November 28, 2017

Public comments In the matter of **Docket UE-171091** (Avista Utilities proposal for its 2018-2027 achievable conservation potential and 2018-2019 Biennial Conservation Plan) submitted by:

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Submitted to:

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These comments have also been submitted in electronic form to the Commission Records Center at records@utc.wa.gov.

Introduction

Avista's filing of their Biennial Conservation Plan (BCP) and their proposal for recognition of a numerical acquisition target for the 2018-2019 biennium, in compliance with the provisions of Washington Administrative Code (WAC) 480-109-100 and 480-109-120, is the primary opportunity for the stakeholder and regulatory review of the target setting methodology and utility planning efforts. It is also the most appropriate opportunity to offer suggestions for improvements to the Company's approach as well as to the manner in which these efforts are regulated. Towards that end, I offer the following comments in the spirit of enhancing the statewide benefits of energy efficiency. My comments touch upon the target setting process, measurement and evaluation of acquisition, the Company's programs and the management of those programs.

Methodological asymmetries between the acquisition target and measurement of verified acquisition

Core to the intent Initiative 937 (I-937), which serves as the foundation of this process, was to augment the regulatory approach for holding electric utilities accountable for the acquisition of cost-effective electric efficiency resources. Towards that end I-937 called for a quantification of the cost-effective and achievable

efficiency resources available to a utility using a methodology consistent with that employed by the Northwest Power and Conservation for direct comparison to the verified actual acquisition after the close of the biennium. Key to this process is the need for symmetry between the methodology used to establish the acquisition target and the methodology applied to measure actual acquisition. There are two such methodological flaws of particular concern within Avista's filing:

1. The Company has proposed an acquisition target based upon the results of their most recent Integrated Resource Plan (IRP). The IRP establishes the quantity of efficiency resources accepted into the optimal resource mix by testing efficiency measures which can be categorized and their characteristics fully identified. Though there are pro's and con's to Avista's approach, when properly executed it is an acceptable methodology with some caveats[1]. This approach is capable of testing prescriptive efficiency measures and some, but not all, industrial measures. Omitted from this process is the significant resource potential available from unique "one off" cost-effective efficiency measures which are not amenable to categorization and whose anticipated cost, energy savings and resource opportunity cannot be defined in advance. Yet there is a long history of the Company successfully acquiring these resources through their Site-Specific program and, per their BCP, such acquisition is planned to continue.

   The Company's BCP indicates that 21% of the local acquisition target is expected to be achieved by the Site-Specific program[2]. Historically approximately half of this acquisition consists of efficiency measures which were not incorporated into the target setting methodology because they cannot be readily categorized and defined. This creates an asymmetry in that the Company is not recognizing the full proven achievable and cost-effective efficiency resource potential in establishing their target.

   The recognition of this asymmetry should in no way be grounds for not pursuing these cost-effective efficiency resource opportunities, but it is grounds for reconsideration of the acquisition target that the Company has proposed. Specifically, it would be appropriate to increase the acquisition target by an estimate of the cost-effective resource potential of measures which could not be generically categorized and tested within the IRP. A reasonable estimate of the acquisition potential could be derived from a historic review of the performance of the Site-Specific program and adding to the target an amount equal to all historically achieved acquisition that was not tested as part of the IRP process. This would remedy the asymmetry issue. Lacking such an adjustment the Company will be pursuing a

target that is likely less than 90% of their resource potential while applying 100% of their portfolio achievement towards meeting that target.

2. As previously stated, Avista's proposed acquisition target is based upon the quantity of efficiency resources selected within the IRP. The selected resources presumably pass the Northwest Power and Conservation Council cost-effectiveness test (which is close but not identical to the Total Resource Cost test as defined within the California Standard Practice Manual). Yet when the Company ultimately claims acquisition towards achieving the defined target that acquisition will be based upon the total portfolio acquisition, to include non-cost-effective measures which did not contribute towards the calculation of the target. The pursuit of non-cost-effective measures will degrade the cost-effectiveness of the overall portfolio, but a significant quantity of non-cost-effective resources can be obtained before the overall portfolio is reduced below the minimal cost-effectiveness threshold.

   This amounts to allowing the Company to purchase their achievement of the acquisition target through the non-cost-effective expenditure of ratepayer funds.

   To better align utility and ratepayer interests, it would be useful to provide proactive guidance indicating that only acquisition derived from measures which were accepted into the IRP preferred resource portfolio or were proven cost-effective at the measure level of granularity will be credited towards meeting the Company's biennial efficiency resource acquisition target[3].

Avista's Natural Gas Multi-Family "Market Transformation" program

The Company's BCP includes the continuation of a "market transformation" fuel-efficiency program targeted for the multifamily housing segment. By referencing the effort as market transformation program the Company is able to trigger a provision within Schedule 90 (governing Avista's electric efficiency program operations) that allows for incentives of up to 100% of the project incremental cost in place of the lower incentive cap applicable to traditional efficiency acquisition programs[4]. Consequently, the program is permitted to fully fund project developers for the entire incremental cost associated with the installation of natural gas infrastructure and end-use equipment.

However, this program lacks the key elements that distinguish a market transformation program from traditional efficiency programs which would, as required by Schedule 90, operate at a lower incentive cap. Most critically the program lacks trigger points that would lead to an exit strategy, the key characteristic that

differentiates a market transformation program from traditional acquisition programs. In fact, the history of the program has been that it has operated for over ten years without a managing towards a defined exit strategy and without transparently reporting market indicators leading to an exit strategy. The period of time that the program has remained in place alone is grounds for rejecting its current claim to market transformation status.

Terming this program market transformation over the course of a full decade while failing to follow even the most basic tenets of market transformation program management seem to have the objective of marketing an expansion of the Company's natural gas infrastructure at ratepayer expense through the use of enhanced incentives.

None of my previous comments should be construed as to be unfavorable towards the serious pursuit of market transformation efforts, either within this sector or in general. But claiming that Avista's current program is or has been a market transformation program is an incorrect application of the term and does damage to the favorable reputation that professionally implemented market transformation ventures have achieved in the northwest over the past quarter century.

Though the program may well merit continuation, it would be appropriate to clearly re-designate it as a traditional acquisition program and exclude it from the definition of market transformation for purposes of Section 4.1.3 of Avista's Schedule 90.

Utility receptivity to non-utility implementation opportunities

The Company completes a biennial IRP process which can, but rarely does, trigger the need for a Request for Proposals (RFP) for additional resources. As long as the Company pre-acquires sufficient resources so as to indicate that there isn't a near-term resource deficit the need to formally expose the utility to external proposals under the full view of regulatory staff can for the most part be avoided.

The ability to avoid the release of a transparent demand-side RFP has led to a notable tendency for the utility to be unduly dismissive of attractive opportunities for engaging external parties in the pursuit of cost-effective efficiency measures in preference for internal programs which expand the size of internal staff and allow for the leveraging of efficiency programs to enhance their corporate image. While it is not, to me at least, objectionable for the corporate image to be enhanced as a result of competently managed efficiency programs in full compliance with all regulatory requirements, it does not serve the interest of the ratepayer to

overlook the conflict of interest that this process presents to the utility. This is particularly true when there are clear indicators that the conflict of interest has distorted the management of the energy efficiency portfolio.

The Commission is currently engaged in a rulemaking process for WAC 480-107. Much of that process has been devoted to the complex nature of evaluating bids for supply-side resources as part of an RFP process; a complicated process with many moving parts. The question of the treatment of RFP's for efficiency resources is potentially a separable and much easier task. Though energy efficiency can cumulatively become a sizable resource over the planning horizon, it is acquired through a large number of small resources over a long period of time. The cost-effectiveness of external proposals can be easily and transparently evaluated against the avoided cost standard established in the prior IRP. Such evaluation of external proposals can and has been completed in previous demand-side RFP's in the distant past. Though in theory the Company has stated that they are open to such proposals on an ongoing basis, the reality is such proposals will only receive a fair evaluation if there is a higher degree of regulatory oversight.

Though suggestions for revisions to this process may be more appropriate within the ongoing WAC 480-107 rulemaking process, it is also quite relevant to the scope of the BCP process within this docket. Consequently I would respectfully propose consideration of a requirement for a biennial fully transparent demand-side RFP timed so as to inform the subsequent BCP. This would be a significant step towards remedying the conflict of interest that the currently exists. Such a process would certainly bring forth additional efficiency resource opportunities that are discouraged or suppressed under the current system.

Compromised independence of Avista's third party evaluator

Per WAC 480-109-110 (1) (d) the Company must complete an "Independent third-party evaluation of portfolio-level biennial conservation achievement". The Company has retained Nexant and has represented their relations with Nexant as meeting the requirements of the cited WAC provisions. Unfortunately, the relationship between Nexant and Avista falls short of meeting any reasonable definition of independence. The "independent" evaluator is selected at the sole discretion of the Company and is specifically selected by the same department and individuals whom are to be evaluated, the evaluation contract is managed by those who are being evaluated, the data is provided by the those who are being evaluated and the areas of evaluation to be funded (or not funded) are determined by those who are being evaluated. Additionally, the Company (and the specific department in the Company being evaluated) has purchased additional goods and

services from the "independent" evaluator, thereby creating an additional conflict of interest as Nexant is simultaneously assuming the role of evaluator and salesperson.

Furthermore, and applicable more broadly to Washington's investor-owned electric utilities, there is the opportunity to simultaneously improve the degree of independence, the quality and insights provided by the evaluation and reduce the considerable evaluation cost through the establishment of a statewide approach to evaluation with an increased role for Staff and the Advisory Groups of the three electric investor-owned utilities. Revising the current system to allow for Staff and/or other impartial non-utility parties to select a cast of evaluators to complete a truly independent evaluation will allow for a more direct comparison between utilities based upon consistent and comparable methodologies and will generate insights simply not possible under the current decentralized system. The evaluation cost borne by ratepayers can be reduced by virtue of the economies of scale possible through utilizing a consistent statewide evaluation methodology. Simply stated, a better product can be achieved at a lower cost.

The most valuable advantage of such an approach is the substitution of a truly independent evaluation in place of the current system. Lacking such an independent review operational and policy decisions will be based upon evaluations tainted by systemic conflicts of interest. As the preparations for the biennial evaluation generally don't occur until the midpoint of the biennium (over one year in the future) there is sufficient time to develop and implement an approach for the statewide evaluation of efficiency programs for the upcoming biennium.

Avista's Energy Efficiency Advisory Group

The Company has had an Advisory Group, under various names, in place since 1992[5]. The current Advisory Group meets the requirements of WAC 480-109-110. However, it is notable that membership in the Advisory Group membership is solely determined by the Company. Requests to the Company for information provided to the Advisory Group have been routinely denied. Lacking Freedom of Information Act requests, which would yield only those documents and written communications retained in public files, information available to the Advisory Group is unavailable to other interested parties. Interested parties are not permitted to become part of a service list for information distributed to Advisory Group members much less be allowed some degree of participation in the Advisory Group.

Though none of these actions violate any specific provisions of WAC 480-109-110 it is certainly inconsistent with the promises of increased transparency that the Company voiced to the Commission on several previous

occasions. The Company should be strongly encouraged, if not required, to periodically review the membership of their Advisory Group and to periodically complete a general solicitation for new members so as to allow for a more productive and diverse conversation of their energy efficiency programs in a timely and transparent manner.

I do wish to recognize that the Company has for the first time been partially responsive to a series of questions which I have posed for purposes of developing these written comments. It is a small but encouraging sign that the Company may be open to a higher level of transparency in the future. The Commission has the opportunity as part of this docket to establish conditions which would advance this progress.

Conclusion

Thank you for your consideration of my comments. It has and continues to be my belief that if demand-side management is important to do, it is important to do well. I believe that the suggestions which I have proposed will lead to an improvement in how energy efficiency is pursued within Washington.

End Notes:

1. Avista's methodology tests energy efficiency options to determine if they favorably contribute to improving the overall supply and demand-side resource mix. Those measures that do so "pass" and are incorporated into the optimized resource portfolio. The IRP also serves the purpose of defining an avoided cost stream. However, this approach does not explicitly test the demand-side resource options against the avoided cost stream, and it is not necessarily true that all selected demand-side options will be cost-effective, nor is it true that all rejected options will be cost-ineffective. The disconnect between the methodology for selecting measures within the IRP and the means by which those measures are evaluated for cost-effectiveness can be a significant issue in both establishing the acquisition target and in generating expectations regarding the likely cost-effectiveness of the efficiency portfolio.
2. Per Appendix A of Avista's BCP the site-specific program is expected to generate 18,000 mWh's. Avista's local acquisition target is 85,061 mWh's including the 5% addition to the target as a result of the Company's previous decoupling agreement and without Avista's share of regional (Northwest Energy Efficiency Alliance) savings and fuel-efficiency acquisition (electric to natural gas conversions, which is not within the I-937 referenced Northwest Power and Conservation Council definition of efficiency).

3. It would be reasonable to make some exception for acquisition which is very nearly cost-effective, such as measures with a Total Resource Cost test benefit-to-cost ratio of 0.9 or better (indicating that benefits equal only 90% of resource cost) if there is some reasonable basis for asserting that the measure(s) were pursued with the sincere expectation that they would be cost-effective and were competently managed to be cost-effective.
4. Avista's Schedule 90, section 4.1.3 exempts "Programs or services supporting or enhancing local, regional or national electric efficiency market transformation efforts" from the cap on incentives at 70% of the customers incremental cost contained in Schedule 90, section 4.1.
5. Per page 8 of Avista's Biennial Conservation Plan.

November 30, 2017

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Executive Director and Secretary
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Re: Avista Corporation, Report identifying its ten-year achievable electric conservation potential and its electric biennial conservation target, Docket No. UE-171091

Dear Mr. King,

The Energy Project respectfully submits these comments in response to the Commission's November 6, 2017, Notice of Opportunity to Comment regarding Avista's 2018-2019 Biennial Conservation Plan (BCP). Our comments are focused on the fuel conversion measures within Avista's low income weatherization program. We recognize that Commission Staff and other stakeholders have raised concerns with Avista's residential fuel conversion program. We do not take a position on the residential fuel conversion program generally, but we do strongly encourage retention of fuel conversion incentives for the low income weatherization program. Low income fuel conversion measures are offered separately from the residential fuel conversion program, and have been found to achieve higher than expected savings. We understand Staff supports retention of low income fuel conversion offerings. These issues are discussed further below.

Avista's low income weatherization program is administered through six Community Action Partnership (CAP) agencies and one tribal organization.[1] In this regard, low income fuel conversion measures are offered separately from Avista's residential fuel conversion program. Weatherization helps low-income customers maintain their electric or natural gas service by lowering energy bills through investments in energy efficiency measures. In some cases, the scope of work on a weatherization project includes fuel conversion from electric to natural gas space heat or hot water heaters. In those cases, utility affordability (based on today's costs per kWh and therm) is a major consideration in assessing fuel switching for potential low income weatherization projects.

Low income fuel conversion represents a modest, but not insignificant component of the low income weatherization program, and is also much smaller scale than the residential fuel conversion program. Avista's BCP

[1] Avista 2018-2019 BCP, Appendix B (2018 Annual Conservation Plan), p. 14.

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for 2018-2019 includes a proposed budget for low income fuel conversions of $296,672, which is 12% of the $2.36M total electric low income weatherization budget and slightly less than one percent of the total electric energy efficiency portfolio budget of $31.5M.[2] Projected savings from low income fuel conversion are 233 MWh, 14% of the total projected savings of 1,696 MWh for the low income weatherization program. The proposed residential fuel conversion program is much larger, with a budget of $4.9M and projected savings of 25,022 MWh.[3]

Fuel conversion measures in the low income weatherization program have been found to achieve higher than expected energy savings. The electric impact evaluation for the 2014-2015 biennium determined that low income fuel conversion customers experienced savings of almost 10,000 kwh annually. Specifically, Avista projected savings of 3,909 kwh per home, but the impact evaluation found average annual savings of 9,876 kwh per home, a verification rate of 253%.[4]

In the event the Commission considers discontinuation of Avista's residential fuel conversion program, the Energy Project respectfully requests that fuel conversion measures be retained for the low income weatherization program. These measures represent another option to help reduce the energy burden for low income households and should be preserved. In our conversations with Commission Staff, we understand that there is support for the retention of fuel conversion measures within the low income weatherization program. To the extent necessary, modifications to Avista's electric tariff Schedule 90 could be made to clarify that fuel conversion measures for the low income weatherization program are to be retained. A conversation pertaining to this specific topic is underway as part of Avista's submitted Biannual Conservation Plan.

I plan to attend the Commission's December 20th Open Meeting and will be available for any questions regarding these comments.

Sincerely,

/s/ Shawn Collins

Shawn Collins
Director
The Energy Project

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[2] Avista 2018-2019 BCP, Appendix A.
[3] Avista 2018-2019 BCP, Appendix A.
[4] UE-132054, 2014-2015 Biennial Conservation Report (BCR) of Avista Corp., filed June 1, 2016, Appendix A, Impact Evaluation of Washington Electric 2014-2015 Energy Efficiency Programs, Nexant, Table 6-55, p. 145.

COMMENTS OF UTILITY CONSERVATION SERVICES, LLC (UCONS)
ON PUGET SOUND ENERGY'S BIENNIAL CONSERVATION PLAN
December 1, 2017

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UTC Dkt. No. UE-171087

I. INTRODUCTION AND SUMMARY

Utility Conservation Services, LLC (UCONS) has reviewed Puget Sound Energy's Biennial Conservation Plan (BCP or Plan) and commends the utility for the Plan's level of detail. While offering much information, however, the Plan would deny hard-to-reach Washington ratepayers an equitable share of cost-effective conservation services as required under I-937 and as established by the Northwest Power and Conservation Council's 7th Power Plan as an important regional goal. More comprehensive and equitable programs are available which would provide the conservation services programs that PSE ratepayers have requested; such programs have been demonstrated to provide a more cost-effective conservation resources portfolio for the utility, but are not included in the current filing. The Plan's shortcomings and inequities underscore the need for a Commission rulemaking to confront and reduce the significant barriers which have been erected to effectively and fairly serving hard-to-reach, largely low- and lower-income customers. There is ample and persuasive precedent from neighboring states to guide the development of such a rule.

After providing some background on UCONS, these comments: (1) briefly respond to several points made in the Plan's Executive Summary and in its Appendix on Evaluation, Measurement and Verification; (2) provide information on the availability of cost-effective conservation in the manufactured home market and the legal obligation of PSE to pursue such conservation opportunities; and (3) describe the "lessons learned" from UCONS' involvement with PSE's development of the BCP, and how those lessons suggest the need for rule making.

II. BACKGROUND

UCONS is a national leader in the development and implementation of residential conservation programs, headquartered in Kirkland, Washington. UCONS has done or is doing business in Washington, California, Oregon, Idaho, Texas, Utah, and New York. We provide services under contract to a large number of utilities, both investor-owned and publicly-owned, as well as to major property management firms. Since 1993, UCONS has delivered direct-install energy efficiency programs to over 320,000 multifamily tenants and over 100,000 manufactured home

utility customers. The aggregate energy savings from these efforts total nearly 500,000,000 kWh and 10,000,000 therms. In recent years, we have focused our work on hard-to-reach (HTR) markets, particularly in the manufactured homes (MH) sector.

In late 2015 and early 2016, UCONS worked with Washington's representatives on the Northwest Power and Conservation Council (Council) to advocate for acquiring the potential cost-effective conservation in HTR markets, particularly the MH sector. In its 7th Power Plan, adopted on February 10, 2016 (Plan), the Council described the "special challenges" of realizing such a conservation potential:

> Manufactured Homes: The manufactured home segment may face special challenges related to income, ownership, building codes, and some difficult-to-implement conservation measures specific to manufactured housing and their heating systems. The assessment should determine whether the adoption of measures in the manufactured home segment is on pace to complete implementation of nearly all remaining cost-effective potential over the next 20 years. Where expected shortfalls appear, specific barriers to implementation should be identified and solutions targeted at those barriers. While this market segment has been successfully targeted with a limited set of conservation measures (e.g., duct sealing), a more comprehensive approach that identifies and implements an entire suite of cost-effective measures during a single visit may be more cost-efficient.[1]

Following the Council's lead, in July 2016, UCONS published a paper entitled "Energy Efficiency in Manufactured Homes in Washington: The Path Forward." It summarized the legal framework for utilities to acquire "all cost-effective conservation" under I-937 and the work of the Council.

Consistent with the Plan, the Path Forward paper described barriers to acquiring conservation from this HTR market and urged utilities to develop, and the Utilities and Transportation Commission (Commission) to approve, conservation plans which would address this conservation potential.

After discussing the Path Forward paper with Commissioners, Commission staff, and various stakeholders, we were pleased to learn that addressing HTR markets would be part of the conservation plan that PSE planned to file. Accordingly, UCONS participated in PSE's request for information (RFI) and request for proposal (RFP) processes which were intended to develop conservation programs and measures to acquire, for the two-year period beginning January 2018, "all cost-effective conservation" as required by I-937.

[1] 7th Power Plan at 4-12 (recommendation MCS-1).

UCONS responded to the RFI with an innovative proposal targeting HTR customer groups which contained the following elements:

- Working with owners and renters of manufactured homes and parks to make them aware of the greatly expanded list of measures and incentives available in the proposal.
- Segmenting MH programs from other residential programs (as PSE did in 2010).
- Offering, on a comprehensive basis, all measures which are identified as cost effective in the 7th Power Plan.
- No requirement for a financial contribution from a customer class which has demonstrated it cannot participate when a contribution is demanded. To the extent that customer co-payments are still deemed necessary, work with select lending institutions on credit options or, if possible, work with the utility to implement on-bill financing or repayment.
- Evaluate energy usage on a per customer basis.

In its response to the UCONS innovative proposal, PSE stated, "We are pleased to inform you that the Hard to Reach Manufactured Home concept will be incorporated into one of our Request for Proposal (RFP) concepts for the 2018-2019 Energy Efficiency Services program portfolio."

