment of all processes and

---

[58] Avista's Account Executive team and Manager Catherine Bryan have historically played a major role in identifying and coordinating non-residential customer participation in custom DSM projects under the 'site specific' program, and will report to Pat Lynch, Director of Energy Solutions, who will report to Mr. Christie. E-mail from Ms. Linda Gervais, Avista to Public Counsel and Commission Staff, June 26, 2014, Status Report filed with Idaho Public Utilities Commission, Dockets AVU-E-13-09 and AVU-G-13-02.

[59] *See, e.g.* Exhibit No. MSK-5, pp. 78-79, (Program Design, Management and Implementation, Internal Communication).

[60] Direct Testimony of Mr. Chris D. Drake, Exhibit No. CDD-1T, p. 14.

[61] Exhibit No. MSK-5, p. 62, Cadmus interviews December 2013-January 2014 with Avista, "noted internal disagreement regarding whether the Top Sheet process was working." *Id.*

[62] *In the Matter of Avista Corporation's Application for a Finding that it Prudently Incurred Its 2010-2012 Electric and Natural Gas Energy Efficiency Expenditures,* Idaho Public Utilities Commission case No AVU-E-13-09, AVU-G-13-02, Comments of the Commission Staff, March 6, 2014, pp. 8-11.

[63] Exhibit No. MSK-1T, pp. 13-16.

responsibilities for both residential and non-residential programs."[64] Indeed, Avista has recently drafted a Standard Operations Procedures (SOP) manual for its Washington operations, and provided the Manual to Commission Staff and Public Counsel on June 26, 2014. The Company plans to update the Advisory Group on the reorganization and SOP manuals very soon.

40. Public Counsel recognizes that Avista's DSM Group is going through a process of organizational change, and new leadership has only recently been announced. We recommend that Avista actively engage and consult with the Advisory Group to review Cadmus' impact and process evaluation findings, and to develop the company's actions and plans to respond to those findings and recommendations. We certainly recognize that the most recent evaluations were completed in May, 2014, and therefore, the Company is understandably still developing new protocols or structures in response to those findings. Public Counsel's understanding is that Avista is very eager to engage the Advisory Group on these matters, and that this is a top priority for the new leadership team.

IV. DSM PRUDENCE

41. In Dockets UE-110876 and UG-110877 the Commission approved a joint motion of Avista, Commission Staff, and Public Counsel, requiring Avista to file testimony and evidence regarding the prudency of DSM expenditures in conjunction with the Company's June 1, 2014 conservation compliance filing pursuant to the EIA.[65] Avista has met this obligation, submitting testimony and exhibits of Mr. Folsom, Dr. Khawaja, and Mr. Drake. The terms of the Memorandum of Understanding approved and adopted by the Commission in Order 05 allow for any party to request adjudicatory review of Avista's DSM prudence filing, and that Avista shall

---

[64] Exhibit No. MSK-1T, p. 14.

not oppose such request. At this time, Public Counsel is not requesting adjudication of Avista's DSM prudence filing.

42. As reflected in our comments above regarding the process evaluation findings, Avista's new DSM leadership team will need to devote significant attention to improve the communications, systems and procedures of the DSM group. In addition, cost-effectiveness will be another major area of focus, as both the electric and natural gas portfolios are close to the 1.0 threshold. While the electric Total Resource Cost (TRC) was 1.31 for the biennium, it trended downward to 1.09 in 2013.[66] The natural gas portfolio cost-effectiveness continues to be challenged in an environment of low gas prices, with a cost-effectiveness ratio of 1.03 in 2013 according to the Utility Cost Test (UCT), excluding costs and benefits from the low income portfolio.[67] Recommended areas for focus, based on Cadmus' findings, include examination of: (1) non-energy benefits, (2) labor and other non-incentive utility costs, and (3) measure or program cost-effectiveness screening analyses to ensure alignment with industry best practices.

V. ISSUES FOR FUTURE ATTENTION

43. Public Counsel commends Avista and specifically its DSM group for the substantial accomplishments achieved during the 2012-2013 biennium to acquire cost-effective conservation resources in excess of the biennial target. Avista has pursued innovative programs for all sectors, such as the T-12 to T-8 lighting conversion for non-residential customers, the expansion of residential lighting measures to include LED lamps and fixtures, a new residential behavior

---

[65] Dockets UE-110876 & UG-110877, Order 05, *Order Granting Joint Motion for Resolution of DSM Prudence*, August 18, 2011.
[66] Exhibit No. BWF-1T, p. 2 (biennium); Exhibit No. BWF-2, 2013 Annual DSM Report, Washington, p. 6 (2013 TRC).
[67] Exhibit No. BWF-2, 2013 Annual DSM Report, Washington, p.8.