However, when the RFP was issued, it focused only on rental housing, excluding ratepayer-owned manufactured homes. Given that more than 80% of MH customers actually own their home, usually on leased land, this limitation effectively negated any real effort to achieve cost-effective conservation from this sector in the context of this BCP.

Accordingly, we respond to PSE's BCP, focusing on points made in its Executive Summary.

III. COMMENTS ON THE BCP EXECUTIVE SUMMARY

Portfolio Savings Targets (page 1): The BCP's Portfolio Savings Targets do not address the current inequity in conservation services provided to hard-to-reach customers in manufactured homes. In its July 2016 Path Forward paper, and as elaborated upon in Section IV below, UCONS, using information from PSE's hard-to-reach customers, identified a minimum of 10.6 aMW of cost-effective conservation potential in PSE's HTR MH customer class (consistent with the 5-year Power Plan goals approved regionally). This data has been previously provided to the UTC in accordance with data reporting requirements under I-937. This was the focus of UCONS' response to the RFI and was earlier provided to PSE as a proposed innovative Pilot in January 2017. The program would have a Total Resource Cost (TRC) above 2.0; all elements of the proposal were created in accordance with the Council Plan and requirements for cost-effectiveness, and were designed with by U.S. DOE contractor Greg Sullivan. PSE reports no errors or mistakes in this proposal.

Development of Ten-Year Conservation Potential and Reference to PSE's IRP (page 2): The I-937 rules governing the BCP in WAC 480-109-100(2) describe how the utility is to determine its ten-year conservation potential:

> (a) This projection must consider all available conservation resources that are cost-effective, reliable, and feasible.
>
> (b) *This projection must be derived from the utility's most recent IRP*, including any information learned in its subsequent resource acquisition process, or the utility must document the reasons for any differences. When developing this projection, utilities must use methodologies that are consistent with those used in the Northwest Conservation and Electric Power Plan.

The highlighted language directs the utility to go to its IRP to derive its conservation potential. The PSE IRP was filed in draft form before the BCP was filed, but the final IRP was filed just after the BCP was filed, on November 14. Appendix J is the Conservation Potential Assessment, was conducted by Navigant. Note that on page 46, Navigant states:

> Commercial retail establishments, residential manufactured homes, and other commercial (unclassified) buildings also account for significant electric energy potential, with the remaining segments each making relatively small contributions to the balance of the total potential.

Despite this recognition by Navigant, neither the IRP nor the BCP properly considers the MH market's conservation potential.

Biennial Target (page 3): WAC-109-100(3)(b) requires that the biennial target be "no lower" than pro rata share of the ten-year conservation potential. Of course, this means that the target may be higher, as it should be if additional cost-effective conservation <u>can be acquired</u> in that two-year period. And, in any event, the Commission's regulations require that the utility "adaptively manage" its conservation portfolio to adapt to changing conditions. WAC 480-109-100(1)(a)(iv).

However, when presented a more cost-effective new resource in January 2017 and presented with it again during PSE's RFI/RFP processes, PSE declined to pursue that resource. Furthermore, increased attention to the MH sector would help remedy a severe imbalance between load and conservation expenditures. Manufactured home customers consume nearly 6% of all PSE electric load, but have received less than 1% PSE's conservation budget (which is embodied in the 2-year IRP guidance of 54 aMW listed on page 3).

2018-19 Budgets (page 6): Again, PSE spends less than 1% of its annual electric conservation budget (less than $2 million) on cost effective conservation services for a customer class that, despite its low average household income, annually provides over $100,000,000 in electric

revenues. PSE has claimed that there "was no more cost-effective conservation potential" remaining, contrary to the 7th Power Plan's goals and to the findings of UCONS audits of over 20,000 PSE MH customers.

Low Income Weatherization (page 6). In its September 2017 presentation to the Conservation Resource Advisory Committee (CRAC), PSE indicated that it provides substantial funding for low-income weatherization (LIW) which produces very low levels of energy savings. The Department of Commerce and various agencies serving low-income ratepayers also confirm that very few homes benefitted from these high LIW expenditures, as they included funding for many MH repairs unrelated to energy conservation. UCONS applauds PSE's efforts to support LIW and supports an increase in such funding. But such funding does not address the goals of pursuing "all cost-effective conservation." Moreover, LIW programs preclude service to the very large portion of PSE MH customers who do not qualify for it. We ask the UTC to not merge budgets for BCP programs and budgets for low-income customers. Energy savings from low-income programs should be counted toward I-937 goals, but low-income programs should not displace funds for acquiring "all cost-effective conservation." Both programs suffer when comingled. The September 2014 PSE presentation to the CRAC demonstrates that low-income funding does not provide the most cost-effective results and that PSE has curtailed significantly its funding for hard-to-reach customers who do not qualify for low-income programs. PSE's selected "SF Rental Pilot" is a further example of the problems that arise when not separating low-income program budgets from the more general I-937 budgets. As a matter of law, low-income programs do not replace or supersede other energy efficiency obligations of the utility.

Electric TRC (page 7): PSE reported a Total Resource Cost (TRC) benefit-to-cost ratio of 1.40. This is significantly below the TRC benefit-to-cost ratio from the UCONS innovative proposal to PSE which would have provided the utility a new program with a TRC of 2.2. This is more evidence of a missed opportunity to pursue and acquire cost-effective conservation for the benefit of the utility and the customers.

Single Family Rental Pilot (page 7). PSE states it plans "to pursue a single family rental pilot to promote savings in that hard-to-reach customer segment." UCONS applauds all programs that promote savings in the HTR customer segment but notes the following concerns with the pilot:

- Single family (SF) rental has not been identified as a hard-to-reach customer class in the 7th Power Plan (and in fact may not be HTR). More importantly, PSE has lumped together two sectors—SF houses and MH—which it has acknowledged are very different from one another and require very different solutions.
- The 2018 SF rental pilot would eliminate from consideration the 80 percent or more of HTR MH customers who own rather than rent their manufactured homes. PSE's investments in programs for MH owners have declined precipitously over the past two years, even while customer data demonstrates

that a very high level of cost effective conservation potential remains. Under the BCP, the vast majority of HTR MH owners would continue to be denied an equitable level of conservation services.

- PSE's BCP does not reflect that the SF Rental Pilot was offered by PSE for many years to its customers in manufactured homes. Data from its prior rental programs demonstrate that PSE MH owners who rent out their manufactured homes will typically not participate, even in a fully-funded direct install program. Because of its prior experience with MH owners who rent out their manufactured homes, UCONS has collaborated with customer groups to assist the contractor selected by PSE to run the new single-family pilot.
- Since 2010, it has been clear to PSE and to energy services contractors that renters represent a small fraction of HTR ratepayers living in manufactured homes. Further, the Washington MH owner associations representing this customer class (AMHO and MHOW) confirm that the MH owners who rent out their homes will rarely participate in a utility conservation program, especially when they need pay for a portion of the improvement for the measures. This market barrier is attributed to the underlying value of a rented manufactured home and the relatively short-term investment in it by its owner, in contrast to typically long-term investments in stick-built, single family homes.
- PSE has filed comments with the UTC that "administrative costs" are very high, making the TRC for programs for many hard-to-reach customer classes a burden to their portfolio. This has certainly not been true for past utility MH programs which UCONS has successfully supported in Washington state, especially when the utility approved a budget to run a sufficiently large program, so that fixed administrative costs were a small fraction of the total budget.

EM&V (Exhibit 8): The Evaluation, Measurement & Verification (EM&V) exhibit of the BCP filing provides many details describing data and methods employed nationally for evaluation of energy efficiency programs. However, it does not address the necessary requirement for an independent program evaluation. Exhibit 8 refers to the CRAG and its role in PSE's conservation programs. But the CRAG is not an independent evaluation party. Further, CRAG members acknowledge such a role could create a conflict of interest for them. The primary function of "customer groups" in Washington, Oregon and California is to provide a public forum for diverse customer input, not to displace the role of the regulator as an independent evaluator. In all other West Coast states, there are important customer groups (like the CRAG) to facilitate public input. However, all independent EM&V is conducted by the regulatory agencies to assure the rigor of evaluation and protect the ratepayer.

For a utility to write a bid specification, hire an evaluator, and make program decisions on "cost effectiveness" without direct regulatory review and approval places both the utility and its

programs in a difficult situation. The primary reason for removing utility involvement in program administration or evaluation by legislation (in Oregon) and by regulatory rulemaking (in California) was to protect the ratepayer and the utility from the inherent conflict in a for-profit utility selling power, while concurrently being required to achieve all cost-effective conservation. These are often mutually exclusive goals.

IV. THE AVAILABILITY OF COST-EFFECTIVE CONSERVATION IN THE MANUFACTURED HOME MARKET AND THE OBLIGATION TO ACQUIRE SUCH CONSERVATION

Over the years, various utilities, including PSE, have sought to serve customers in the MH market using UCONS or other contractors. As a result, UCONS has a great deal of data on what services have been performed. Based on data from the Council and the Northwest Energy Efficiency Alliance, and as explained further in our initial Path Forward paper, there is a realistic conservation potential of 10.6 aMW during the 5-year period of the 7th Plan (2016 – 2020) for this HTR customer class. Data show that MH residents use far more electricity per household than other utility customers – over 17,000 kWh annually. However, even though PSE's MH customers constitute over 5% of PSE's load, only 1% of PSE's conservation budget is directed to MH conservation and efficiency improvements.[2]

The conservation potential in this sector is substantial. Ishbel Dickens, past Executive Director of the National Mobile Home Owners Association, has stated in a letter to us "that manufactured home owners across the country are missing out on important conservation opportunities that ought to be as available to them as they are to other homeowners." Indeed, this conclusion is supported by PSE's own Conservation Potential Assessment which accompanies its filed 2017 IRP. In that document, PSE's contractor, Navigant, states: "Commercial retail establishments, residential manufactured homes, and other commercial (unclassified) buildings also account for significant electric energy potential . . . ."[3]

Because there is a large remaining cost-effective conservation potential in the MH sector, I-937 requires that it be pursued by the utilities and included in its conservation plans. That is clear from the plain language of the statute as well as the Commission's implementing regulations which require the utility to "[i]dentify cost-effective, reliable, and feasible potential of possible technologies and conservation measures in the utility's service territory," "[d]evelop a

[2] PSE's current IRP and September 2017 CRAC presentation data demonstrate this customer class accounts for over 5% of all PSE electricity revenues. Customer and contractor data required under I-937 show that conservation funds for the MH sector have decreased in recent years, with about 3% of total funds being spent on the MH sector in 2010-15, decreasing to less than 0.5% in 2016-17.

[3] *2017 PSE Integrated Resource Plan*, App. J (Conservation Potential Assessment), at 46.

conservation portfolio that includes all available, cost-effective, reliable, and feasible conservation," and "[i]mplement conservation programs identified in the portfolio . . . ."[4]

Even if cost-effective conservation programs for the MH sector were not required to be included in any given conservation plan, the Commission requires utilities to "[c]ontinually review and update as appropriate the conservation portfolio to adapt to changing market conditions and developing technologies."[5]

V. "LESSONS LEARNED": INSTITUTIONAL BARRIERS TO THE ACQUISITION OF "ALL COST-EFECTIVE CONSERVATION"

The UCONS experience in the RFI and RFP processes revealed several institutional barriers that limit PSE's acquisition of all cost-effective conservation:

- *Too much early discretion lies with the utility.* Leaving the RFI and RFP processes in the hands of the utility effectively took the Commission and Commission staff out of the process in its early stages, when there were opportunities to expand the utility's conservation portfolio to include all cost-effective conservation.
- *The RFI process actually discourages innovation.* While the RFI process is intended to solicit innovative ideas, in practice it discourages innovation because, by its terms, any ideas presented become the utility's property.[6] As a result, a contractor which spends considerable resources developing an idea and submits it in response to an RFI has no assurance of a potential payoff in the end. The utility may convert the idea into an RFP and then award a bid to some other contractor. This barrier has been addressed in California where the PUC has required that by 2020 at least 60% of utility conservation programs be third-party programs, thereby tapping the non-utility sector's creativity in developing such programs.[7] California also employs a "request for abstracts," which differs from the RFI and RFP processes used by PSE in the development of its BCP. The RFA process allows the third parties submitting proposals to "own" their ideas rather than transferring their ownership to the utility. This gives the third party submitting a proposal comfort that its work and innovation will not just be transferred to the utility. California also employs third party evaluators at the front end of the process to ensure that those third parties submitting proposals are treated fairly.
- *The process resulted in mixed messages.* Though PSE indicated that the UCONS submission would "be *incorporated* into one of our Request for Proposal (RFP) concepts

[4] WAC 480-109-100(1)(a)(i)-(iii).
[5] WAC 480-109-100(1)(a)(iv).
[6] On page 3 of the RFI, PSE states as a "key consideration for bidders": "Your response to the survey will become the property of PSE upon its receipt by PSE . . . ."
[7] See Decision Providing Guidance for Initial Energy Efficiency Rolling Portfolio Business Plan Filings, Dec. 16-08-019, Dkt. No. 13-11-005 (Cal. P.U.C., Aug. 18, 2016).

for the 2018-2019 Energy Efficiency Services program portfolio," it was not. Instead of focusing on the potential for energy efficiency in *all* manufactured homes, PSE jettisoned any focus on improving delivery of conservation programs to the vast majority of manufactured home owners who live in the homes they own.

- *The process artificially restricted proposals.* In the end, PSE rejected the UCONS proposal because it did not address the MH rental market, even though PSE has demonstrated since 2010 that MH owners who rent out their homes will not participate in a utility program which is not comprehensive or fully funded. So, instead of evaluating the UCONS proposal based on its potential for acquiring cost-effective conservation from throughout the MH sector, PSE rejected it because it did not fall within the confines of its artificially narrow focus on rental markets.
- *There are inadequate incentives for utilities to actively pursue all cost-effective conservation.* In Washington, I-937 requires utilities to pursue *all* cost-effective conservation, and the Commission's adoption of revenue decoupling is intended to remove any disincentive for utilities to so by making utilities "agnostic" on whether or not they acquire conservation resources. However, despite this mandate and regulatory policy, utilities are not finding it in their economic interests to aggressively pursue all cost-effective conservation as required by state law. Further, leaving utilities in their current role of being involved with evaluating their own conservation programs does not promote confidence that "all cost-effective conservation" has been achieved. Indeed, that has not occurred.

In our view, the best way to overcome these and other barriers and to ensure the acquisition of all cost-effective conservation by utilities would be to take conservation programs out of the utilities' hands and place them with an independent third party, akin to the Energy Trust of Oregon (ETO).[8] In Oregon, the creation of the ETO has led to consistency of programs across utilities, reduced administrative oversight, and eliminated the inherent conflict of interest that utilities have when they are required to acquire conservation but have the economic incentive to sell more energy instead. Adopting an ETO model in Washington would require legislation, and developing such legislation and getting it enacted would take years. In any event, creating an ETO model in Washington is beyond the scope what is currently before the Commission.

VI. REQUEST FOR COMMISSION ACTION

Based on UCONS long history of serving HTR markets, particularly those in manufactured homes, the focus of the Northwest Council on acquiring cost-effective conservation in such markets, and our experience in navigating the PSE RFI and RFP processes, we recommend the following:

[8] See https://www.energytrust.org. Other states have that model as well, including Vermont and Wisconsin.

1. *Consideration of PSE's BCP.* In evaluating PSE's BCP, the Commission should direct PSE to renew its efforts to pursue conservation in the MH market, as PSE indicated it would in its 2017 update and in early discussions relating to the BCP's development. The requirement that utilities "adaptively manage" their portfolios provides ample authority for the Commission to mandate this. This Commission action could include:

    a. Directing PSE to issue a new RFP that would permit contractors to propose programs to acquire conservation from HTR markets, without artificial limitations relating to property ownership.
    b. Issuing a broader "Request for Ideas" akin to the process in California to coax out of the private sector new ideas that would be the property of their third party creator and would be accepted by the utility if demonstrated to be cost-effective.
    c. Direct Commission Staff to take an active role in any such supplemental process to ensure that it is fair and thorough.

2. *Longer Term.* Because of the above-described institutional barriers, the Commission should direct Staff to conduct workshops, perhaps leading to a rule-making proceeding, that would consider the following:

    a. Adopting some elements of the program in effect in California in which the California Public Utilities Commission currently requires utilities to include at least 20% third party programs (increasing to 60% by 2020) and provides for utility "requests for ideas" that can lead to innovative approaches to the acquisition of conservation.
    b. Requiring greater transparency, including publication, of a utility's avoided costs so third parties are better able to determine whether to invest in developing innovative proposals.
    c. Requiring, at the front end of the process, independent third-party evaluations of utility RFIs and RFPs to ensure that the utilities do not artificially constrain the scope of their solicitation of ideas. Requiring at the back end of the process independent EM&V oversight by the UTC of conservation funded programs administered by regulated utilities
    d. Requiring that utilities prepare and submit data segmented by customer group to facilitate further evaluation of conservation potential from such customer groups.
    e. Consideration of mechanisms by which utilities could receive appropriate incentives to acquire more conservation. These policies could include performance or other financial incentives designed to move utilities from being "agnostic" on acquiring energy efficiency (as revenue decoupling seeks to do) to becoming zealous advocates for demand-side resources.

The purpose of all of these proposed actions, both within the context of the pending PSE BCP and ongoing and future efforts, is to enhance conservation efforts by the State and its utilities and

to spur innovation in that effort. Providing additional cost-effective energy efficiency services to the HTR MH market has been endorsed by the Council; it is required by I-937; and it is the right thing to do for HTR MH customers and ratepayers generally. We look forward to working with the utilities and the Commission in this endeavor.

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

AVISTA CORPORATION REPORT CONCERNING ITS 2018-2027 TEN-YEAR CONSERVATION POTENTIAL AND 2018-2019 BIENNIAL CONSERVATION TARGET	DOCKET NO. UE-171091

COMMENTS OF PUBLIC COUNSEL

December 1, 2017

I. INTRODUCTION

1. Pursuant to the Commission's November 6, 2017, Notice of Opportunity to File Written Comments (Notice), the Public Counsel Unit of the Washington State Attorney General's Office (Public Counsel) respectfully submits these comments in advance of the Commission's December 20, 2017, Recessed Open Meeting. These comments address Avista's (Company) Biennial Conservation Plan (BCP) concerning its ten-year conservation potential and its 2018-2019 biennial conservation target filed with the Commission in compliance with RCW 19.285.040.

2. Avista's BCP proposes a target of 93,760 MWh for the 2018-2019 biennium. The ten year conservation potential is 368,000 MWh with a 20 percent pro rate share as 73,636 MWh.[1] The pro rate share of 73,636 MWh does not include the Behavior Program Savings of 15,386 MWh, Distribution and Street Light Efficiency savings of 749 MWh,

[1] UE-171091, In the Matter of Avista's 2018-2027 Ten-year Achievable Conservation Potential and Biennial Conservation Plan in Compliance with RCW 19.285 and WAC-480-109-120(1).

or the five percent decoupling commitment of 3,989 MWh that accumulates to the proposed 93,760 MWh.

3. Public Counsel has reviewed the documents associated with this filing, and has been in contact with the Company regarding our concerns. We appreciate the Company's responsiveness to the issues we have raised. However, we believe there are a couple of remaining issues in the Company's filing. Public Counsel does not share any concerns regarding the proposed biennial conservation target of 93,760 MWh; nonetheless, we do have concerns regarding the Company's proposed programs employed to achieve this BCP target.[2]

- ***Behavioral Program Savings:*** We have concerns regarding the Company's proposed Behavioral Program Savings of 15,386 MWh and by what means the Company will achieve the allocated savings, considering it will not be offering the Opower/Oracle program behavioral program.
- ***Termination of Fuel Conversions:*** Public Counsel has concerns regarding Staff's recommendation to terminate the program.[3]
- ***Amendment to Proposed Fuel Conversion Funding:*** Public Counsel does not believe that the Fuel Conversion Program should be funded at its currently proposed level of $4.9 million given the small electric DSM Residential Portfolio.
- ***Pilot Programs:*** We applaud the Company's effort in creating several new pilot programs centered on hard- to- reach sectors in the Company's service territory.

II. BEHAVIORAL SAVINGS

4. The Company has committed to achieving 15,386 MWh of behavioral savings in the 2018-2019 Biennium.[4] However, the Company will not be running its Opower/Oracle Home Energy Report (HER) program, which was utilized to develop the estimate of the Behavioral Program Savings in the BCP target. The Company informed Advisory Group

[2] 2018 DSM Annual Conservation Plan, Appendix A and BCP Appendix A.

[3] Public Counsel has filed cross-answering testimony in UE-170485 and UG-170486 (*Consolidated*) as CAC-1T through CAC-10.

[4] UE-171091, In the Matter of Avista's 2018-2027 Ten-year Achievable Conservation Potential and Biennial Conservation Plan in Compliance with RCW 19.285 and WAC-480-109-120(1) at "Table No. 1: Avista BCP Target Summary" at 2.

members of its proposal to end the HER program in order to begin its Residential Behavioral Pilot Program during the BCP planning process, which Public Counsel supported. Public Counsel informally asked the Company whether it would retain the estimated 15,386 MWh allocated to the Behavioral Program Savings. Also, we asked for a detailed response for how the Company proposed to reach these savings. The Company stated that it has "committed" to achieving these savings, but did not provide a detailed response or strategy for achieving these savings. In response to how they intend to achieve these savings, the Company stated it would "pursue savings first through its Residential Behavioral Pilot Program in 2018 and will adjust accordingly in 2019."[5] Furthermore, Public Counsel inquired on whether pilot savings will be added toward the BCP savings target and this remains unclear.

5. Public Counsel believes the Company should disperse the 15,386 MWh savings allocated to this Behavioral Savings to other residential and nonresidential programs, instead of relying on possible saving from the pilot program. Additionally, we believe that the Company should provide updates to the Advisory Group throughout 2018 as to whether an adjustment is needed in 2019, as well as the details of its plan to achieve the remaining savings in 2019 associated to the Behavioral Program Savings. Finally, we believe it is misleading to include the Behavioral Program under the Residential Programs, as this program is a pilot.[6]

[5] Avista Response to Informal Comments on the Draft 2018-2019 BCP (received on Nov. 2, 2017).

[6] UE-171091 Avista BCP Appendix A.

III. RESIDENTIAL FUEL CONVERSION

6. Public Counsel has two concerns with the Fuel Conversion Program. First, we believe the Fuel Conversion should continue to be offered by Avista. Second, while we support the continuance of the Fuel Conversation Program, we do not believe that the program should continue with the allocated funding suggested by the Company. Ultimately, Public Counsel believes the discussion of any modifications to the Fuel Conversion Program should occur in the Advisory Group, pursuant to WAC 480-109-110.

A. Avista Should Offer the Residential Fuel Conversion Program

7. The Company filed its BCP on November 1, 2017, in Docket UE-171091 after seven months of planning, which including several in-person and webinar meetings. The meetings included discussions about and information regarding Avista's DSM program. Staff revealed on October 23, 2017, through an email to all electric utilities, that they would no longer accept fuel conversions as a DSM program. On October 27, 2017, Staff and intervener parties filed response testimony in Avista's pending rate case, Dockets UE-170485 and UG-170486 (Consolidated), and Staff raised for the first time the issue of whether Avista's Fuel Conversion Program should end beginning with the 2018-19 biennium. Although Staff raises the issue in Avista's pending general rate case, issues relating to the Fuel Conversion Program are appropriately before the Commission through the BCP proceeding.

1. Avista customers receive benefits from this program

8. Public Counsel believes that Fuel Conversions benefit Avista customers in several scenarios. First and most importantly, natural gas is a more efficient and cost-effective

method for heating. The costs of heating with electricity can be 1.5 to three times the cost of heating with natural gas. Additionally, on average a customer that switches from electric space heating to natural gas savings 7,485 kWh per year and 3,790 kWh per year after switching from electric water to natural gas water heating (accumulatively 11,275 kWh per year). Furthermore, the extraction and delivery of natural gas has an efficiency of 90 percent compared to electricity's 30 percent efficiency. Consequently, considering that Avista's service territory primarily consists of moderate- to low-income customers, it seems inappropriate to allow only those customers who qualify as low-income to continue to participate in Fuel Conversions and receive the cost saving benefits. Indeed, both Staff and the Company have identified heating with natural gas as more efficient than heating with electricity, and have stated it is a benefit of the fuel-switching program.

9. Second, Avista's electric and natural gas customers would lose direct and indirect benefits provided by the Fuel Conversion Program. Electric customers directly benefit from the Program through its acquisition as a cost-effective resource and the deferral of infrastructure costs such as generation, transmission, and distribution costs. Natural gas customers receive direct benefits of infill opportunity on existing infrastructure and spreading fixed costs across a larger customer base. Avista's electric and natural gas customers also may indirectly benefit from a reduction in particulate matter 2.5 (PM^{25}), associated with wood burning emissions.

10. Third, Public Counsel believes that there continues to be a need in the residential sector for assistance provided by the Fuel Conversion Program in overcoming the economic barriers to switching from electricity to natural gas for space heating and water heating. According to the Northwest Power Council Seventh Power Plan and consistent

with previous plans:

> All of the Council's prior analysis found that while direct use of natural gas is often more thermodynamically efficient than using electricity generated from natural gas, its economic efficiency (i.e., whether direct use of natural gas is lower cost) depends on the specific situation with respect to the relative price of natural gas and electricity, space and/or water heating energy use, the cost and efficiency of space and water heating systems, and access to natural gas service.[7]

Considering Avista's climate and customer demographic, we believe that residential Fuel Conversions may be offering a cost- effective solution.

11. Finally, the Fuel Conversion Program has mitigated the need for (1) more recent investments in electric distribution, generation, and transmission, (2) higher electricity prices, (3) higher natural gas prices, (4) higher peak electricity load, and (5) higher wholesale market prices.

2. Unknown effects of ending the program

12. Public Counsel perceives two foreseeable effects of ending the Fuel Conversion Program. First, we believe that there may be a possibility of confounding effects caused by the presences of recent changes in the Fuel Conversion Program, as well as the addition of the Line Allowance Extension Program (LEAP) pilot program. The following is a chart provided by the Company regarding participation rates and expenditures for the Fuel Conversion Program from 2009 to 2017.

[7] Northwest Power Council Seventh Power Plan, Appendix N.

WA Fuel Conversion Project Counts, Incentives, and Savings by Sector 2009-2017										
	Conversions	2009 (Unverified Gross)	2010 (Unverified Gross)	2011 (Verified Gross)	2012 (Unverified Gross)	2013 (Verified Gross)	2014 (Unverified Gross)	2015 (Verified Gross)	2016 (Adjusted Reported Gross)	2017 (Unverified Oct YTD)
Residential	Project Count	139	177	143	149	134	191	422	811	1,546
	Incentives	$ 92,150	$ 93,000	$ 65,000	$ 69,977	$ 68,854	$ 344,100	$ 1,044,158	$ 1,845,504	$ 2,812,843
	Savings (MWh)	955	1,239	815	1,199	990	1,811	3,927	9,767	13,675
Non-Residential	Project Count	4	2	2	5	2	0	4	6	12
	Incentives	$ 184,300	$ 107,848	$ 73,100	$ 356,000	$ 107,700	$ -	$ 561,367	$ 632,085	$ 1,533,387
	Savings (MWh)	652	470	173	2,536	735	0	407	806	3,088
Low Income	Project Count	133	218	236	113	169	102	134	111	81
	Incentives	$ 345,239	$ 662,000	$ 624,000	$ 354,956	$ 508,820	$ 444,368	$ 309,089	$ 277,652	$ 353,852
	Savings (MWh)	1,261	1,450	1,234	686	491	202	599	258	326
Total	**Project Count**	**276**	**397**	**381**	**267**	**305**	**293**	**560**	**928**	**1,639**
	Incentives	**$ 621,689**	**$ 862,848**	**$ 762,100**	**$ 780,933**	**$ 685,374**	**$ 788,468**	**$ 1,914,614**	**$ 2,755,241**	**$ 4,700,082**
	Savings (MWh)	**2,868**	**3,159**	**2,222**	**4,421**	**2,217**	**2,013**	**4,933**	**10,831**	**17,090**

*2009-2014 Non-Residential data are un-evaluated and are to be considered approximate.

13. Although this chart provides useful data on the historical trends of the Fuel Conversion Program, it does not aid in analyzing the reasons for the increased participation. We perceive there were several coinciding factors that may have influenced the increase in participation in recent years. First, in Docket UE-143081, the Company was allowed to raise the incentive level for the Fuel Conversion Program from $900 to $2,300. Second, in 2015 the Company was granted permission to begin the LEAP pilot program, which allowed the use of the excess allowance to be applied toward the enhanced rebates offered in the Fuel Conversion Program. Because there were several changes and augmentations associated with fuel conversions since 2014, it is difficult to say which adjustment was the cause for the increase in participation and whether the termination of the Fuel Conversion program would lead to participants unwillingness or inability to participate in the LEAP pilot.

14. Second, related to the previous argument, are the possible short- and long-term effects of the discontinuance of the Fuel Conversion Program even with the continuation of the LEAP pilot. As previously stated, we are unaware of the individualized effects of

the Fuel Conversion given the recent changes in incentive prices as well as the LEAP pilot program. The termination of the Fuel Conversion Program may cause a reduction in customers' ability to convert to natural gas. This may result in the following effects:

- Higher electricity prices;
- Earlier investments in generation, transmission, and distribution projects;
- Infrastructure investments for capacity; and
- Higher natural gas distribution prices.

Thus, it is premature to end the Fuel Conversion Program until the true effects and influences of the program can be examined.

3. Advisory group should be given the opportunity to discussion this issue

15. Considering the short time period in which Staff stated its position on Fuel Conversions, the filing of the BCP, and the filing of Staff's response testimony in Avista's general rate case, Public Counsel believes that this issue should be further discussed within the context of the Advisory Group before recommendations of termination should be determined. The Company initiated the first of what we presume are several discussions regarding the Fuel Conversion program. Under WAC 480-109-110, the Advisory Group is to advise the utility on conservation issues, and it has not had an opportunity yet to fully serve that function on this issue.

Public Counsel looks forward to the discussion with the Commission, Staff, the Company, and other interested Stakeholders on the Company's Fuel Conversion Program.

B. Public Counsel Recommends the Funding for the Fuel Conversion Program Should Decrease Given the Current Residential Portfolio

16. The Company has included fuel conversions in all sectors of its conservation offerings. However, Public Counsel focuses our comments on the Residential Fuel Conversion Program. The Residential Fuel Conversion Program consists of a budget of $4,942,900 with an associated estimated savings of 25,022 MWh, out of an overall Residential Portfolio budget of $8,156,832 and an estimated savings of 66,657 MWh. However, this overall savings of 66,657 MWh contains the savings related with the electric to natural gas fuel conversion program, which are not applicable toward the BCP savings target. As a result, the cumulative Residential Portfolio is 41,635 MWh with a budget of $8,156,832.

17. As previously noted, Public Counsel does support the continuation of the Residential Fuel Conversion Program. Nevertheless, we cannot support the Residential Fuel Conversion Program in its current state. The Company's proposed Residential Portfolio contains only two programs, Residential Prescriptive and Simple Steps, with a combined budget of $3,213,932 with 26,249 MWh savings that are attributable to the BCP savings target. The Residential Fuel Conversion program has a higher budget ($1,728,968 more) than those programs used to meet the BCP savings target.

18. Thus, Public Counsel cannot support a DSM program that constitutes over half the funds for residential programs and does not offer savings used toward the BCP savings target.

IV. PILOT PROGRAMS

19. The Company is offering several pilot programs in the 2018-2019 Biennium. These pilots include the Residential Behavioral Pilot, the Multi-family Hard to Reach Program, Residential Wall Insulation Pilot, Ecova Commerical Building Operation

Simulation Pilot, and the Low-Income Multifamily Pilot Program.[8] Public Counsel is extremely pleased to see the Company offering not only future- looking programs that may utilize AMI and Smart Grid capabilities, but also more pilot programs geared toward residential customers. We hope to see robust updates and participation in these programs, in order to expand these offerings into full programs for inclusion in the residential portfolio. Furthermore, we hope to see Avista diversifying their programs and extending its offerings to more of their customers

V. CONCLUSION

20. Public Counsel appreciates the opportunity to comment on Avista's proposed 2018-2019 biennial conservation target and ten- year potential. We anticipate further discussion on these issues with Avista and other interested stakeholders. We look forward to reviewing the comments submitted by other parties, as well as additional information to be provided by Avista, and addressing these issues at the Commission's December 20, 2015, Open Meeting.

[8] 2018 Electric Demand-Side Management: Annual Conservation Plan, BCP Appendix B.

December 1, 2017

Steven V. King
Executive Director and Secretary
Washington Utilities and Transportation Commission
1300 Evergreen Park Drive SW
Olympia, WA 98504-7250

Re: Docket No. UE-171091, Avista Ten-Year Achievable Conservation Potential, Biennial Conservation Target, and Biennial Conservation Plan for 2018-2019, pursuant to RCW 19.285.040 and WAC 480-109-120

The NW Energy Coalition (NWEC or Coalition) appreciates the opportunity to comment on Avista Corporation's (Avista or the Company) 2018-2019 Biennial Conservation Target and Biennial Conservation Plan (BCP). NWEC is a member of the Avista DSM Advisory Group. We appreciate Avista's willingness to discuss ideas for enhancements and improvements to best serve their customers and acquire cost-effective conservation.

Our concerns with the BCP as proposed are focused on two main areas: Avista's aggressive fuel conversion programs and its limited electric residential portfolio. We also offer a few additional suggestions for other areas of the BCP.

Avista's Fuel Conversion Programs

Avista proposes three fuel conversion programs through the BCP, which are described briefly below. Below is a summary of Avista's 2018-2019 proposed budget and a notation of how much of each program budget is dedicated to fuel conversion, as taken from Appendix A of the BCP. Particularly in the case of the residential program, fuel conversions make up a substantial part of the electric budget.

	2018-19 Electric Budget	**2018-19 Fuel Conversion Budget**
Low Income Programs	$2,362,517	$296,672 (12.6%)
Residential Programs	$8,156,832	$4,942,900 (60.6%)
Non-Residential Programs	$10,737,426	$3,794,000 (35.3%)
Subtotal Program Funding	**$21,256,775**	**$9,033,572 (42.5%)**
NEEA Funding	$2,800,000	
Portfolio Support	$7,480,165	
Total	**$31,536,939**	

Summary of Fuel Conversion Programs

1. *Residential Fuel Conversions*

Avista offers a residential fuel conversion (also known as "fuel switching" or "fuel efficiency") incentive to its customers. To receive this incentive, a customer switches from an electric-

powered appliance (e.g., electric resistance heat, electric water heater) to a natural gas appliance.

In the 2018-2019 BCP, Avista proposes three residential fuel conversion incentives:

- From an electric resistance heater to a natural gas furnace: $1,500
- From an electric resistance heater and water heater to a natural gas furnace and natural gas water heater: $2,250
- From an electric resistance heater to a natural gas direct vent wall heat unit: $1,300

Receiving the conversion incentive does not require that a customer install equipment that is more efficient than standard; an additional incentive funded from the gas conservation rider incents that upgrade. Communications from Avista staff indicate that 94% of customers install high efficiency equipment as part of the fuel conversion program.[1]

This conversion incentive is funded from the electric conservation rider. Prior to September 2014, Avista was only able to fund residential fuel conversions at between $0.01 and $0.07 per kWh diverted, compared to the $0.08 to $0.20 per kWh saved at which electric efficiency projects could be funded. In September 2014, under docket UE-143081, Avista proposed changing the fuel conversion incentive to be the same as electric efficiency projects, and the proposal was allowed to take effect. Before the tariff revision, the Avista incentive for a conversion to a natural gas furnace, for example, was $1,000 or less. After the tariff revision, the incentive for conversion to a natural gas furnace has ranged between $1,500 and $2,300; the current and proposed incentive is for an incentive of $1,500.

Since the tariff was revised in 2014, the number of fuel conversion projects that has been funded by Avista under this rider has increased dramatically. Below is a brief summary of fuel conversion projects funded under this rider since 2010, as provided by the Company.[2]

Year	**Residential Fuel Conversion Projects (WA)**
2010	177
2011	143
2012	149
2013	134
2014	191
2015	422
2016	811
2017 (Jan-Oct 2017)	1546
2018 (forecast)	1255

[1] Email communication from Amber Gifford, Avista, on November 2, 2017.

[2] Presentation by Avista, November 30, 2017.

Avista has another program that can provide incentives for residential fuel conversion, the Line Excess Allowance Program (LEAP) pilot, which began in 2016 and is likely contributing to the recent large increase in fuel conversions. Under this program, the Company gives a new natural gas residential customer an allowance of $4,482 to cover the cost of the natural gas line extension to the property. If the cost to connect to the system is less than the allowance amount, any excess can be applied toward an efficient natural gas furnace, boiler, and/or water heater. The average customer receives an excess allowance rebate of $2,805[3]; this incentive is additional to the fuel conversion incentive and to the natural gas efficiency incentive. While this program is not discussed as part of the BCP and is not funded by the conservation riders, it obviously has some impact on the desirability of natural gas direct use versus efficient electric uses for residential customers. In 2016, 531 customers participated in the LEAP pilot and, in 2017, 1142 customers had participated as of September 2017.[4]

2. Low Income Fuel Conversion

Community Action Partner (CAP) agencies are able to fund fuel conversions for low-income customers with Avista funding. In Avista's 2018 Annual Conservation Plan, electric resistance heaters to natural gas furnace conversions through the CAP agencies are fully funded ($5,196.30) by Avista and electric to natural gas water heating is rebated at Avista's avoided cost of energy ($586.78).

3. Non-Residential Fuel Conversions

Finally, since 2008, Avista has offered a "multi-family market transformation program," which the Company notes in the current BCP filing is "intended to increase the availability of natural gas space and water heating in multi-family residential rentals, larger than a 5-plex." New multi-family construction can receive $3,500 per unit for the installation of natural gas or water heating (as written in the BCP and in program materials, it does not seem that the equipment installed has to be more efficient than standard to receive the incentive).

Other fuel conversions may happen as part of the site-specific non-residential program, but these incentives and electricity savings are not specifically called out in the 2018-2019 BCP budget.

Future of Avista's Fuel Conversion Programs

In written email comments to the three Washington electric Investor-Owned Utilities (IOUs) on October 23, 2017, UTC Staff expressed that fuel conversion programs should be removed from conservation programs.[5] In filed testimony in the current Avista General Rate Case, Staff further explained that they are of the view that Avista should discontinue its fuel conversion program, beginning with the 2018-2019 biennium.[6] In short, Staff's testimony related to the fuel conversion program was that:

[3] UE-170485, Exhibit JES-2.
[4] *Ibid*.
[5] Email provided to Avista DSM Advisory Group, dated October 23, 2017.
[6] UE-170485, Testimony of Jennifer Snyder.

- It is unfair that electric ratepayers pay for the administration and incentives for conversion to natural gas.
- Fuel conversion is not conservation as defined by the Northwest Power Act or Washington State.
- While other IOUs have funded non-conservation programs under conservation riders, these programs have usually been small in scope, in the public benefit, and unlikely to be supported by the utility without this cost recovery. These characteristics do not apply to the fuel conversion program.
- Avista's fuel conversion programs and incentives together (LEAP excess allowance, fuel conversion incentive, and natural gas efficiency incentive) bias customers toward natural gas.
- Low income fuel conversions can continue "in cases where it is in the best interest of the low-income customer."[7]

NWEC Fuel Conversion Program Comments

NWEC agrees with Staff that Avista's fuel conversion programs are not conservation and should therefore not be included as part of the BCP or be funded from the conservation rider. To the above points from Staff, we add the following points and make a recommendation regarding low-income fuel conversions.

1. The Northwest Power Act and Washington State defines conservation as "any reduction in electric power consumption as a result of increases in the efficiency of energy use, production, or distribution."[8,9] The Northwest Power and Conservation Council additionally clarifies in the 7th Power Plan that "fuel switching is not conservation under the Northwest Power Act," and further concludes that, "fuel choice markets are reasonably competitive and that those markets should be allowed to work without interference"[10]—that is, incentives that encourage fuel switching are not necessary.
2. In Avista's Integrated Resource Plan (IRP) process, fuel conversions are included in the load forecast in the Company's Integrated Resource Plan, with the forecast being based on historical data. Fuel conversions are not included as a measure in the Conservation Potential Assessment to "compete" against other conservation measures on the supply-side–further confirming that the fuel conversion is not "conservation" as other efficiency measures are considered.
3. The Company contends that, because of Avista's current fuel mix, converting to direct use of natural gas is less greenhouse gas emissions intensive than using electric appliances.[11] However, we can expect Avista's electricity fuel mix to become cleaner and less emissions intensive over time as Avista works toward meeting its renewable targets under Washington's Energy Independence Act, as coal plants retire, and as other energy

[7] *Ibid.*
[8] 16 USC 839a, Sect. 3(3) https://www.gpo.gov/fdsys/pkg/STATUTE-94/pdf/STATUTE-94-Pg2697.pdf
[9] RCW 19.285.030 (6) http://app.leg.wa.gov/RCW/default.aspx?cite=19.285.030
[10] Seven Northwest Conservation and Electric Power Plan, Appendix N: Direct Use of Natural Gas. https://www.nwcouncil.org/media/7149904/7thplanfinal_appdixn_duofnatgas.pdf
[11] Company presentation to UTC Staff, as provided to the Avista DSM Advisory Group on October 26, 2017.

policy continues pushing the electric grid toward a cleaner future. Any assessment of a program's impacts on greenhouse gas emissions must be long-term in nature. Locking a significant amount of new customers into natural gas infrastructure at this time may not result in a long-term beneficial greenhouse gas reductions over the alternative of relying more on the electrical system.

4. The Company also contends that conversion to natural gas is the least cost to customers.[12] However, switching customers to natural gas use exposes customers to any future price volatility in the natural gas markets and to price risk due to any future carbon pricing. We highlight that Puget Sound Energy has discontinued its fuel conversion program for the 2018-2019 biennium, noting that, "Key rationale included a potential carbon tax (making the conversion from electric to natural gas potentially not economic for participating customers, and create the perception of an unwise investment for PSE customers in the long-term)."[13] Actively encouraging natural gas uptake and infrastructure build-out as Avista is doing through its programs is not in the best long-term interests of customers.
5. For low-income fuel conversions, because of these above points, the Coalition recommends that more research be done by the Company and reviewed by the advisory group and the UTC to determine exactly when fuel conversion projects would be in "the best interest of the low-income customer" versus upgrading to more efficient electric equipment.

Other Residential Conservation Programs

The remainder of Avista's electric residential efficiency portfolio is limited: the Company funds Simple Steps, a retail buy-down program for lighting, showerheads, and clothes washers; and it has a small residential prescriptive program, which accounts for about 4% of the residential electric budget for 2018-2019 and 4% of the expected residential electricity savings. The Oracle/OPower Home Energy Reports program will be discontinued as of the end of 2017, to be replaced in 2019 with a behavioral pilot program.

We urge the Company to take a harder look at other opportunities for residential conservation. We would also like to see a more thorough explanation of how the Company plans to achieve the savings that they are guaranteeing to meet after the discontinuation of the Oracle/OPower Home Energy Reports Program.