ATTORNEY GENERAL OF WASHINGTON
Public Counsel
800 5th Ave., Suite 2000
Seattle, WA 98104-3188
(206) 464-7744

program, and substantial achievement of distribution efficiency savings through automated conservation voltage reduction (CVR).

44. In reviewing the BCR and prudence filing of Avista for this second biennium of implementation under the Energy Independence Act, we have identified some issues that would benefit from further attention going forward from the Company, the Commission, and Advisory Group. Many of the issues outlined below apply to the other IOUs as well.

- *Reorganization of DSM Group.* Public Counsel looks forward to learning more about the new leadership team, its priorities for the near term, and plans to engage with the Advisory Group.

- *Cost-effectiveness review.* The natural gas portfolio was just barely cost-effective under the utility cost test (UCT, or PACT) and thus will continue to require significant attention for possible modifications to improve cost-effectiveness. Cadmus recommended Avista may benefit from third-party review of cost-effectiveness screening processes to ensure high-quality analysis that aligns with best practices.[68] Additional areas of focus include non-energy benefits as well as Avista's labor costs.

- *Prudence review and consistent reporting.* Public Counsel recognizes that we do not currently have consistent reporting requirements and procedures for DSM prudence review for all of the IOUs. The Commission and stakeholders would benefit from greater consistency in this regard, and we look forward to discussing this issue further, most likely as part of the EIA rulemaking proceeding.

- *Distribution efficiency evaluation protocol.* As noted in the evaluation by Navigant, Avista and Navigant should consider presenting the automated CVR evaluation methodology to the RTF for possible adoption.

- *Evaluation, measurement, and verification (EM&V).* In addition to reviewing and addressing the impact and process evaluations of Cadmus, Avista will shortly be issuing a Request for Proposals (RFP) for EM&V of conservation achievement for the 2014-2015 biennium.

- *NEEA Regional Market Transformation Savings.* For the 2012-2013 biennium, the electric IOUs used divergent methodologies for incorporating NEEA into the target and reporting NEEA savings. For the 2014-2015 biennium, a consistent approach was sought and NEEA savings were excluded from the penalty targets, although by condition the

[68] Exhibit No. MSK-1T, p. 12.

companies agreed to continue to pursue regional market transformation efforts. This is a topic for further review in the EIA rulemaking proceeding.

- *Components of biennial conservation report filing.* Public Counsel recognizes that a substantial amount of detail was included in the testimony and exhibits filed by Avista in the BCR and prudence review. While the issue of consistency in reporting is being considered in the EIA rulemaking proceeding, based on our recent review we have the following additional suggestions for inclusion with the BCR filing (these suggestions would apply to all IOUs):
  - A summary exhibit showing conservation savings and expenditures by sector and program, for the biennium and each year. PSE has consistently provided such a document and it greatly facilitates stakeholder review of the BCR.[69]
  - The biennial conservation report filed with the Department of Commerce.
  - An explanation of NEEA savings, comparison of forecast to actual savings, and the memorandum from NEEA to the utility regarding biennial conservation savings.

VI. CONCLUSION

45. The prior biennium saw significant accomplishments by Avista to acquire cost-effective conservation resources in excess of the biennial conservation target. Some of the highlights achieved by Avista this biennium include a very successful T-12 to T-8 lighting program for non-residential customers, the inclusion of LED bulbs and fixtures in the upstream lighting program in 2013 that resulted in higher savings, the launch of a residential behavior program in 2013, and achievement of higher than expected savings from the commissioning of automated conservation voltage reduction.

46. At the time of preparing these comments, we are still seeking clarification regarding Avista's reported conservation achievement of 2012 savings claims from the 2011 CFL contingency program. Therefore, Public Counsel does not have a specific recommendation at this time regarding Avista's reported conservation achievement for the biennium. We anticipate providing a recommendation at the Commission's July 25, 2014 Open Meeting, once we have had an opportunity to review the comments of other stakeholders and upon further clarification from the company. Even without those CFL contingency savings, however, Avista has met its 2012-2013 biennial conservation achievement target. We applaud the company on this significant achievement in support of cost-effective conservation acquisition.

47. As discussed above, we recommend that Avista actively engage and consult with the Advisory Group regarding the recent evaluation recommendations and the Company's development of new systems, procedures, and plans to address those recommendations. Avista has conveyed that the Company is eager to do this, and will make plans to schedule a meeting with the Advisory Group shortly after Mr. Johnson assumes his new role on July 1, 2014.

48. Public Counsel will have representatives at the Commission's July 25, 2014 Open Meeting to address these comments.

[69] *See* UE-111881, PSE Biennial Conservation Report, May 29, 2014, Attachment 2, 2012-2013 Exhibit 1: Savings and Expenditures Extracts.