Residential Program Opportunities

Avista's Conservation Potential Assessment (CPA), prepared for the 2017 Integrated Resource Plan (IRP), includes a table listing the top residential measures with the highest conservation potential in Washington over the 20-year horizon. Weatherization measures, such as infiltration

[12] *Ibid*.
[13] 2018-2019 Biennial Conservation Plan Overview, Puget Sound Energy, as filed on November 1, 2017 in UE-171087.

control (e.g., air sealing) and insulation, were some of the highest-rated measures.[14] However, Avista's 2018-2019 BCP only lists two incentives in the area of the residential building envelope—storm windows and windows.

The Company is proposing two pilot programs that would touch on the area of the residential envelope – (1) a direct install program that would install lightbulbs and water efficiency measures but also have a contractor assess a home's attic and/or crawl space insulation and recommend efficiency measures; and (2) a residential wall insulation pilot to encourage building envelope improvements when a customer is upgrading siding. NWEC is supportive of both of these pilots and hopes the Company will consider ways to incentivize or otherwise encourage participating customers to maximize their weatherization opportunities when they are already interacting with the Company or its contractor.

In addition to weatherization, the CPA highlights conservation opportunities in the areas of heat pumps. Avista does have an incentive for an air source heat pump and for a ductless heat pump ($700 and $500, respectively), but indicates that the Company is not expecting much uptake for these incentives in the 2018 DSM Annual Plan (57 and 80 projects, respectively, compared to 2,800 expected natural gas furnaces or boilers).[15]

NWEC encourages Avista to consider creative ways to achieve the conservation opportunities highlighted in the CPA and to bring ideas and questions to the DSM advisory group. NWEC also echoes a request made during the Fall Advisory Group meeting that the Company present a webinar or other information to the advisory group about how the Company sets its prescriptive incentive levels.

Home Energy Report Savings

The Company is transitioning away from its OPower/Oracle Home Energy Report and will be launching a smart thermostat pilot in 2018 and eventually a behavioral pilot program that works with its AMI. However, the Company has committed to the estimated savings that would have been realized by the OPower/Oracle Home Energy Reports, or 15,386 MWh for the biennium. NWEC would appreciate more clarity in the BCP of how the Company plans to achieve the conservation that would have come from the Home Energy Reports.

Other Comments

NEEA Savings: In UTC staff comments emailed to the Company on October 23, 2017, Staff expressed that IOUs should include NEEA forecast savings within their biennial target. NWEC looks forward to further discussions with Staff and the Company about this issue, how decoupling commitments should be calculated, and ensuring a common approach by all IOUs.

[14] 2017 Electric IRP Appendices, Table 5-6, Page 612. https://www.myavista.com/-/media/myavista/content-documents/about-us/our-company/irp-documents/2017-electric-irp-appendices-final.pdf?la=en

[15] ACP Appendix A, Table 1, as filed in Docket.

Pilot Programs: The Coalition is generally supportive of the pilot concepts outlined in the 2018 Annual Conservation Plan and discussed at the Fall Advisory Group meeting and we look forward to discussing them further as the pilots get underway. However, we would like to see more details in the BCP on how the Company will measure success of these pilots. We also encourage the Company to move quickly to a full program offering if a pilot is showing that it is successful.

Residential Financing: In Avista's 2017 Annual Conservation Plan, the Company said that they were exploring on-bill repayment options for its customers. In this filing, the Company has reported that, while on-bill repayment could be beneficial to its customers, the "additional complexity, monitoring, and administrative burden outweighs those benefits." NWEC asks that the Company brief its Advisory Group further to explain this burden. NWEC also encourages the Company to research and explore whether there are other opportunities to promote customer access to financing, such as interest buy-downs or credit reserves that would allow more customers to qualify for and take advantage of third-party financing.

Non-residential pay-for-performance: Other Washington utilities are beginning to explore and pilot non-residential pay-for-performance programs. NWEC encourages Avista to observe and learn from these programs and implement a pay-for-performance pilot in Avista's non-residential sector.

Respectfully submitted,

Amy Wheeless
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NW Energy Coalition

BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of Puget Sound Energy 2018-2019 Biennial Conservation Plan	**DOCKET UE-171087**
In the Matter of Avista Corporation 2018-2019 Biennial Conservation Plan	**DOCKET UE-171091**
In the Matter of Pacific Power and Light Company 2018-2019 Biennial Conservation Plan	**DOCKET UE-171092**

COMMISSION STAFF COMMENTS REGARDING ELECTRIC UTILITY CONSERVATION PLANS UNDER THE ENERGY INDEPENDENCE ACT, RCW 19.285 and WAC 480-109 (2018-2019 BIENNIAL CONSERVATION PLANS)

December 1, 2017

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Introduction

In 2006, Washington voters approved Initiative 937, also known as the Energy Independence Act (EIA). Now codified in RCW 19.285 and Chapter 480-109 WAC, "qualifying" electric utilities — those with at least 25,000 customers in Washington — are mandated to set and meet energy conservation targets.[1]

On November 1, 2017, Puget Sound Energy (PSE), Avista Corporation (Avista), and Pacific Power & Light Company (Pacific Power) timely filed their respective Biennial Conservation Plans (BCPs or Plans), regarding their 2018-2019 conservation targets with the Commission as required by law.[2]

Commission Staff (Staff) participated in the development of the Plans through advisory groups for all three companies, and conducted a thorough review of the Plans as filed. Staff's review focused on verifying that the companies used methodologies consistent with the Northwest Power and Conservation Council's (Council) most recent final Power Plan,[3] that proposed program changes are appropriate, and that each Plan complies with the statutory requirement to "pursue all available conservation that is cost-effective, reliable and feasible."[4] Staff also recommends targets different from those proposed by the companies, summarized in Table 1.

Table 1: Summary of 2018-2019 Staff-proposed Savings Targets[5]

	Total Planned Savings (MWh)	EIA Penalty Target (MWh)	Decoupling Penalty Target (MWh)
PSE	519,994	448,109	23,658
Avista	94,260	89,771	4,489
Pacific Power	91,596	81,500	4,075

Staff's review of the BCPs has focused on evaluating whether the companies met the reporting requirements outlined in RCW 19.285.070, WAC 480-109-120.

In these comments, Staff summarizes the target setting process, highlights key pieces of information, and identifies lingering issues. Staff also discusses some recent and anticipated changes in the rules, policies, and technologies affecting energy conservation in Washington. After reviewing the comments filed by other parties in this matter, Staff intends to present final

[1] RCW 19.285.030(19) (definition of "qualifying utility"); RCW 19.285.040(1)(b) (biennial conservation targets).
[2] RCW 19.285.070; WAC 480-109-120; *See* dockets UE-171087, UE-171091, and UE-171092.
[3] RCW 19.285.040(1)(a).
[4] RCW 19.285.040(1).
[5] It is likely that the EIA penalty target and the decoupling penalty target will be reflected separately in the Commission's orders. The companies will be expected to achieve the combined sum of these two amounts.

recommendations and proposed conditions for approval at the Commission's December 20, 2017, Recessed Open Meeting.

Target Setting and Implementation Plans

The target setting process begins with the development of Conservation Potential Assessments (CPA), which establish the savings potential in a utility's service territory over twenty-, ten- and two-year periods. Once the potential is set, the utilities may make necessary adjustments to derive their biennial conservation target. Examples of the changes that might be made include updating savings estimates based on new information, adding savings associated with measures not captured in the CPA (such as behavioral efficiency), calculating additional targets required by the Commission for decoupling, and removing savings that will be achieved through regional programs, such as the market transformation work done by the Northwest Energy Efficiency Alliance (NEEA).

NEEA

All three utilities fund and actively collaborate with NEEA, a regional market transformation organization. NEEA continues to improve the cost-effectiveness of companies' overall portfolios by leveraging regional market power and creating economies of scale to achieve co-created energy efficiency savings.[6]

PSE, Avista, and Pacific Power collaborated to develop a consistent approach for the treatment of NEEA savings beginning in the 2014-2015 biennium.[7] As a result of that collaboration, the companies agreed to fund NEEA and report the amount of savings achieved to the Commission separately from the biennial conservation target. NEEA savings are neither used when utilities are setting their target nor applied toward meeting their target.

To be consistent with public utilities, investor-owned utilities report a full target in the conservation reports they submit to the Washington Department of Commerce (Commerce), without any excluded potential and the total savings achieved from all sources.[8]

Beginning January 1, 2014, a statutory change means that conservation achieved above a utility's electric conservation target can be claimed as excess savings to meet shortfalls in subsequent biennia. In comments on the backward-looking 2014-15 biennial conservation reports (BCRs), Staff recommended excess savings be calculated using a target that includes all potential savings, as the decoupling commitment, and an achieved savings amount that includes all savings achieved by the utility, no matter the path to achievement.[9] This method would recognize all savings that were purchased by ratepayers during the biennium, would accurately reflect the

[6] Formerly known as net market effects.
[7] *See* Dockets UE-100170, UE-100176, and UE-100177 Joint Proposal for Consistent Approach to Northwest Energy Efficiency Alliance (NEEA) Claimed Conservation Savings (October 31, 2012).
[8] WAC 480-109-120(3)(c)
[9] *See* Dockets UE-132043, UE-132045, UE-132047 Staff Comments on 2014-2015 Biennial Conservation Reports (July 21, 2016).

achievement reported on a statewide basis, and would increase consistency between investor-owned and consumer-owned utilities.

However, Staff ultimately agreed with stakeholders that excluding NEEA savings is consistent with our standard practice for the 2014-2015 biennium and recommended that excess savings be calculated based on the stated UTC target and the stated UTC achievement, continuing to exclude NEEA for the 2014-2015 BCR.[10]

Staff has several concerns about continuing the practice of excluding NEEA savings from the EIA target.

- The risk of missing a target has been all but eliminated
- Consistency with public utilities
- Shortchanging ratepayers in carbon regulation
- Support for NEEA

Low risk to miss target: Originally, NEEA savings were removed from the EIA target (which has an associated penalty for failure to achieve the target) to avoid the risk of a third party reporting less than anticipated savings too late in the biennium for a utility to make up for it by achieving additional savings elsewhere. Staff has always believed that this risk was real but low.[11] But the risk of a utility not meeting their target because of last-minute underperformance by NEEA has been even more drastically reduced by the recently-allowed ability to carry over excess savings from the previous biennium. During the 2014-15 biennium PSE banked 38,906 MWh, Avista banked 2,389 MWh, and Pacific Power banked 24,178 MWh of excess savings.[12] These amounts are available to cover any shortfall a utility might experience in the upcoming biennium. Additionally, NEEA has improved the timing of their reported savings and works transparently with stakeholders to allow a utility sufficient early warning if initiatives appear in danger of falling short on savings.

Consistency with public utilities: The EIA covers both investor-owned and publicly-owned utilities. Allowing investor-owned utilities to remove the market transformation savings goals from the EIA target while publicly-owned utilities are required to meet market transformation targets is confusing to any outside entity attempting to determine the amount of conservation accomplished by each utility.

Shortchanging ratepayers in carbon regulation: There is a high likelihood that carbon regulation in Washington will interact with EIA targets and achievement.[13] Staff believes that including NEEA savings in the target would allow any excess NEEA savings to be treated as excess under

[10] It is likely that NEEA savings will continue to be excluded for the 2016-17 biennial achievement as well.
[11] Staff Comments on 2016-2017 Biennial Conservation Plans, Dockets UE-152058, UE-152072, UE-152076
[12] PSE - Docket UE-132043, Order 05, ¶19; Avista - Docket UE-132045, Order 03, ¶21; Pacific Power - Docket UE-132047, Order 03, ¶17.
[13] The Washington state Department of Ecology adopted the Clean Air Rule, found in WAC Chapter 173-442-160(5), on Sep. 15, 2016, establishing emission reduction units (ERUs) as a tool for measuring compliance with industry-specific emission reduction targets. Energy efficiency is one type of program that may generate ERUs. Ecology is also currently amending its air quality standards, found in WAC 173-407. Under these rules, energy efficiency is one type of carbon dioxide mitigation project that may be used to offset carbon dioxide emissions. See proposed WAC 173-407-020 "Mitigation project."

WAC 480-109-100(c).[14] If this bankable excess savings is allowed to be used for compliance with carbon regulation, then it has additional value to the ratepayer. Staff is concerned that a utility target that excludes NEEA savings could, therefore, result in greater costs to ratepayers for compliance with carbon regulation.

Support for NEEA: Additionally, NEEA is a collaborative organization. Washington's three investor-owned electric utilities represent a significant source of funding and stakeholder involvement. The success of NEEA rests largely on the amount of support it receives from utilities; utilities that may prefer to run such programs themselves. For the 2016-2017 biennium, Staff's primary concern with excluding NEEA savings from targets "was that utilities would waver in their commitments to and funding of NEEA."[15] Staff hoped that this concern was fully addressed when the Commission adopted rules that defined market transformation as part of a utility's statutory obligation to "pursue all" available conservation. Unfortunately, Staff believes that utilities have not been consistently providing NEEA the type of support needed to make the organization as successful at providing regional market transformation savings as it could potentially be. Thus, the responsibility for NEEA's failure to achieve its potential should also be shared by the utilities.

Staff recommends that for the 2018-2019 biennium, NEEA savings be included in the EIA target and any excess be treated the same as other excess savings. In each company-specific section below, Staff will provide a recommended target that includes NEEA savings.

Decoupling Calculation

As part of agreements made to implement decoupling mechanisms, all three utilities have committed to exceeding their EIA biennial target by 5 percent.[16] Since it has been standard practice to omit NEEA savings from the EIA target, both Avista and Pacific Power have chosen to calculate the 5 percent without NEEA savings. PSE chose to calculate the additional 5 percent commitment prior to subtracting NEEA savings. Confusion over the correct order of operations in performing these calculations is reasonable.

Staff hopes its recommendation, explained above, to include NEEA savings in the EIA target for the upcoming 2018-2019 biennium will dispel this confusion. If the Commission agrees and orders NEEA savings to be included, the confusion over the decoupling calculation will be a non-issue. However, if the Commission determines that NEEA savings continue to be held outside of the EIA target, Staff recommends that the 5 percent commitment be calculated from the conservation target before the removal of any NEEA savings as a matter of consistency. Table 2, below, illustrates the effect of Staff's recommendation for the decoupling target calculation.

[14] Savings are treated symmetrically, if they are in the target they will count towards excess. If the savings are held out of the target, additional savings do not count towards excess savings roll-over and the value of these additional savings are forfeit.
[15] *See* Dockets UE-152058, UE-152072, UE-152076, Staff Comments on 2016-2017 Biennial Conservation Plans (Dec. 3, 2015)
[16] PSE see Docket UE-121697, Order 07, ¶ 108; Avista see Docket UE-140188, Order 5, ¶ 26; Pacific Power see Docket UE-152253, Order 12.

Table 2: 2018-2019 Utility Decoupling Targets

	Utility Proposed Decoupling Target (MWh)	Staff Recommended Decoupling Target (MWh)
PSE	23,658	23,658
Avista	3,989	4,489
Pacific Power	3,715	4,075

Rebate Incentive Level

Staff notes that the cost-effectiveness of the portfolio is essential for determining whether an energy efficiency program's costs are prudent, but simply because a measure is cost-effective does not automatically mean that the costs incurred are all prudent. A well-run program will pursue conservation resources that are cost effective, and will attempt to achieve these savings at the *lowest reasonable cost*. With technological improvements quickly driving down the costs of some measures, particularly LED lights, it is imperative that utilities actively manage programs to ensure they are not overpaying for savings. Generally speaking, a utility should pursue a measure when it passes the total resource cost test (TRC) and set incentive levels using the utility cost test (UCT). This will determine if a measure is cost-effective. Utilities should not stop their program design at this point, however. Staff expects utilities to adaptively manage their programs by following market trends and researching options to lower incentives as appropriate. Money saved by not over-incenting popular measures that would be adopted by customers at a lower incentive amount could be used to implement less popular measures, or to reach underserved markets, thereby maximizing the acquisition of savings.

Hard to Reach Markets

The Council's 7th Power Plan identified hard-to-reach markets as action plan item MCS-1.[17] PSE and Pacific Power are participating in the regional work group that, as a result of item MCS-1, is helping to determine which segments are underserved in the region. Staff encourages Avista to join this effort.

PSE has provided several updates to their advisory group on current programs designed to reach segments traditionally thought of as hard-to-reach. In order to reach segments the Company believes may be proportionately underserved, PSE has adjusted the cost-effectiveness thresholds for low income programs, enhanced multifamily offerings, provided incentives specific to manufactured homes, and is exploring a pilot program for single family rentals.

[17] Northwest Power and Conservation Council, *7th Power Plan*, Chapter 4: Action Plan at 4-10 (May 26, 2016) *available at* https://www.nwcouncil.org/media/ 7149934/7thplanfinal_chap04_actionplan.pdf.

Avista is proposing several pilot programs designed to target potentially underserved markets such as multifamily, limited-income customers, and rental properties.

Pacific Power has identified a higher-than-average percentage of manufactured homes in their territory and is working with NEEA to obtain more useful data about the segment. The company is planning programs to reach manufactured homes in the upcoming biennium including targeted delivery measures and on-bill-financing specific to manufactured home parks.

Staff eagerly anticipates the findings of the MCS-1 working group. Once underserved segments are identified in each service territory, the utilities should work closely with their advisory groups to design appropriate programs and develop outreach strategies to capture these savings. Proper implementation of these programs will increase equitable distribution of conservation's benefits, and will help utilities meet their obligation to pursue all cost-effective conservation.

Additional Areas of Interest

The ongoing conservation planning, reporting, and reviewing process developed for each utility's portfolio is effectively an ongoing prudency review. Throughout a biennial cycle, Staff ensures prudency related to conservation by reviewing several elements, including the proper establishment of conservation potential, whether programs are cost effective, reliable, and feasible, whether all reasonable measures were pursued, if appropriate public and stakeholder involvement was included in the process (advisory group review), and verification that programs were administered efficiently.

Details about each Companies' programs will be discussed in following sections. Here, Staff provides a discussion of some of the areas of interest that Staff focused on during its review of each utility's BCP, including:

- Non-energy impacts,
- On-bill repayment,
- Resource value test,
- Performance incentives,
- Research,
- Pilot programs, and
- Electric-to-natural-gas fuel conversions.

Non Energy Impacts

The EIA requires the inclusion of quantifiable environmental costs and benefits when calculating cost-effective conservation.[18] The Commission has made clear that it prefers a properly balanced

[18] RCW 19.285.030(6). Cost-effectiveness is defined at RCW 80.52.030 and include system costs and quantifiable environmental costs and benefits.

TRC.[19] As such, when a benefit is identified as quantifiable, it should be quantified and included in a utility's calculations of cost-effective conservation.

In its December 18, 2015, comments on the Council's Draft 7th Power Plan, the Commission recognized that there are proven health benefits associated with reduced emissions, and stated that the EIA calls for including the financial value of positive health impacts brought about by reducing particulate matter emissions ($PM_{2.5}$) emissions.[20] In 2017, Washington's electric IOUs enlisted the consulting firm Abt Associates to analyze and quantify the benefit of reduced $PM_{2.5}$ emissions provided by installation of ductless heat pumps. Heat pumps can lower $PM_{2.5}$ emissions by reducing or replacing wood combustion as an energy source. Staff applauds this step towards quantifying a non-energy benefit.

Energy efficiency measures can reduce particulate emissions not just by displacing dirtier fuels, but also by lowering system-wide load, which reduces emissions from the system of utility-scale combustion-based electric generators. To properly account for all the non-energy benefits of $PM_{2.5}$, utilities should analyze the reduction of $PM_{2.5}$ from generation resources as a result of load reduction from all types of energy efficiency measures.

In June 2017, the Bonneville Power Administration (BPA) initiated a regional working group, which aimed to design a co-funded regional study to quantify non-energy impacts of energy efficiency. Unfortunately, due to cost management efforts at BPA, the agency was unable to commit to funding a study. Since state utilities have an obligation to include all quantifiable environmental costs and benefits in cost-effectiveness tests, they should take on leadership roles to ensure this effort is advanced.

On-bill repayment

During the last year, Staff asked all three companies to evaluate the possibility of adding an on bill repayment option to their energy efficiency programs. Interest in providing additional avenues for customers to finance energy efficiency measures was piqued by the proceedings in Docket UE-151871, when PSE proposed a new leasing service for hot water heaters and HVAC equipment.[21] In addition, over the last several years the gas utility NW Natural has demonstrated to Staff the success of its conservation-focused on-bill repayment program.

As a result, Pacific Power also began offering an optional concierge financing service for business customers in 2017 and, in 2018, plans to pilot an on-bill financing program for residential customers.

PSE utilized their Request for Information (RFI) process to identify service options for on-bill repayment/financing, financing concierge service, and a revolving fund with deferred repayment. Ultimately, the Company found that the significant costs involved, including upgrading PSE's billing and accounting systems to integrate with a third party provider, were not worth the incremental amount of customer participation expected from implementing such a program.

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[19] UG-121207, Policy Statement on the Evaluation of the Cost-Effectiveness of Natural Gas Conservation Programs.
[20] Commission comment for the Draft 7th Power Plan, December 18, 2015, available at https://www.nwcouncil.org/energy/powerplan/7/draftplan/comments/view?id=1862.
[21] *See* Docket UE-151872, Order 06, 37 ¶ 131(Nov. 16, 2016).

In 2017, Avista researched the feasibility of providing customers with a financing option to assist in obtaining new energy efficient equipment. Staff suggests the Company explore new avenues to make obtaining energy efficient equipment available to customers, including interest rate buy down programs. Staff looks forward to additional discussion in the advisory group on this issue.

Resource Value Test

In the spring of 2017, the National Efficiency Screening Project published the National Standard Practice Manual for Assessing Cost-Effectiveness of Energy Efficiency Resources (NSPM). The NSPM presents a cost-effectiveness test that is designed to incorporate a jurisdiction's applicable policy objectives, called the Resource Value Test (RVT). By following six universal principles, the manual develops a framework which can be followed step-by-step to develop a jurisdiction specific RVT.

Currently, the UTC uses a modified TRC test as the primary test to evaluate conservation programs. This test has been tweaked numerous times over the years, and Staff is unsure whether all policies are accounted for correctly, or whether companies are applying the test in a manner commensurate with one another. Staff believes that working through the framework outlined in the NSPM collaboratively with stakeholders would allow the Commission more certainty that the cost-effectiveness of energy efficiency is being properly evaluated.

PSE, Avista, and Pacific Power all recommend a collaborative process to discuss cost-effectiveness calculation policy goals, implementation of any potential revisions, and applicability to other resources.

Staff strongly agrees that the NSPM should be followed in a collaborative process to identify areas of improvement to UTC cost-effectiveness methodology. Staff suggests that any such comprehensive process commence after the conclusion of the Commission's current integrated resource plan (IRP) rulemaking in Docket U-161024.

Performance Incentive

As described in WAC 480-109-100(9), a utility may propose a positive incentive to encourage achievement exceeding the biennial conservation target. Properly designed, Staff believes this type of incentive could be beneficial to both utilities and ratepayers. PSE chose not to propose an incentive in this biennium's conservation plan; however, the Company suggests conducting a workshop in a statewide collaborative setting. This may be a useful exercise and Staff proposes a joint advisory group meeting halfway through the biennium to discuss this, as well as any other common issues.

Pilot Programs

An integral part of pursuing all conservation is the ongoing research and evaluation of technologies and programs.[22] These efforts often take the form of pilot programs. By law,

[22] WAC 480-109-060(21).

utilities "must implement pilot projects when appropriate and [are] expected to produce cost-effective savings within the current or immediately subsequent biennium."[23] In past biennia, Staff has noted the limited number of pilot programs implemented by Washington's investor-owned utilities.

In their 2018-2019 BCPs, all three utilities have meaningfully expanded their pilot offerings. Staff looks forward to seeing each of these programs thoughtfully implemented. Utilities should solicit input from their respective advisory groups concerning the goals of each program and the reporting of appropriate evaluation metrics that should be used to inform decisions about when to expand, modify, or end each program.

Research

Staff encourages utilities to undertake research needed to adaptively manage their programs. Currently, there are two particular studies which are important to the programs of all three utilities.

The first is a regional end-use load research study, which will update comprehensive data last collected on this scale in 1990. Among other utility planning purposes, accurate end-use load information is critical to correctly assessing the capacity value of energy efficiency measures. Staff has expressed its belief in the inherent value of this study to each company and hopes to see all utilities participating fully.

The second study, conducted by NEEA every four years, is a regional commercial building stock assessment (CBSA). For the upcoming CBSA, there is an opportunity for each utility to request oversampling in its particular service territory until approximately February 2018. Staff believes utilities should request this oversampling from NEEA to gain valuable data for more efficiently implementing programs.

Fuel Conversions

PSE has discontinued its electric-to-natural-gas fuel conversion program for the 2018-2019 biennium.

Avista has proposed increasing the size of its electric-to-natural-gas fuel conversion program and its multifamily natural gas market transformation program. A discussion of Staff's specific objections to Avista's programs can be found in the company-specific section of this document, infra at Pages 18-20.

[23] WAC 480-109-100(1)(c).

Company Targets and Plans

Puget Sound Energy (Docket UE-171087)

Company Recommended Target

For the 2018-2027 period, PSE estimates that its 10-year achievable conservation potential is 1,799,149 MWh (205.4 aMW), as measured at the customer meter. PSE's IRP-identified potential for the 2018-2019 biennium is 473,163 (54.0 aMW).[24] PSE calculated a 2018-2019 biennial EIA penalty conservation target of 448,109 MWh (51.2 aMW) and a decoupling commitment target of 23,658 MWh (2.7 aMW).[25]

PSE made several adjustments to derive its biennial conservation target. First, to find the portfolio total savings the company added to the IRP-identified potential:

- 18,693 MWh (Projected savings from retail wheeling customers),
- 4,480 MWh (Pilots with uncertain savings), and
- 23,658 MWh (The decoupling target of 5 percent, as calculated from the IRP-identified potential).

This resulted in a total 2018-2019 Total Portfolio Savings of 519,994 MWh (59.4 aMW). Next, to determine the EIA penalty target of 448,109 MWh. the company subtracted the following from the total portfolio savings:

- 25,054 MWh (NEEA savings from the Program Measures category that were included in the CPA),
- 18,693 MWh (Projected savings from retail wheeling customers),
- 4,480 MWh (Pilots with uncertain savings), and
- 23,658 MWh (The 5 percent decoupling target).

PSE plans to spend $180,706,838 to achieve the total portfolio savings of 519,994 MWh, which includes NEEA savings, the pilots with uncertain savings, savings from retail wheeling customers, and the decoupling commitment savings. The company also plans to spend $2,157,779 on net metering, whose revenue is collected through the electric conservation rider Schedule 120. The biennial budget is about 8 percent less than the previous biennial budget while the portfolio total savings is approximately 14 percent less than the previous biennial planned savings. This continues the trend of less achievable savings that costs more per MWh (on average) to procure. Among other influences, this is a result of increasing of conservation baselines and market saturation of lower-cost measures. The budget includes additional costs for:

- research ($200,000 for the CBSA and $700,000 for end use load research),
- additional commitments to low-income weatherization ($500,000 in funding as part of the decoupling commitment), and

[24] PSE used the two-year savings potential for 2018-2019, as it was larger than the pro rata share.
[25] PSE committed to achieve 5 percent above its biennial conservation target as part of an agreement for a decoupling mechanism in docket UE-121697.

- the highest spend year of the four year cycle for the Large Power Users/Self-directed program (2018 will have expenses approximately $12 million more than 2019).

The company expects its total portfolio to achieve a TRC ratio of 1.4 and a UCT ratio of 1.5, indicating that the portfolio is cost-effective.[26] Table 3 compares PSE's current and upcoming biennial proposed targets and budgets.

Table 3: PSE-proposed Conservation Savings and Budget

	2016-2017 Biennial EIA Target[27]	2016-2017 Portfolio Total[28]	2018-2027 10-year potential	2018-2019 Biennial EIA Target	2018-2019 Portfolio Total[29]
Savings (MWh)	537,078	605,194	1,799,149	448,109	519,994
Budget		$198,985,000			$182,864,61730

Staff finds that the company used a methodology consistent with the Council's 7th Northwest Power Plan, as required by WAC 480-109-100(2)(b) and WAC 480-109-999(1)(a), to develop its conservation potential assessment.

Staff Recommended Target

As discussed on Page 5 of these comments, Staff recommends NEEA savings no longer be removed from the EIA target. For PSE, this would simply change the EIA target to 473,163 MWh, the full amount of conservation potential found for 2018-2019 in the CPA. The decoupling target and total portfolio savings would remain as calculated by PSE.

[26] Excluding low-income programs.
[27] See docket UE-152058, Order 01.
[28] See docket UE-152058.
[29] Includes NEEA, decoupling commitment, and pilots with uncertain savings.
[30] Includes $2,157,779 for the net metering program.

Table 4: Staff-proposed PSE Conservation Savings

Category	Savings (MWh)
IRP-identified potential	473,163
EIA target	**473,163**
Decoupling commitment	**23,658**
Total target subject to penalty	496,821
Pilots with uncertain savings	4,480
Projected savings from retail wheeling customers	18,693
2018-2019 Portfolio Total	**519,994**

Low-Income Cost-Effectiveness

In order to maintain comprehensive offerings, PSE has revised the way it calculates cost-effectiveness for low-income programs. As an alternative to the minimum TRC requirement, measures identified as cost-effective in the Department of Commerce Weatherization Manual will automatically qualify for PSE low-income funding. [31] PSE estimates that this change will add more than 1 million kWh of savings for low-income customers.

For the upcoming biennium PSE will exclude low-income programs from the portfolio level cost-effectiveness calculations.[32]

Pilots

PSE has identified several innovative pilots for the upcoming biennium. Most notable is the company's commitment to a pay-for-performance initiative in their Business Energy Management division. This is the only pilot PSE identifies as having uncertain savings. As such, the company is not counting on this program to meet the EIA target, but is counting 4,480 MWh of estimated savings toward the Portfolio Total goal. The pay-for-performance pilot will engage several customers with large building footprints and savings potential. The program will incent capital, O&M, and behavior savings on an escalated performance basis.

PSE will pilot an initiative working with HVAC distributors to increase regional stocking of high-efficiency equipment. Included in the plan are pilot measures, such as the multifamily automatic tubspout diverter; and pilot delivery methods, such as direct install of advanced power strips and chick warmers.

[31] WAC 480-109-109(10)(a)
[32] WAC 480-109-109(10)(b)

An EM&V 2.0 (sometimes referred to as advanced evaluation, measurement & verification) pilot on several non-residential projects will help determine if PSE can shorten the M&V period for some projects based on the goodness-of-fit of daily energy consumption models. The Company has been working with Lawrence Berkley National Laboratory and DNV-GL on these efforts to leverage advanced analytics and data mining of conservation program data.

The Company is also exploring a single-family rental pilot that would target large rental portfolio property owners with bundled retrofit services. This program attempts to reach a segment of the populations that is notoriously difficult to engage in conservation programs. Staff encourages PSE to continue consistently innovating to find new ways of achieving cost-effective savings.

Stakeholder Engagement

Staff would like to recognize the outstanding manner in which PSE continues to utilize their advisory group. The company and the Conservation Resources Advisory Group (CRAG) have worked diligently to identify issues, concerns, and opportunities in the biennium. Staff appreciates the amount of time that the Company and the members of the CRAG have devoted to resolving these issues before the Company filed the BCP. PSE's commitment to ensuring that stakeholders have all of the information, background, and details needed brings maximum value to CRAG proceedings. The Company is consistently responsive to member questions and concerns. In 2018, PSE plans to resume its advisory group newsletter "CRAG Communications," which will allow an additional conduit of information between meetings.

Avista (Docket UE-171091)

Company Recommended Target

As required by rule, Avista's biennial target must be at least 20 percent of its 10-year target.[33] The Company's 2017 Conservation Potential Assessment (CPA), required as part of its 2017 Integrated Resource Plan (IRP), identified a 10-year conservation potential of 368,181 MWh for Washington.[34] Its 2015 IRP had built a higher baseline into the CPA and decreased avoided costs, which resulted in a higher 10-year target of 391,000 MWh. Staff is concerned that Avista's 10-year potential has decreased. Pacific Power's 2018-2019 BCP identifies a conservation forecast that is significantly greater than that identified in Avista's CPA despite Avista's higher electricity load. Staff will continue to investigate and communicate with Avista and Applied Energy Group (AEG), Avista's CPA consultant, why its 10-year potential has decreased.

Avista used a methodology consistent with the Council's 7th Northwest Power Plan to develop its CPA. In its 2017 IRP, Avista improved its conservation potential modeling techniques. Individual energy efficiency resources compete with supply and demand response options to meet resource deficits, where energy efficiency measures benefited by receiving 10 percent more value compared to the supply-side resources. The Company screened over 8,700 demand side

[33] WAC 480-109-100(3)(b)
[34] Docket UE-161036 Avista Corporation's 2017 Integrated Resource Plan, at 5-7. Avista retained AEG to conduct its 20-year Conservation Potential Assessment (CPA), which is included as an appendix in the 2017 IRP.

resources in its model as individual conservation measures, allowing the model to select cost-effective measures on a measure-by-measure basis—rather than by bundling.

For the 2018-2019 CPA, the two-year achievable potential is 69,899 MWh for Avista's Washington electric operations. However, the pro rata share of the utility's 10-year conservation potential is calculated as 73,636 MWh. Given that Avista's 2-year potential, as initially calculated is below the pro rata share of the 10-year potential, the pro rata share of Avista's 10-year potential will be the basis for the Company's target.[35] Thus, the starting point Avista estimates for its 10-year achievable conservation potential is 73,636 MWh. In addition, the Company also includes the following adjustments:

Additional Savings

- 15,386 MWh (behavioral program savings),
- 749 MWh (distribution efficiency), and

Less

- 9,986 MWh (NEEA pro rata savings identified within Avista's CPA).

Avista's CPA does not include behavioral savings. The Company added 15,386 MWh of projected savings, which was estimated from its existing Opower/Oracle forecast for the 2018-2019 biennium. Next, the Company adjusted its savings by subtracting 9,986 MWh of savings attributable to NEEA programs from the biennial conservation target. Staff disagrees with this calculation. For the 2018-2019 biennium, Staff contends *NEEA savings should be included in the EIA penalty target* and excess NEEA savings should be treated the same as other excess savings.

In addition, Avista has a decoupling mechanism, as outlined in Docket UE-140188 and UG-140189 (Order 05). The Company must achieve 5 percent above its biennial conservation target. In this biennium, Avista's proposed decoupling commitment is an additional 3,989 MWh, based on the Company's *exclusion* of NEEA savings in its decoupling commitment calculation. As noted earlier, Staff disagrees with the Company's calculation and has outlined an alternative, presented later in these comments. Avista projects its total portfolio savings as 93,760 MWh. This amount includes input values from the Company's conservation potential assessment, a commitment to additional savings derived from behavioral program estimates, distribution and street light efficiencies, and its decoupling commitment.

Table 5 compares Avista's current and upcoming biennial proposed targets and budgets.

[35] WAC 480-109-100(3)(b) The biennial conservation target must be no lower than a pro rata share of the utility's ten-year conservation potential.

Table 5: Avista-proposed Conservation Savings and Budgets

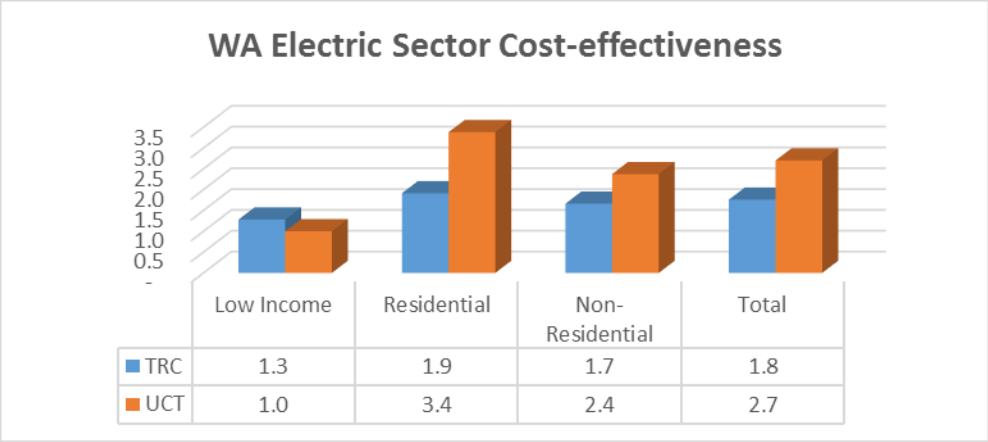
	2016-2017 Biennial EIA Target **excluding NEEA*	**2016-2017 Portfolio Total**	**2018-2027 10-year potential**	**2018-2019 Biennial EIA Target** **excluding NEEA*	**2018-2019 Portfolio Total**
Savings (MWh)	72,626	88,533	368,181	79,785[36]	93,760
Budget **excluding conversions*		$22,666,000			$22,500,000
Total Budget		$26,770,000			$31,537,000[37]

Avista plans to spend $31,537,000 to achieve a total savings of 93,760 MWh. The total portfolio budget also includes NEEA savings, new pilot programs, incentives for conversions from electric-to-natural-gas for residential and multi-family new construction, and decoupling commitment savings.

The 2018-2019 portfolio total biennial budget, *not including fuel conversions*, is similar to the previous biennium. Staff remains concerned that the Company plans to spend an additional $8,737,000, or approximately 28 percent of its total budget, on residential and multi-family construction unit electric-to-natural-gas fuel conversions.[38] Historically, Avista included these expenditures in the budget but held the savings outside of the biennial conservation target, as conversions are not considered conservation measures.[39] The Company also includes an increased budget for non-residential site-specific projects and interior prescriptive lighting incentives, which showed a significant increase in 2016.

[36] These savings *exclude* NEEA as part of its portion of the BCP target subject to penalty. Adding the Company's 5% decoupling commitment, the local biennium target equals 83,774 MWh.
[37] Avista's proposed budget includes expenditures related to NEEA, residential electric-to-natural-gas conversions, and electric-to-natural-gas conversions for multi-family new construction.
[38] Including the low-income budget, this figure totals $9,033,633.
[39] The Commission has approved non-conservation programs that can be temporarily recovered through utilities' conservation tariffs, including net metering, electric vehicle pilots, demand response pilots, and fuel conversion programs. Common themes among these programs are that they are small and have a minimal impact on the rate of the rider. See *Avista's 2017 General Rate Case*, Dockets UE-170485 and UG-170486; Snyder, Exh. JES-1T at pp. 18.

Figure 1: Avista's Washington Electric Sector Cost-Effectiveness



As shown in Figure 1, the Company will achieve cost-effectiveness above 1.0, indicating that the portfolio is cost-effective.[40] On a total portfolio level, the TRC ratio is 1.76 and UCT is 2.7.

Staff Recommended Target

As mentioned before, Staff disagrees with the Company's target calculations, specifically its *exclusion* of NEEA savings. By correctly including NEEA savings in the EIA penalty target and its decoupling commitment calculation, Staff calculates the Company's EIA and decoupling penalty targets as shown in Table 6, below:

Table 6: Staff-proposed Avista Conservation Savings

Category	Target (MWh)
Pro Rata Share of 10-year conservation potential[41]	73,636
Behavioral Program Savings	15,386
Distribution and Street Light Efficiency	749
EIA Target	**89,771**
Decoupling commitment	**4,489**
Total target subject to penalty	94,260
2018-2019 Portfolio Total	**94,260**

In addition to the NEEA savings calculations, which affect all three electric companies, three substantive issues remain. Those issues are:

1. **Discontinue recovery of electric-to-natural-gas fuel conversion incentive programs through Avista's conservation cost recovery tariff.** As described in Staff witness

[40] *Avista's 2018 Annual Conservation Plan*, at Page 32.
[41] The conservation potential includes 9,986 MWh of NEEA Pro Rata Savings (identified within CPA).

Jennifer Snyder's testimony in Avista's general rate case (UE-170485, UG-170486), and as a result of ongoing discussions in 2017 with the Company, Staff does not support including any electric-to-natural-gas fuel conversions for residential or multi-family new construction as part of the 2018-2019 Biennial Conservation Plan.[42] For 2018 and beyond, no electric-to-natural-gas fuel conversion expenditures should be allowed to be recovered through the Company's electric conservation cost recovery adjustment, as outlined in WAC 480-109-130.[43]

2. **Pilot programs reporting.** Staff is concerned that the Company has not incorporated adequate pilot development, implementation, or reporting information into its proposed programs. Avista should regularly consult with its advisory group, as required by rule, and develop and report on metrics to better determine pilot program success.[44]

3. **Decrease in residential offerings.** Staff and other advisory group members raised questions about why Avista's prescriptive residential offerings have decreased and do not more closely align with its most recent CPA. Staff suggests the Company include the residential offerings listed as its "top 20 measures" or provide a rationale as to why these offerings are not feasible and report back to the advisory group.

Discontinue recovery of electric-to-natural-gas fuel conversion costs through the conservation tariff rider

There is an increasing concern that Avista is using electric conservation funding not just to improve customers' access to natural gas, or to avoid building a future electric generation plant, but to actually expand its natural gas business. Staff recognizes the benefits of increasing access to natural gas for customers who choose to switch fuels and supports Avista's past development of the fuel conversion program.[45] But funds recovered through electric rates should not be devoted to expanding the Company's natural gas business.

Staff voiced concerns with the Company's growing fuel conversion program throughout 2017, issuing several data requests. Avista hosted several WebEx Company presentations with Staff, explaining their position for growing their electric-to-natural-gas fuel conversion programs. Along with other issues, fuel conversion programs were discussed on the following dates:

- April 25 (WebEx, Company & Staff),
- May 8 (WebEx, Company & Staff),
- August 23 (Advisory Group),
- September 25-26 (Two-day Fall Advisory Group Meeting),
- October 13 (Company & Staff),

[42] *Avista's 2017 General Rate Case*, Dockets UE-170485, UG-170486; Snyder, Exh. JES-11 at 36, Avista 2018 Draft ACP (indicating the Total 2018 Washington Electric Budget); Snyder, Exh. JES-11 at 71, Avista 2018 Draft ACP, Appendix F (regarding Fuel Efficiency Conversions). Snyder, Exh. JES-11 at 71, Avista 2018 Draft ACP, Appendix F (indicating a Multifamily Market Transformation budget of $2,509,562).
[43] WAC 480-109-130 Conservation cost recovery adjustment.
[44] WAC 480-109-100(1)(c) Pilots.
[45] *Avista's 2017 General Rate Case*, Dockets UE-170485 and UG-170486; Snyder, Exh. JES-1T at Pages 16-22.

- October 23 (Staff email recommending removal of fuel conversions programs from the Company's DSM Program/Tariff, effective January 1, 2018),
- October 24 (In Person Meeting, Company & Staff), and
- November 30 (WebEx, Advisory Group).

After review of the Company's Draft BCP, on October 23, 2017, Staff recommended discontinuation of the residential and multifamily "market transformation" electric-to-natural-gas fuel conversion incentive programs. These programs have continued to draw controversy each year, and Staff believes these programs, which represent one third of the Company's total BCP biennial budget, need to be completely removed from conservation programs. This includes cancelling any tariffs.

In its 2018-2019 BCP, the Company is proposing to substantially increase its fuel conversion budget. Avista's initial draft of its ACP included a budget of $4,942,900 for the residential fuel conversions program (including incentive costs, internal labor, and other non-incentive utility costs) out of a total electric residential budget of $8,156,832. In stark contrast, the residential conservation measure budget is overshadowed by these electric-to-natural-gas fuel conversions, where the Company allocated a mere $328,000 for residential prescriptive measures.[46] The Company's residential portfolio *without* fuel conversions achieves a TRC ratio of 2.2 and a UCT ratio of 3.1. Staff suspects more conservation measures could be included as part of the Company's portfolio for the residential sector. Staff views Avista's fuel conversion programs as duplicating the intent and purpose of Avista's existing natural gas Line Extension Allowance (LEAP) pilot program, which is recovered from natural gas ratepayers. LEAP is better suited for these purposes. For 2018 and beyond, increasing access to natural gas should be done with funding from the LEAP pilot program.

In its 2018-2019 BCP, Avista not only increases the budget and incentives for residential electric-to-natural-gas fuel conversions but also increases its budget for multifamily new construction electric-to-natural-gas. Since 2008, Avista's multifamily program has provided rebates to developers of new complexes who choose to install natural gas. The budget for this program has ballooned to $3,794,000 for this two-year planning cycle.

Staff questions why incentives for fuel conversion are still being offered. In Staff's data request sent to the Company in May 2017, Avista estimated that 28 percent of the eligible multifamily construction market chose natural gas, while during 2004-2008 less than 15 percent chose natural gas. Historically, incentives for the multifamily new construction have ranged from $900 per unit, in 2008, up to $3,500 per unit in 2017. Staff questions why the Company continued to increase incentives year-after-year for this program—apparently putting its metaphorical thumb on the side of gas over electricity by offering these increased incentives, paid for by electric ratepayers, which continue to further distort intra-fuel competition in the multifamily construction development market. Pacific Power and PSE do not offer these incentives.

Avista claims its fuel conversion program is a cost-effective method to achieve electric savings that also removes electric load from Avista's system. However, Staff notes that the electric-to-natural-gas fuel conversions are held outside the CPA and do not "compete" with other supply-

[46]Avista's Simple Steps, Smart Savings residential program is an upstream buy down program and includes residential lighting and showerheads. Avista has allocated $2,885,000 for this residential program over the biennium. CLEAResult is contracted by Avista to provide the manufacturer and retail coordination.

side resources in the IRP. Instead, they are embedded in the demand-side forecast in the IRP. Further, the Company's conversions are currently held outside of the conservation target—yet the prudency determination and costs of the program have historically been recovered through the Company's annual conservation cost recovery tariff.[47] Coupled with the sheer scale of the conversion program in comparison to the actual conservation program, it is readily apparent to Staff that *electric* customers should no longer fund any electric-to-natural-gas conversion programs through the electric conservation rider as they are not conservation savings. A customer choice program that increases access to natural gas is more properly funded through gas rates.

Staff believes that the prudency of proposed electric-to-natural-gas fuel conversion programs for the 2018-2019 biennium, which are similar to the LEAP pilot program, are more appropriately addressed in the context of the current Avista general rate case because of the inextricable link to electric rates. Regarding the approval of Avista's BCP, Staff does not believe that the Commission must withhold its approval of the BCP, as a whole, because of the fuel conversion issues. Instead, Staff recommends that the Commission include an additional condition in its 2018-2019 BCP order that excludes residential and multifamily new construction fuel conversion cost recovery from the conservation cost recovery adjustment (Schedule 91) pending resolution of these issues in Avista's current general rate case.

Staff notes one exception to fuel conversions: Avista's low-income weatherization program. This program allocates funds to seven Community Action Agencies (CAAs) in its territory and allows these agencies to spend the funds on either electric or natural gas measures at their discretion. Staff recommends allowing funding of low-income fuel conversions through Avista's Low Income Rate Assistance Program (LIRAP) tariff Schedules 92 and 192, (and not through its conservation program). At this time, Staff recognizes that natural gas prices are a market driver and sees no reason to prevent these agencies funding low-income fuel conversion in cases when they determine it is in the best interest of the low-income customer to do so. The projects should be funded at the budgeted amount in the low-income weatherization program, providing low-income rate assistance through these projects.

Pilots

Staff commends the Company on its willingness to sponsor pilot projects and evaluate new technologies for attaining energy conservation at a reasonable cost of $350,000.[48] In particular, Staff supports Avista's newly proposed residential behavioral pilot program, which will utilize advanced meter infrastructure (AMI) and Wi-Fi enabled residences. As a result of the newly proposed residential behavioral pilot, Avista proposes to end its home energy report (HER) program with Opower/Oracle in 2018. The Company has committed to replacing HER savings with this pilot and will carry-over its forecasted behavioral savings of 15,386 MWh in its biennial target.

Staff is concerned that the Company has committed to these savings—while details in the BCP are vague. It would be helpful if Avista could provide more information, including a quarterly

[47] WAC 480-109-130 Conservation cost recovery adjustment.
[48] *Avista's 2018-2019 BCP*, Docket UE-171091, Appendix B (2018 Annual Conservation Plan) at 19-22.

update with its advisory group members on the pilot scope, schedule and selection of its third-party vendor to implement the behavioral target savings. The Company should regularly update Staff on how (and at what cost) its committed 15,386 MWh of savings will be achieved.

Stakeholder Engagement

In 2017, Staff notes Avista has improved aspects of its advisory group communication and hosted a series of webinars on topics such as its LEAP program, multifamily fuel conversion program, and its draft targets and plans. The Company has engaged its conservation advisory group, and Staff appreciates the amount of time that the Company and the members of the advisory group have devoted to these issues. However, Staff remains concerned that the Company may view the function of the advisory group as merely a conduit for disseminating information rather than a forum for discussion and advice: the advisory group, is intended "to advise the utility on conservation issues."[49] Staff encourages the Company to revisit the rule and discuss the role and purpose of the advisory group with its members. Also, in an effort to increase transparency, Staff requests that budget, savings, and other tables containing data with calculations submitted to the Commission (through draft plans or informal data requests) be provided in Excel format.

Prescriptive residential conservation measures

Avista's prescriptive residential offerings do not appear to closely align with its most recent CPA. The Company should evaluate its offerings and refile its BCP to include the Company's CPA "top 20 measures" or provide a rationale as to why these offerings are not feasible and cannot be offered alongside its other residential programs.[50] The biennial potential for residential savings must be reconciled with current program offerings; the Company should discuss results in detail with its advisory group.

Pacific Power & Light Company (Docket UE-171092)

Company Recommended Target

For the 2018-2027 period analyzed in its CPA, Pacific Power estimates that its 10-year conservation potential is 394,473 MWh, measured at the generator.[51] Pacific Power hired the consultant AEG to develop a CPA for all of its states (except Oregon, for which the Company obtains conservation resources through the Energy Trust of Oregon). Staff finds that the Company used a methodology consistent with the Council's 7th Northwest Power Plan, as required by WAC 480-109-100(2)(b) and WAC 480-109-999(1)(a), to develop its CPA.

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[49] WAC 480-109-110 Conservation advisory group.
[50] *Avista's 2017 DSM Potential Study Report*, prepared by Applied Energy Group (AEG). Table 5-6 Residential Top Measures in 2019 (Annual Energy, MWh).
[51] Staff notes that there are some irregularities and mismatched figures in Pacific Power's original as-filed BCP. Pacific Power has informed Staff of its intent to file an updated plan with corrected figures. The details and analysis in Staff's comments are based on the Company's corrected figures.

With the CPA's data as an input, Pacific Power used its IRP resource selection tools to identify Washington's total technical, achievable and economic conservation potential. The Company adjusted the IRP's selected conservation resources to account for a number of factors, including existing behavioral programs (which were not included in AEG's assessment), cost-effective cogeneration, and updated unit energy savings assumptions for some measures based on newer information. After these adjustments, Pacific Power identified 81,500 MWh of cost-effective, reliable and feasible conservation for the 2018-2019 biennium.[52]

Pacific Power modified this target by first removing forecasted NEEA savings, then adding a 5 percent decoupling commitment, pursuant to the Company's interpretation of Order 12 in Docket UE-152253. Table 7 below compares Pacific Power's representation of its current and upcoming biennial targets and budgets.

Table 7: Pacific Power-proposed Conservation Savings and Budget

	2016-2017 Biennial EIA Target	2016-2017 Portfolio Total [53]	2018-2027 10-year potential	2018-2019 Biennial EIA Target	2018-2019 Portfolio Total [54]
Savings (MWh)	87,814 MWh	96,876 MWh	394,473 MWh	78,008 MWh	91,596 MWh
Budget		$24,560,530			$22,585,727

The Company and Staff agree that the 5 percent decoupling commitment should be calculated based on the Company's EIA target obligations. Staff disagrees with Pacific Power's interpretation that the Company's EIA obligation is net of NEEA's projected savings. Pacific Power's order of operations in calculating its EIA target is as follows:

1. Determine available cost-effective, reliable and feasible conservation — 81,500 MWh
2. Subtract forecasted NEEA savings of 7,207 MWh — 74,293 MWh
3. Calculate 5 percent decoupling commitment based on 74,293 MWh — 3,715 MWh
4. Add decoupling commitment to net-of-NEEA target — **78,008 MWh**

Pacific Power plans to spend $22,585,727 over the 2018-2019 biennium to achieve an estimated 91,596 MWh of savings (both figures including NEEA). The 2018-2019 biennial budget is about

[52] Pacific Power used the two-year savings potential for 2018-2019, as it was larger than its pro-rata share of 78,895 MWh.
[53] The 2016-2017 target excludes NEEA savings, and does not include a decoupling commitment. Pacific Power did not have a decoupling arrangement at the time of the 2016-2017 BCP filing.
[54] The proposed 2018-2019 target excludes NEEA and includes Pacific Power's calculation of its decoupling commitment.

9 percent less than the previous biennial budget. The Company expects its total portfolio to achieve a TRC ratio of 1.3 and a UCT ratio of 1.4, indicating that the portfolio is cost-effective.[55]

Pacific Power is planning to implement a number of pilot programs. The Company took an appropriately conservative approach to reporting the pilot program's costs and savings, including the costs in the Company's conservation budget, but not including any savings generated by the pilots in their total projected savings estimates.

The primary driver of the reduction in both the conservation target and the program's energy savings projections is the reduced cost of supply-side resources relative to demand-side resources in Pacific Power's IRP. Continued low gas prices have helped keep supply-side alternatives competitive, while improved building codes and updated unit energy savings for key energy efficiency measures provide upward pressure on the price of conservation resources. Nonetheless, Pacific Power estimates that its non-NEEA programs will achieve roughly 108 percent of its non-NEEA target.

Staff Recommended Target

As discussed on Page 5 of these comments, Staff recommends NEEA savings no longer be removed from the EIA target. For Pacific Power, this would simply change the EIA target to 81,500 MWh, as shown in Table 8, below:

Table 8: Staff-proposed Pacific Power Conservation Savings

Category	Savings (MWh)
2-year share of adjusted 10-year potential	81,500
EIA target	**81,500**
Decoupling commitment	**4,075**
Total target subject to penalty	85,575
2018-2019 Portfolio Total	**85,575**

If the Commission decides to continue the practice of removing forecasted NEEA savings from companies' targets, Staff recommends subtracting NEEA's forecasts *after* adding the decoupling commitment. Staff contends that the 5 percent commitment should be based off the conservation target before forecasted NEEA savings are removed, because a company's decoupling commitment should be based on the Company's core obligation. 81,500 MWh represents all cost-effective conservation; accordingly, the decoupling commitment should be 5 percent of this figure. This would result in a 2018-2019 biennial conservation target of 78,368 MWh.

This issue is rendered moot if the Commission adopts Staff's recommendation to include NEEA savings in each company's biennial conservation target.

[55] Tests include 10 percent NW Power Act credit, NEEA estimated costs and benefits, and non-energy impacts.

Stakeholder Engagement

Staff appreciates Pacific Power's continued efforts to engage with the advisory group. Staff would welcome any efforts on the part of Pacific Power to increase active participation from other members of the advisory group, though Staff recognizes that stakeholder engagement is not fully within the Company's control. Staff has not identified any issues within the advisory group that should be considered by the Commission at this time.

Summary

After reviewing the comments filed by other parties in this matter, Staff intends to present its final recommendations and proposed conditions for approval at the Commission's December 20, 2017, Recessed Open Meeting.

December 18, 2017

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P.O. Box 47250
Olympia, Washington 98504-7250

Re: Docket Nos. UE-171091, UE-171087, and UE-171092 – Response Comments of Avista Utilities, Puget Sound Energy and Pacific Power & Light on Commission Staff Comments Regarding Electric Utility Conservation Plans Under the Energy Independence Act

Dear Mr. King,

Avista Corporation, dba Avista Utilities (Avista), Puget Sound Energy (PSE) and Pacific Power & Light Company (Pacific Power) (collectively referred to as the Investor Owned Utilities "IOUs") submit the following comments in response to the Washington Utilities and Transportation Commission Staff's ("Staff") comments issued in Docket Nos. UE-171091, UE-171087 and UE-171092 on December 1, 2017 regarding the Electric Utility Conservation Plans under the Energy Independent Act.

The Electric IOUs' comments focus specifically on Staff's recommendation "[…] that for the 2018-2019 biennium, NEEA savings be included in the EIA target."[1]

The IOUs collectively disagree with this recommendation for the following reasons.

(1) The IOUs' support of the Northwest Energy Efficiency Alliance ("NEEA") and its mission since the inception of the organization in 1996 has been unwavering. The IOUs appreciate NEEA's forward-looking vision and investments, are actively engaged with NEEA board and committee positions, and are committed to continue these efforts into the future. The current NEEA funding cycle 2015-2019 is nearing its end and strategic planning is underway for the next funding cycle to determine the direction for NEEA to proceed. IOU representatives are actively engaged in the NEEA strategic planning process and intend to revisit the current policy for treatment of NEEA savings with their respective Advisory Groups during the 2020-2021 Biennial

[1] Page 6 of Staff Comments on 2018-2019 Biennial Conservation Plans, ¶ 3, "NEEA".

Conservation Plan ("BCP") target-setting process, once NEEA's strategic direction for 2020-2024 funding cycle is known.

(2) Including NEEA savings in IOUs' enforceable targets would inappropriately shift the risk of NEEA achieving its goals to the IOUs. Although the IOUs are actively engaged through the NEEA board and committees, they are but 3 of the 13 funders comprising less than 25 percent of total NEEA funding, and hold only 3 of the 18 voting board seats that are adaptively managing the policies and direction of NEEA. The current policy of removing projected NEEA savings from the IOU enforceable target accurately reflects the limited ability of the IOUs to influence savings realized through NEEA initiatives. Moreover, because NEEA reports savings to IOUs after a biennial period is already complete, the IOUs have no ability to adaptively manage programs to make up for any NEEA shortfall.

Staff suggests that the IOUs bear low risk from NEEA underperformance because of the ability to use excess conservation from previous biennia to cover shortfalls. However, the IOUs current savings balances have an expiration date and may not be reflective of available balances moving forward. As such, the IOUs current savings balance levels should not be used as a justification for increasing IOU risk. The IOUs do not agree with this shift of savings from programs we do control to savings from programs that we do not control, such as NEEA.

(3) Contrary to Staff's assertion, the IOUs' electric savings reporting is already consistent with other Washington utilities. During the last biennial cycle, the IOUs collaborated with Staff to ensure that the electric savings reported to the Department of Commerce include all savings that ratepayers funded in the previous year, including those reported by NEEA.

(4) The IOUs have followed the prescribed process in setting their EIA Penalty Targets. The individual IOUs worked closely with their respective Advisory Groups for several months prior to the filing of their Biennial Conservation Plans ("BCPs"). During that time, all IOUs had support and approval from their Advisory Groups on the goal determination as filed with each of their BCPs. Any change to the goal setting should be vetted with each of the IOU's Advisory Groups to be consistent with the process.

Avista, PSE, and Pacific Power agree that NEEA savings should be excluded from the EIA penalizable target base on the above outlined reasons. NEEA savings are different from other

traditional Energy Efficiency programs where direct funding, savings, and cost effectiveness can be derived. It is not a fair assignment of risk to include NEEA savings that are outside of the IOUs' control, nor should—as has been expressed by various Advisory Group members—IOUs unduly benefit should NEEA exceed their indicated targets. Alternately, if the commission feels this topic should be explored further, the IOUs would support a state-wide discussion with their respective Advisory Group membership.

In addition, Public Counsel supports the exclusion of NEEA savings from the EIA Penalizable target as it elevates concern that the IOUs would use additional NEEA savings to offset their traditional Energy Efficiency programs. Public Counsel wants to ensure that the utilities are 100% committed to achieving savings from programs that are in their direct control.

The IOUs appreciate the opportunity to provide these response comments. Please direct any questions regarding these comments to Dan Johnson at (509) 495-2807 or dan.johnson@avistacorp.com or Dan Anderson at (425) 424-6837 or Dan.Anderson@pse.com or Don Jones at (503) 813-5184 or Don.Jones_JR@rockymountainpower-pacificpower.net.

Sincerely,

Dan Johnson, Avista
Dan Anderson, PSE
Don Jones, Pacific Power

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

December 19, 2017

SENT VIA WEB PORTAL ONLY
Steven V. King
Executive Director and Secretary
Washington Utilities and Transportation Commission
1300 S. Evergreen Park Dr. SW
P. O. Box 47250
Olympia, Washington 98504-7250

Re: Dockets UE-171091, UE-171087, and UE-171092 (2018-2019 Biennial Conservation Plans), Public Counsel's Response to Staff's Comments Regarding Electric Utility Conservation Plans Under the Energy Independence Act, RCW 19.285 and WAC 480-109

Dear Mr. King:

The Public Counsel Unit of the Washington State Attorney General's Office (Public Counsel) respectfully submits this letter in docket numbers UE-171091 (Avista Corporation), UE-171087 (Puget Sound Energy), and UE-171092 (Pacific Power and Light) responding to Commission Staff Comments Regarding Electric Utility Conservation Plans Under the Energy Independence Act, RCW 19.285 and WAC 480-109 (Staff Comments). Public Counsel's comments specifically respond to Staff's recommendation regarding the inclusion of the savings from the Northwest Energy Efficiency Alliance (NEEA) regional market transformation programs (NEEA savings) in the Energy Independence Act (EIA) target.

I. STAFF'S RECOMMENDATION REGARDING NEEA SAVINGS

Staff Comments state, "Staff recommends that for the 2018-2019 biennium, NEEA savings be included in the EIA target and any excess be treated the same as other excess savings. In each company-specific section below, Staff will provide a recommended target that included NEEA savings."[1] Staff provides four primary reasons for the inclusion of the NEEA savings in the penalizable target:

1. The risk of missing a target has been all but eliminated;

[1] Dockets UE-171087, UE-171091, and UE-171092, Staff Comments on 2018-2019 Biennial Conservation Plans at 6.

2. Consistency with public utilities;
3. Shortchanging ratepayers in carbon regulation;
4. Support for NEEA.[2]

Public Counsel disagrees with Staff's recommendation and analysis of the issue. First, Staff presented the recommendation without first providing an opportunity for the Advisory Groups to address the issue. Because the Advisory Groups function is to advise the utilities on conservation issues, they should have an opportunity to fully serve that function. They have not had that opportunity with respect to the issue of including NEEA savings in the EIA target for the upcoming biennium. Second, we disagree with Staff's arguments for the inclusion of NEEA savings in the EIA target. We will discuss this below.

II. STAFF BYPASSED THE COMPANIES' ADVISORY GROUPS

The Companies filed their biennial conservation plans (BCPs) on November 1, 2017, in Dockets UE-171091, UE-171087, and UE-171092 after many months of planning, which included in-person and webinar meetings. The meetings included discussions, not only on the individual demand-side management (DSM) programs, but also on the calculation and setting of the BCP targets. Staff revealed on October 23, 2017, through an email to all electric investor-owned utilities, that they believe the NEEA savings should be included in the EIA target, in addition to four other requests.[3] In fact, some of the Advisory Group members were not informed of Staff's intentions regarding some of the items delineated in the email until the day before the Companies filed their respective BCPs.[4] It is customary that the issues, such as those mentioned in Staff's October 23rd email, would be discussed during the Companies' BCP process, so the Advisory Group could provide full analysis and debate of the issues.

Public Counsel believes that all of the issues presented in Staff's email should have been discussed with the Advisory Group pursuant to WAC 480-109-110(1). Staff's Comments reflect that the Advisory Group had such discussions regarding inclusion of NEEA savings in the EIA target during the 2014-2015 Biennial Conservation Report (BCR).[5]

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[2] Dockets UE-171087, UE-171091, and UE-171092, Staff Comments on 2018-2019 Biennial Conservation Plans at 5.

[3] This email required electric IOUs to incorporate the following five points into their 2018-2019 BCP filing: EM&V 2.0, on-bill repayment, termination of the Fuel Conversion Program, implementation of the National Standard Practice Manual, and inclusion of the NEEA savings in the penalizable EIA target. During the months dedicated to planning the BCP, some of these points were discussed, including EM&V 2.0 and on-bill repayment. The other topics were not discussed until raised by Staff in their October 23, 2017, email.

[4] Puget Sound Energy (PSE) emailed the Conservation Resource Advisory Group (CRAG) on Monday, October 30, 2017; Avista informed the Advisory Group on Thursday, October 26, 2017. PacifiCorp informed their Advisory Group member on November 2, 2017.

[5] Dockets UE-171087, UE-171091, and UE-171092, Staff Comments on 2018-2019 Biennial Conservation Plans at 5.

To: Mr. Steven King
Re: Dockets UE-171091, UE-171087, and UE-171092 (2018-2019 BCPs)
Public Counsel Comments in Response to Staff re: Electric Utility Conservation under EIA
Date: December 19, 2017

III. RESPONSE TO STAFF'S RATIONALE TO INCLUDE NEEA SAVINGS

Public Counsel disagrees with Staff's rationale for including NEEA savings in the EIA target. The first reason Staff offers is that the risk of missing a target has all but been eliminated. Staff states that each Company can use savings that are banked as excess conservation savings toward the potential underperformance of NEEA programs.[6] This logic is flawed on two accounts:

1) Excess conservation savings are not guaranteed for the utilities every biennium and the amount of any conservation savings can vary greatly. Additionally, these banked excess conservation savings should be used toward underperformance of a utility's DSM programs, not for compensating risk factors associated with NEEA's under achievement.

2) NEEA savings are achieved outside of the utilities' directed programs and are not used in setting the BCP targets. As a result, Staff's current proposal will result in less overall conservation savings, which is contrary to state policy.

The second reason Staff provides for including NEEA savings in the EIA target is "consistency with public utilities." Public Counsel understands that IOUs are consistently reporting EIA savings similar to other public utilities under the EIA, pursuant to Dockets UE-132043, UE-132045, and UE-132047. If publicly-owned utilities are including NEEA savings in their penalizable EIA targets, this topic should be raised and discussed with the Advisory Groups.

The third reason Staff provides for including NEEA savings in the EIA target is that there is "a high likelihood that carbon regulation in Washington will interact with EIA targets and achievement."[7] While Public Counsel shares the belief that there may be some form of carbon regulation in the foreseeable future for Washington State, Public Counsel does not share Staff's belief that including NEEA savings in the EIA target is appropriate. At this time, including NEEA savings would be contradictory to current state policies on conservation because to do so would decrease the overall conservation that would be achieved. Moreover, carbon regulation would presumably result in more conservation, not less.

The fourth reason Staff provides is that they fear utilities will diminish in their support of NEEA, stating, "utilities would waver in their commitments to and funding of NEEA."[8] However, Public Counsel has seen no evidence that this is the case. First, the Companies have a statutory obligation to fund NEEA under their obligation in RCW 19.285.040(1) to "pursue all available conservation that is cost-effective, reliable, and feasible." Second, the Companies have an

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[6] Dockets UE-171087, UE-171091, and UE-171092, Staff Comments on 2018-2019 Biennial Conservation Plans at 5.

[7] Dockets UE-171087, UE-171091, and UE-171092, Staff Comments on 2018-2019 Biennial Conservation Plans at 5.

[8] Dockets UE-171087, UE-171091, and UE-171092, Staff Comments on 2018-2019 Biennial Conservation Plans at 6.

incentive to invest in NEEA for assistance in market transformation and decreasing risk in areas such as, emerging technologies, research and data, infrastructure, and enhancing market relationships.

IV. PUBLIC COUNSEL RECOMMENDATION

Because Public Counsel does not believe the discussions will be lengthy, Public Counsel recommends that the Commission allow the Advisory Groups and all interested parties to discuss and address Staff's NEEA recommendation before the Commission renders a decision on the Companies' BCPs. In the alternative, if the Commission wishes not to postpone decision on the BCP filings, we believe the Commission should not reject the Companies' BCPs solely on the exclusion of the NEEA savings in the EIA target. We believe instead that the Commission should order a condition for the Advisory Groups (and any other interested stakeholders) to discuss this issue for the next BCP cycle and accept the Companies' exclusion of the NEEA savings for this BCP cycle.

However, if the Commission decides the issue on the merits in the current dockets, Public Counsel firmly believes that the NEEA savings should not be included in the EIA target. As we have stated in the past:

> Public Counsel supports the agreement reached by the three utilities to remove NEEA savings from the biennial conservation plan target, and believes that parties *should continue efforts* to resolve any remaining differences in methodology for the 2016-2017 biennium. Public Counsel continues to support market transformation efforts and the electric utilities involvement in and funding of NEEA.[9]

Furthermore, Public Counsel has consistently argued that the savings attributable to the EIA target be savings achieved through the DSM programs offered by the electric investor-owned utilities and not include those from a regional savings program.[10] Public Counsel believes the addition of the NEEA savings into the EIA target will degrade the BCP targets and result in lower overall conservation savings, if the EIA target is to include NEEA savings.

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[9] Docket UE-132043, Public Counsel Comments ¶ 8 (Dec. 3, 2013) (emphasis added).
[10] Docket UE-132045, Public Counsel Comments at 8-10. Public Counsel specifically gives the example:

> As mentioned earlier, Avista's CPA identified a biennial conservation potential of 67,137 MWh for Washington, consistent with the Council's methodology. NEEA's initial projected savings for Avista's Washington service territory was 45,000 MWh for the biennium. If that amount of projected savings were to be subtracted from the CPA developed target, the resulting biennial target for electric end-use efficiency would have been only 22,137 MWh. That level of conservation acquisition is far below Avista's historical *annual* acquisition from its local utility programs.

To: Mr. Steven King
Re: Dockets UE-171091, UE-171087, and UE-171092 (2018-2019 BCPs)
Public Counsel Comments in Response to Staff re: Electric Utility Conservation under EIA
Date: December 19, 2017

V. CONCLUSION

Public Counsel appreciates the opportunity to respond to Staff's Comments on inclusion of NEEA savings in the EIA target. We anticipate further discussion on these issues with the Companies and other interested stakeholders, as well as addressing these issues at the Commission's December 20, 2015, Open Meeting. If you have questions about these comments, or those filed previously, please contact Carla Colamonici at (206) 389-3040 or at CarlaC@ATG.WA.GOV.

Sincerely,

CARLA A. COLAMONICI
Regulatory Analyst
Public Counsel Unit
(206) 389-3040

CAC:cm

BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of Puget Sound Energy's 2018-2019 Biennial Conservation Plan	**DOCKET UE-171087**
In the Matter of Avista Corporation's 2018-2019 Biennial Conservation Plan	**DOCKET UE-171091**
In the Matter of Pacific Power and Light Company's 2018-2019 Biennial Conservation Plan	**DOCKET UE-171092**

COMMISSION STAFF COMMENTS RESPONDING TO STAKEHOLDER COMMENTS REGARDING NEEA SAVINGS IN DOCKETS UE-171087, UE-171091, and UE-171092 (2018-2019 BIENNIAL CONSERVATION PLANS)

December 27, 2017

Avista Corporation, Puget Sound Energy, and Pacific Power and Light Company filed a joint response to staff's comments on December 18, 2017. They state 1) utility support for NEEA is unwavering; 2) including NEEA in the target shifts risk to utilities; 3) utilities' reports to Commerce are consistent with the reports of public utilities; 4) advisory group meetings held in the last several months supported the goals as filed; and 5) advisory group members believe utilities should not unduly benefit if NEEA exceeds its targets.

The Public Counsel Unit of the Washington State Attorney General's Office filed a response to staff's comments on December 19. They state 1) staff bypassed the advisory groups; 2) staff's email *required* the inclusion of five specific points in the plans; 3) that staff's references to the review of the 2014-2015 biennial conservation reports do not seem to apply to setting the 2018-2019 targets; 3) excess conservation savings are not guaranteed; 4) inclusion of NEEA in the target will result in less conservation; 5) staff's concern about consistency with public utilities has already been addressed through revised reports to Commerce; 6) including NEEA savings in the target is contradictory to state policies on conservation; and 7) public counsel has seen no evidence of utilities wavering in their support of NEEA.

Reply comments were also filed by UCONS, in docket UE-171087, that summarize previous recommendations. As these comments do not address the treatment of NEEA savings, they are not further addressed in this document.

Clarification of staff's recommendation

After reviewing comments of other parties, staff realized that its recommendation may have been unclear regarding the inclusion of NEEA savings in the target. Staff's recommendation more precisely refers to NEEA savings from *program measures*. These "program measure" savings, as opposed to the two other categories for NEEA, "codes and standards measures" and "trackable measures," represent savings that are normally identified in each company's conservation potential assessment. In the utilities' biennial conservation plans, the program measure savings are the NEEA savings proposed to be subtracted from the IRP guidance targets. Staff prefers a method that includes the entire cost-effective conservation potential in the target subject to penalty.

Only NEEA program measure savings are included in staff's recommended target. Including all three types of NEEA savings in the target is an option for the commission to consider, but is not staff's current recommendation. As always, there should be symmetry between savings included in the target and savings that count toward achieving the target. This is a founding principle of staff's recommendation.

Unwavering support for NEEA

It appears that staff's recommendation caused confusion around whether utilities must participate in NEEA programs. If NEEA's programs are cheaper than utility programs, it would be difficult to argue that utilities could opt out and still "pursue all cost-effective conservation." Staff expects that the companies will support NEEA's efforts toward market transformation, as long as those efforts deliver cost-effective conservation.

Including NEEA in the target appropriately places risk on utilities

Staff agrees with the responses that leaving NEEA out of the target removed that risk from the utility, and further believes it effectively resulted in pre-approval of the NEEA acquisition. Staff simply believes the risk of failure to acquire all identified cost-effective conservation appropriately rests wholly on the company, including adequate monitoring of NEEA programs.

Consistency with public utilities

The responses discuss reporting to Commerce. Staff agrees that reporting to Commerce has become consistent. Staff is primarily concerned that ratepayers are paying for the NEEA resource, and not receiving the full benefit of the purchase. The public utilities are able to carry-forward any over-achievement, including any related to NEEA. However, the commission's practice of excluding NEEA has the unintended consequence of reducing the bank of megawatt-hours on which the company, and thus the ratepayers, could rely. The magnitude of this effect was unknown until the first approval of the companies' achievement in 2016.

Advisory group discussions

The responses refer to the last several months of advisory group discussions. Staff provides supporting documents as an attachment to these responsive comments. The attachment includes examples of meeting minutes from the companies that do in fact mention specific issues from staff's email of October 23, 2017. The attendance record at the beginning of each meeting shows that staff participated in all of the meetings, unlike public counsel. Regardless, staff's comments from July 21, 2016, while they refer to savings in the previous biennium, were made within the current biennium, and led to a lengthy discussion concerning treatment of NEEA savings at the time.[1] Consensus concerning including or excluding NEEA savings does not exist within any of the utility advisory groups and staff believes the issue is significant enough to warrant a commission opinion.

[1] Dockets UE-132043, UE-132045, and UE-132047, Commission Staff Comments Regarding Electric Utility Conservation Achievements Under the Energy Independence Act, RCW 19.285 and WAC 280-109 (2014-2015 Biennial Conservation Reports) (July 21, 2016). *See* Attachment.

Staff includes its email from October 23, 2017, in the attachment as well, to illustrate that the email, rather than *requiring* anything, provided nearly 6 weeks of notice that staff would be addressing these items in its formal comments on December 1. This email was forwarded to stakeholders by staff on October 24, 2017. It is unfortunate that the companies delayed sharing staff's email with the advisory groups for 10 days, but that is not something over which staff retains control. Finally, as the commission stated in its order adopting WAC 480-109,

> Should a stakeholder believe a utility is deficient in meeting the requirements of WAC 480-109-100(1), it is appropriate for that stakeholder to raise the issue with the advisory group. Failing resolution through the advisory group process, a *stakeholder may raise the issue with the Commission during our review of the plans or reports* in WAC 480-109-120.[2]

Utilities will not unduly benefit if NEEA exceeds its target

The legislature has determined that the right mechanism for limiting risk is to allow utilities to carry-forward excess conservation savings to future biennia.[3] Thus, the utilities will not *unduly* benefit if NEEA exceeds its target. In fact, the legislature has made no provision for the exclusion of any type of savings from the requirement to pursue all conservation, nor does the commission's rule.

Excess conservation savings are not guaranteed

Staff agrees that excess conservation savings are not guaranteed. However, as always, the company must aim for a slightly higher number to ensure that they meet the target. In the past, this has ensured some excess conservation. The companies' programs are based on the premise that they can drive both higher and lower levels of conservation through the design of their programs. Based on historical performance, Staff is confident in the companies' abilities to adjust programs to increase achievement, and the commission has provided mechanisms to ensure their ability to do so.

[2] *In the Matter of Amending, Adopting, and Repealing Rules in WAC 480-109 Relating to the Energy Independence Act*, Docket UE-131723, General Order R-578 at 11, ¶ 32 (Mar. 13, 2015) (emphasis added).
[3] State of Washington, 63rd Legislature, Engrossed Substitute House Bill 1643 (June 12, 2014), available at http://lawfilesext.leg.wa.gov/biennium/2013-14/Pdf/Bills/Session%20Laws/House/1643-S.SL.pdf?cite=2014%20c%2026%20%C2%A7%201.

BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of Puget Sound Energy 2014-2015 Biennial Conservation Report	DOCKET UE-132043
In the Matter of Avista Corporation 2014-2015 Biennial Conservation Report	DOCKET UE-132045
In the Matter of Pacific Power and Light Company 2014-2015 Biennial Conservation Report	DOCKET UE-132047

COMMISSION STAFF COMMENTS REGARDING ELECTRIC UTILITY CONSERVATION ACHIEVEMENTS UNDER THE ENERGY INDEPENDENCE ACT, RCW 19.285 and WAC 480-109 (2014-2015 BIENNIAL CONSERVATION REPORTS)

JULY 21, 2016

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Executive Summary

In 2006, Washington voters approved Initiative 937, also known as the Energy Independence Act (EIA). Now codified in RCW 19.285 and Chapter 480-109 WAC, "qualifying" electric utilities — those with at least 25,000 customers in Washington — are mandated to set and meet energy conservation targets.[1] On December 19, 2013, the Washington Utilities and Transportation Commission (Commission) approved the 2014-2023 achievable conservation potential and 2014-2015 biennial conservation target, subject to conditions, for Puget Sound Energy (PSE) in docket UE-132043, Avista Corporation (Avista) in docket UE-132045, and Pacific Power and Light Company (Pacific Power) in docket UE-132047.

On May 31 and June 1, 2015, PSE, Avista, and Pacific Power timely filed their respective Biennial Conservation Reports (BCRs or Reports), regarding their 2014-2015 conservation targets with the Commission as required by law.[2] As detailed in Table 1 below, each utility achieved cost-effective conservation savings beyond their target.

Table 1: Summary of Reported 2014-2015 Cost-Effective Savings

	Base UTC Biennial Conservation Target (MWh)[3]	Reported Biennial Conservation Savings (MWh)	Reported Portfolio-Level Cost-effectiveness (TRC)[4]
PSE	485,770[5]	552,596	1.6
Avista	65,131[6]	70,693	1.7
Pacific Power	74,703	98,881	1.7

[1] RCW 19.285.030(19) (definition of "qualifying utility"); RCW 19.285.040(1)(b) (biennial conservation targets).
[2] RCW 19.285.070; WAC 480-109-120; initial orders in dockets UE-132043, UE-132045, and UE-132047.
[3] See dockets UE-132043, Order 01 ¶ 26; UE-132045, Order 01 ¶ 28; UE-132047, Order 01 ¶ 26. This target does not include any additional decoupling incremental conservation target commitments or excluded programs i.e. NEEA.
[4] WAC 480-109-100(10)(b) allows low-income conservation to be excluded from portfolio-level cost-effectiveness calculations. PSE and Avista include low-income in its calculations. Pacific Power excludes low-income from its calculations.
[5] Including decoupling, PSE's target is 510,056 MWh.
[6] Including decoupling, Avista's target is 68,388 MWh. Note that there is some discrepancy in the target reported by Avista and the target identified by Staff. In docket UE-140188, Order 05 ¶ 26 Avista's target is 64,956 MWh plus 3,248 MWh for decoupling for a total target of 68,204 MWh. However, in docket UE-132045, Order 01 ¶ 28 and Order 02 ¶ 28 the approved target is 65,131 MWh. Under either target Avista meets its decoupling commitment. This discrepancy should be addressed in Avista's petition on excess savings in docket UE-140188.

These are the first Reports to be filed since the Commission adopted new rules for EIA compliance in March 2015.[7] While these rules largely codified existing Commission conditions, notable changes to the reporting requirements in WAC 480-109-120(4) include the reporting of the portfolio-level cost-effectiveness of the actual electricity savings from conservation, an independent third-party evaluation of portfolio-level biennial conservation savings achievement, and a summary of the steps taken to adaptively manage conservation programs throughout the preceding two years.

The 2014-2015 BCRs are also the first opportunity for the utilities to claim excess conservation savings in accordance with the passage of HB 1643. RCW 19.285.040(1)(c)(i) allows that,

> *beginning on January 1, 2014, cost-effective conservation achieved by a qualifying utility in excess of its biennial acquisition target may be used to help meet the immediately subsequent two biennial acquisition targets, such that no more than twenty percent of any biennial target may be met with excess conservation savings.*

The statute specifically addresses a utility's target, but does not consider any additional commitments the companies may have with the Commission. Both PSE and Avista currently have decoupling commitments that require them to achieve conservation five percent above that target.[8] Pacific Power has a pending request for decoupling treatment and may have a similar commitment in future biennia.[9]

Companies also achieve conservation savings from areas that are excluded from the Company-specific target, such as market transformation programs and pilots. The commission has relied on its standard practice for review and approval of investor-owned utility conservation targets, only holding companies responsible for the programs they directly implement.[10] The question of what constitutes excess savings and to which targets it can be applied will be examined in further detail in the next section.

Staff's review of the BCRs has focused on evaluating whether the companies met the reporting requirements outlined in RCW 19.285.070, WAC 480-109-040, the conditions set forth in the Order 01 in each respective docket, and whether the Company correctly reported its savings for the biennium.

In these comments, Staff will summarize each report, highlight key pieces of information, and identify lingering issues. Staff will also discuss some recent and anticipated changes in the rules, policies, and technologies affecting energy conservation in Washington. After reviewing amendments to the reports and the comments filed by other parties in this matter, Staff intends to present its final recommendations and proposed conditions for approval at the Commission's August 12, 2016, Recessed Open Meeting.

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[7] See Docket UE-131723, General Order R-578 (March 13, 2015). The new rule is codified in WAC 480-109.
[8] *In the Matter of the Petition of Puget Sound Energy, Inc. and Northwest Energy Coalition For an Order Authorizing PSE to Implement Electric and Natural Gas Decoupling Mechanism and to Record Accounting Entries Associated with the Mechanisms,* Docket UE-121697, Order 07 (June 25, 2013) ¶ 108; *WUTC vs. Avista Corporation d/b/a Avista Utilities*, Docket UE-140188, Order 05 (November 25, 2014) ¶ 26.
[9] See docket UE-152253.
[10] RCW 19.285.040(f). NEEA has been excluded because the NEEA board has members from utilities outside the Commission's jurisdiction, whether in Washington or without.

Focus Issues and Prudency

The ongoing conservation planning, reporting, and reviewing process developed for each utility's portfolio is effectively a prudency review. Throughout a biennial cycle, Staff ensures prudency related to conservation by reviewing several elements, including the proper establishment of conservation potential, whether programs are cost effective, reliable, and feasible, whether all reasonable measures were pursued, if appropriate public and stakeholder involvement was included in the process (advisory group review), and verification that programs were administered efficiently.

Details about individual Company programs will be discussed in following sections. This section provides a discussion of the areas of focus and common issues identified during Staff's review of each utility's BCR, including but not limited to:

- Treatment of Excess Savings.
- Single Large Facility Savings.
- Reporting of NEEA Savings to Commerce.
- Unit Energy Savings Values.
- Adaptive Management.
- Pilot Programs.
- Fuel Conversions.

Treatment of Excess Savings

The 2014-2015 BCR is the first opportunity for the utilities to claim excess conservation savings in accordance with the passage of HB 1643.[11] A summary of the excess savings achieved from the 2014-2015 biennium, using the current approach to target calculation, is presented in Table 2. As in past biennia, it is important that the Commission identify the amount of savings achieved during the previous biennium, which should enable the identification of excess savings available for use in the future. However, because the amendment to the statute did not contemplate the Commission's standard practice of excluding certain elements, calculating excess savings poses two critical questions that the Commission must consider before settling on an appropriate method.

- Can excess savings be applied towards a Company's decoupling commitment?
- Should savings from the Northwest Energy Efficiency Alliance (NEEA) and other excluded programs be considered excess savings?

[11] RCW 19.285.040(c)(i)"Except as provided in (c)(ii) and (iii) of this subsection, beginning on January 1, 2014, cost-effective conservation achieved by a qualifying utility in excess of its biennial acquisition target may be used to help meet the immediately subsequent two biennial acquisition targets, such that no more than twenty percent of any biennial target may be met with excess conservation savings."

Table 2: 2014-2015 Excess Savings Achieved (MWh)

	Biennial Conservation Target (Based on Commission Order)	Overall UTC Target (with Decoupling Commitment, without NEEA)	Full Target	Utility Program Savings	Total Utility Savings (including NEEA and Pilots)	Excess Savings
PSE	558,301[12]	513,690	582,589	552,596	663,122	80,533
Avista	76,261[13]	68,388	79,518	70,693	101,356	2,571
Pacific Power	89,016[14]	74,703	89,016	98,881	111,160	22,144

Excess Savings and Decoupling Commitments: the Commission's rule specifically addresses the utilities' biennial conservation targets, but does not consider any additional conservation commitments the companies may have with the Commission. Staff does not think this particular issue was contemplated by the legislature, nor has the Commission had an opportunity to establish a position.

Currently, both PSE and Avista have agreed to decoupling commitments to achieve an additional five percent of conservation above the Company's biennial conservation target.[15] In Pacific Power's most current rate case, the Company has requested a decoupling mechanism which, based on the PSE and Avista models, will likely result in an additional conservation decoupling commitment if the decoupling mechanism is approved.[16]

To avoid double counting, Staff maintains that utilities may apply each verified MWh of conservation acquired in excess of the target to meet biennial conservation requirements related to either the decoupling target or to a target shortfall in one of the subsequent two biennia, but that utilities may not use the same MWh of conservation to comply with multiple targets.

There is some question as to whether the excess savings may be used towards meeting the additional conservation decoupling commitment with the Commission. Staff believes that excess savings may be used to meet decoupling commitment shortfalls in future biennia. A decoupling

[12] See docket UE-132043, Order 01 ¶ 5; the full Biennial Conservation Target includes the savings from End-Use Efficiency Measures (551,880), and Existing Home Energy Reports (6,421). No potential savings have been excluded.
[13] See docket UE-132045, Order 01 ¶ 5 and ¶ 9; the full Biennial Conservation Target includes the savings from End-Use Efficiency Measures (67,137), Distribution Efficiency (2,061), Generation Efficiency (163), and Home Energy Reports (6,900). No potential savings have been excluded.
[14] See docket UE-132047, Order 01 ¶ 5; the full Biennial Conservation Target includes the savings from End-Use Efficiency Measures (89,016). No potential savings have been excluded.
[15] *In the Matter of the Petition of Puget Sound Energy, Inc. and Northwest Energy Coalition For an Order Authorizing PSE to Implement Electric and Natural Gas Decoupling Mechanism and to Record Accounting Entries Associated with the Mechanisms,* Docket UE-121697, Order 07 (June 25, 2013) ¶ 108; *WUTC vs. Avista Corporation d/b/a Avista Utilities*, Docket UE-140188, Order 05 (November 25, 2014) ¶ 26.
[16] See docket UE-152253.

commitment asks a utility to go above-and-beyond its achievable biennial potential to realize future savings now, and Staff believes that the Company should not be penalized if it falls short in a future biennium because of its prior success. Additionally, while the legislature did not appear to consider decoupling, the passage of HB 1643 indicates general approval that excess conservation should be available to mitigate any future shortfalls that occur despite the pursuit of all available conservation.

Staff's suggested method for calculating excess savings is detailed in Attachment 1. The target approved by the Commission in the utility's Biennial Conservation Plans (its Base UTC Target) remains the penalizable amount under the EIA. The Overall UTC Target would include the addition to the Base UTC Target of any decoupling commitment, which is penalizable under the Commission's orders.

In order to achieve clear guidance from the Commission about implementation of this new law, Staff recommends that each Company file a petition with the Commission in its respective decoupling docket. The petition should further request clarification that any penalty for missing a decoupling commitment would be calculated in the companies' respective Biennial Conservation Plan (BCP) dockets.

Excess Savings and Excluded Savings: NEEA savings are currently held separate from target setting and reporting under the Commission's standard practice of only holding the utility accountable for programs it directly controls. Staff has not considered these savings to be excess. This is because when a utility foregoes the risk of an EIA penalty due to a NEEA shortfall, it should also forego the benefit of using NEEA savings to meet its target, current or future. This would hold true for other programs withheld from the target setting process. However, this practice removes benefits that have already been purchased by ratepayers, because the costs associated with NEEA are recovered from customers through the conservation cost recovery tariffs. Further, it artificially lowers the companies' achievement reported on a statewide basis.

For the purposes of calculating excess savings, each utility could report a target that includes all potential savings, as well as any decoupling commitment (Full Target). This target could then be compared with an achieved savings amount that includes all savings achieved by the utility, no matter the path to achievement (Total Savings Achieved). Detailed calculations are contained in Attachment 1. Staff points out that this approach is quite different from our past practice and welcomes stakeholder feedback moving forward.

Single Large Facility Savings

Single large facility conservation savings are treated separately than other cost-effective conservation under the law.[17] Beginning in January 2014, single large-facility conservation savings in excess of a utility's biennial target can be used to meet up to five percent of

[17]RCW 19.285.040(c)(i); WAC 480-109-160(28) defines "Single large facility conservation savings" as cost-effective conservation savings achieved in a single biennial period at the premises of a single customer of a utility whose recent annual electricity consumption prior to the conservation savings exceeded five average megawatts.

subsequent target shortfalls, in addition to the twenty percent that can be met with standard excess savings.[18] No utility is separately reporting these large facility savings at this time.

Of all the facilities that may potentially qualify under single large facility savings, there are approximately twenty in PSE's service territory (seven of the twenty are currently not included in the conservation rider), seven in Avista's service territory, and one in Pacific Power's service territory. These facilities represent at least 105 aMW of total consumption. The savings potential at these facilities is unknown, but conceivably significant.

Staff encourages utilities to pursue these potential savings, and recommends that any program engagement with a potentially qualifying single large-facility customer be discussed with the utility's advisory group early in the process. In addition, Staff requests that with its next business plan update each utility include an analysis of the savings potential of large facilities in its service territory.

When single large facility savings are achieved, they must be clearly reported as "single large facility savings." When excess savings are earned at the end of a biennium, the utility should classify the quantity of single large facility savings that will be used to meet the target and how much will be held for future shortfalls.

Reporting NEEA Savings to Commerce

All three utilities fund and actively collaborate with NEEA, a regional market transformation organization. NEEA continues to improve the cost-effectiveness of companies' overall portfolios by leveraging regional market power and creating economies of scale to achieve co-created energy efficiency savings.[19]

PSE, Avista, and Pacific Power collaborated to develop a consistent approach for the treatment of NEEA savings beginning in the 2014-2015 biennium.[20] As a result of that collaboration, the companies agreed to fund NEEA and report the amount of savings achieved to the Commission separately from the biennial conservation target. NEEA savings are neither used when utilities are setting their target nor applied toward meeting their target.

In addition to BCRs filed with the Commission, utilities must concurrently submit conservation reports to the Washington Department of Commerce (Commerce).[21] The form provided for these reports is unclear as to where investor-owned utilities should report NEEA savings. As a result, utilities were inconsistent with including or excluding NEEA savings in the Achievement field of the Commerce Energy Independence Act (I-937) Report Workbook.

Each utility provided an appropriate and thorough narrative on the way they fit their more complicated target-setting and reporting processes into the Commerce form. However, Staff requests that the utilities work with Staff to determine a uniform approach to completing the form and update the Commerce filings before Staff recommends issuing orders in these dockets. Staffs suggests that the investor-owned utilities should remain consistent with the public utilities

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[18] WAC 480-109-100(3)(c)(ii).
[19] Formerly known as net market effects.
[20] See Dockets UE-100170, UE-100176, and UE-100177 Joint Proposal for Consistent Approach to Northwest Energy Efficiency Alliance (NEEA) Claimed Conservation Savings (October 31, 2012).
[21] WAC 480-109-120(3)(c)

in the Commerce reports. This means that companies would report a full target, without any excluded potential, and the total savings achieved from all sources. The target approved by the Commission, as well as any decoupling commitment, should be detailed in the notes of the report.

Unit Energy Savings Values

The Commission has directed the utilities to use the unit energy savings (UES) values that the Northwest Power and Conservation Council's Regional Technical Forum (RTF) calculates for each measure, where they exist and are appropriate, unless the utility has more appropriate data that specifically reflects its service territory. However, the utilities vary in how frequently they update their assumptions to reflect current RTF practice. Pacific Power and Avista update every other year when preparing their next biennial target; this allows the utilities to use the same value when setting their target and measuring whether it was met ("locked UES"). PSE voluntarily updates UES values every year ("floating UES").

Staff has previously recognized that floating UES values may increase a Company's risk of not meeting its target.[22] Indeed, Staff has recommended utilities be allowed to claim savings using locked UES values under the agreement that, in the 2014-2015 BCRs, utilities that use locked values would present savings using both locked and floating UES values. Such a presentation would enable Staff and the Commission to evaluate the actual risk associated with requiring annual updates to UES values. Pacific Power was the only Company to provide such an analysis in its 2014-2015 BCR.[23] Out of the total savings Pacific Power claimed toward the Biennial Conservation target, 3.3 percent came from using the floating UES values. This amount would not affect whether Pacific Power met its target.

Although Avista failed to provide the Commission with an analysis of reported savings using locked versus floating UES values, the need for such an analysis has been eliminated. In the target-setting process for the 2016-2017 BCP, Avista agreed to update its UES values annually. If a company voluntarily agrees to update UES values annually, Staff will not object. Staff interprets such a position by a company to mean that it has assessed the actual risk to be low, and that annual updates to UES values promote effective portfolio management. As a result, a company would then focus on the most efficient measures while culling those that are beginning to perform poorly with respect to baseline equipment.

Staff finds that while using floating UES values does impose some risk of the utility not meeting its target, this risk is small and can be mitigated through active portfolio management. In addition, the new provision to use excess savings from previous biennium to meet shortfalls

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[22] Most commonly, UES values degrade over time as the result of continuous improvement of the baseline efficiency of installed equipment. Consequently, annual updates of UES values will typically disadvantage companies because the UES values used for claiming savings would be less than the UES value used for setting the biennial targets.

[23] PSE was not expected to present such an analysis as the Company already voluntarily updates its UES values annually. Pacific Power's savings analysis replicated PSE's method of updating UES values once during the biennial period, effective January 1st of the second year based on updated information available by October 1st of the first year.

provides a layer of insurance for any utility that has been proactively updating UES values. Staff recommends that by the 2018-2019 biennium, every utility update their UES values at least once a year..

Adaptive Management

One of the key indicators that a Company is actively "pursu[ing] all conservation that is cost-effective, reliable and feasible"[24] is the extent to which each Company is adaptively managing conservation programs and portfolios. This should include continuing cost-effective programs, discontinuing programs that have been shown to no longer be cost-effective, and exploring potential new programs or technologies. Accordingly, and as required by rule,[25] each Company was obligated to include a summary in its BCR of the steps taken to adaptively manage conservation programs throughout the preceding two years.[26]

PSE summarized that it added new measures, adjusted incentives according to key market drivers, improved internal and customer-facing operational efficiencies, streamlined rebate and grant application processes, provided customers with actionable information, and maximized customer outreach in the 2014-2015 biennium. Two tables are included in its Report that highlight particular initiatives from the 2014 and 2015 program years with references to details contained in the Company's annual conservation reports.

In Avista's BCR, the adaptive management summary highlights a department reorganization that occurred early in the biennium. Avista identifies a number of pilot programs and new technologies that it adopted during the biennium or ruled out as likely not cost-effective. In 2015, Avista began a small business audit and direct-install program to overcome barriers in reaching these customers. Additionally, Avista has identified the growth in the marijuana industry as a potential source of savings and has taken steps to actively engage with producers.

Pacific Power did not include a summary of its adaptive management in its initial BCR filing. Staff has discussed this oversight with the utility, which has agreed to file a revised BCR shortly. Even without the summary, Staff has been able to identify instances of adaptive management at Pacific Power over the biennium, such as discontinuing the refrigerator recycling program when it was no longer cost-effective and actively working with the program vendor to expand its home energy reporting program.

Demonstrating appropriate adaptive management is crucial to demonstrating prudency in conservation programs. Staff suggests that the summary of the steps taken to adaptively manage programs deserves greater prominence in all three future BCRs, ideally including both the general process of adaptive management within a program and specific examples that highlight how well the process is working.

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[24] WAC 480-109-100(1)(a)
[25] WAC 480-109-120(4)(vi)
[26] WAC 480-109-100(1)(iv) "Continuously review and update as appropriate the conservation portfolio to adapt to changing market conditions and developing technologies, and assess the potential of such technologies for implementation in its service territory."

Pilot Programs

Order 01 of each utility's respective conservation docket authorized it to spend up to 10 percent of its conservation program budget on educational and pilot programs "whose savings impact has not yet been measured."[27] The language in the new rules is stronger, requiring that utilities "must implement pilot projects when appropriate and expected to produce cost-effective savings within the current or immediately subsequent biennium."[28]

In the 2014-2015 biennium, none of the utilities had notable pilot programs. Staff is disappointed in the percent of the conservation budget reported as allocated to pilot programs in this biennium, with no utility reaching even one percent. In addition, a significant portion of this limited budget went toward programs that were expansions of existing programs and, as such, were only tenuously categorized as pilot programs.

Staff expects to see the utilities, in cooperation with their advisory groups, meaningfully expand their pilot offerings during the 2016-2017 biennium.

Fuel Conversions

PSE included electric to natural gas water heater and furnace savings in both its BCP target and as part of its savings claimed in its BCR. PSE only provides incentives when a customer converts to high-efficiency appliances.

Avista provides incentives when a customer converts to standard or high efficiency natural gas appliances and thus excludes fuel conversions from both its BCP and BCR. The method of calculating these savings has been approved by each utility's respective advisory groups.

Staff does not have any recommendations regarding fuel conversions at this time but simply wishes to call attention to the varying ways the utilities are handling fuel conversions.

Company Reports and Achievements

Puget Sound Energy (Docket UE-132043)

Conservation Target and Achievement

In Order 01 of UE-132043, the Commission approved a 2014-2015 biennial conservation target of 485,770 megawatt-hours (MWh) for PSE. The Company reports that it exceeded this target, achieving 552,596 MWh. The Company spent about $190 million, which is less than two percent more than the $188 million budget the Commission approved. When including NEEA and pilot programs, the Company's total conservation achievement increases to 663,123 MWh. The total portfolio cost-effectiveness is 1.6.[29] A summary of PSE's reported savings and expenses follows:

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[27] See dockets UE-132043, Order 01 Attachment A ¶ 7; UE-132045, Order 01 Attachment A ¶ 7; UE-132047, Order 01 Attachment A ¶ 7.
[28] WAC 480-109-100(1)(c).
[29] Under the Northwest Power and Conservation Council method, a portfolio is considered cost-effective when the benefit-to-cost ratio, using the Total Resource Cost (TRC) test, is greater than one.

Table 3: Summary of PSE's 2014-2015 Conservation Achievements[30]

	Target[31]	Actual	Actual/Target Percentage
Savings (MWh)	485,770 MWh	552,596 MWh	114%
Savings (average MW)	55.5 aMW	63.1 aMW	
Expenditures	$187,646,000	$190,098,000	101%

The following table breaks down PSE's conservation achievement by program or sector, providing a comparison of the cost-effectiveness of the programs within the various sectors. Staff is impressed by the low-income conservation cost-effectiveness ratio of 1.1, an outlier among the companies.

Table 4: PSE's 2014-2015 Conservation Achievements by Program

Program	Anticipated Savings (MWh)	Actual Savings (MWh)	Budget	Expenditures	TRC
Residential	260,790	282,555	$85,520,500	$93,558,362	1.6[32]
Commercial and Industrial	243,130	265,039	$68,415,000	$67,039,006	1.6
Distribution system	6,200	1,495	$0	$0	-
Low Income	3,140	3,505	$6,198,000	$6,336,329	1.1
Pilots	35,330	18,897	$2,870,000	$1,627,149	1.9
NEEA	72,530	91,630	$10,521,000	$7,137,633	3.9

[30] Excluding NEEA savings and savings from pilots.
[31] When including the 5% decoupling commitment, PSE's 2014-2015 biennial target is 513,690. *WUTC vs. Puget Sound Energy*, Docket UE-132043, Order 03 (September 11, 2014) ¶ 22.
[32] PSE includes low-income programs in its Residential Program reporting.

Third Party Verification

PSE contracted with SBW Consulting, Inc. (SBW) to review the Company's conservation programs and verify its claimed savings in the Biennial Electric Conservation Achievement Review. Evergreen Economics, Inc. assisted as a subcontractor. Generally, SBW found that PSE has employed solid practices in tracking and measuring the achievements of its conservation programs.

SBW found that the Company accurately reflected PSE-listed savings, selected and used the correct UES values, and appropriately responded to recommendations from the previous consultant review. SBW and the Company quickly resolved the few minor issues that were identified.[33] It is Staff's opinion that both SBW and the Company performed professionally, and competently worked through issues and problems that developed during the course of the biennium.

Reporting Requirements

Staff has not identified any instances where PSE failed to meet the reporting requirements laid out in Order 01 of docket UE-132043, RCW 19.285.070, and WAC 480-109-120(4).

Avista (Docket UE-132045)

Conservation Target and Achievement

In Order 01 of UE-132045, the Commission approved a 2014-2015 biennial conservation target of 64,956 MWh for Avista. The Company reports that it exceeded this target, achieving 70,693 MWh. The Company spent about $23 million, which is four percent more than the $22 million budget the Commission approved. When including NEEA savings, the Company's total conservation achievement increases to 101,356 MWh. The total portfolio cost-effectiveness is 1.5. The following table provides a summary of Avista's reported savings and expenses:

Table 5: Summary of Avista's 2014-2015 Conservation Achievements[34]

	Target[35]	**Actual**	**Actual/ Target Percentage**
Savings (MWh)	64,956	70,693	109%
Savings (average MW)	7.42	8.07	
Expenditures	$22,107,759	$23,076,191	104%

[33] PSE 2014-2015 BECAR Final Report page ES-3.
[34] Excluding NEEA savings.
[35] When including the 5% decoupling commitment, Avista's 2014-2015 biennial target is 68,204. *WUTC vs. Avista Corporation d/b/a Avista Utilities*, Docket UE-140188, Order 05 (November 25, 2014) ¶ 26.

The following table breaks down Avista's conservation achievement by program or sector, providing a comparison of cost-effectiveness between the various elements of the program.

Table 6: Avista's's 2014-2015 Conservation Achievements by Program

Program	Anticipated Savings (MWh)	Actual Savings (MWh)	Budget	Expenditures	TRC[36]
Residential (not including Low Income)	32,045	41,794	$6,548,519	$7,500,853	1.0
Low Income	2,989	1,488	$4,011,742	$3,044,737	0.9
Commercial and Industrial	41,375	35,330	$7,775,657	$9,764,893	2.4
Distribution	2,061	1,513	-	$1,619,300	-
Generation Facilities	163	249	-	$282,074	-
Pilots	1,410	29	$253,700	$ 4,891	0.9
NEEA	29,000	30,397	$2,848,650	$2,760,816	-

Third Party Verification

Avista contracted with Nexant to review the Company's conservation programs and verify its claimed savings. Although Nexant discovered that the realization rate of some measures was not always consistent with expectations (with some measures underperforming relative to expectations and others over-performing), on balance Nexant found that the performance of Avista's portfolio was consistent with expected savings. Unverified savings for the biennium derived from locked UES values was 70,693 MWh, while evaluated, verified savings (with adjusted UES values) was 70,961 MWh. Staff accepts the values derived from the locked UES values, consistent with the Commission's order.

Although Nexant uncovered no serious infirmities during the review of Avista's conservation programs over the biennium, Staff wishes to raise two issues specific to Avista: 1) confusion over the appropriate UES values used for claiming savings; and, 2) the Opower interruption.

[36] Cost-effectiveness was not provided for every program.

Confusion over the appropriate UES values used for claiming savings

In its BCR, Avista requested permission to claim only the savings reported by third party evaluator, Nexant, toward its target. In other words, Avista requested to abandon its position with regard to using locked UES values for reporting savings this biennium. In abandoning that position (which is memorialized in multiple documents entered into the record during the target-setting process)[37], however, Avista does not propose to supplant the locked UES values with updated UES values provided by the Council's Regional Technical Forum (RTF), or other UES values updated using data specific to Avista's service territory and vetted through the Advisory Group process. Rather, Avista proposes to disregard all UES values previously identified by the RTF and previously vetted by the Advisory Group in favor of a single consultant's evaluation of Avista's portfolio.

As a result of discussions with Staff subsequent to the filing of its BCR, Avista has agreed to claim savings for this biennium consistent with its prior request to use locked UES values. Additionally, Avista has agreed, voluntarily, to claim savings using annually updated UES values for future biennia. As such, there is no issue with Avista's claimed savings that requires additional Commission intervention at this time.

As part of the annual update to its 2016-2017 BCP, Staff recommends the Commission direct Avista to review the legal framework within which it operates its conservation programs, including those Commission orders and associated conditions lists further clarifying this framework. Avista must provide a presentation on this subject to its board, and include such documentation in the annual update. It would be helpful if the board's response is also provided.

Opower Interruption

Between February and August, 2015, an error associated with the launch of Avista's new customer care and billing system caused a six-month lapse in customers receiving Home Energy Reports from Opower. This issue has been discussed in great detail (and largely resolved) elsewhere, and so Staff will not belabor the issue here, except to note: 1) savings have been properly reported in Avista's BCR; and, 2) the program continues to generate substantial savings.

As Nexant describes in its evaluation report, savings did not significantly decline during or after the lapse. Further, to the extent that savings were impacted by the lapse in report mailings, a decline in savings would be captured in the billing analysis and would be netted out of total savings. Importantly, the lapse happened in the second year of the biennium. This means that savings are reported for 2014 and *net* savings are reported for the second year. Accordingly, if savings had decreased in 2015, the net savings (relative to 2014) would have been negative and overall savings claimed for EIA compliance would also have been reduced. Staff is not concerned with the Opower savings Avista is claiming in its BCR, nor is it concerned that the six-month lapse will have serious negative impacts on the program going forward.

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[37] For example, see docket UE-132045, Biennial Conservation Plan of Avista Corporation, Appendix C – Fixed UES List for 2014-2015.

Reporting Requirements

Staff has not identified any instance where Avista failed to meet the reporting requirements laid out in Order 01 of docket UE-132045, RCW 19.285.070, and WAC 480-109-120(4).

Pacific Power & Light Company (Docket UE-132047)

Conservation Target and Achievement

In Order 01 of UE-132047, the Commission approved a 2014-2015 biennial conservation target of 74,703 megawatt-hours (MWh) for Pacific Power. The Company reports that it exceeded this target, achieving 98,881 MWh. The Company spent about $20.8 million, which is about three percent more than the $20.2 million budget the Commission approved. When including NEEA savings, the values increase to total conservation savings of 111,160 MWh and expenditures of $22,888,355. The total portfolio cost-effectiveness, including NEEA, is 1.7. A summary of Pacific Power's reported savings and expenses follows:

Table 7: Summary of Pacific Power's 2014-2015 Conservation Achievements[38]

	Target	**Actual**	**Actual/Target Percentage**
Savings (MWh)	74,703	98,881	132%
Savings (average MW)	8.528	11.288	
Expenditures	$20,242,600	$20,829,232	103%

As demonstrated in the following table, Pacific Power's performance at the program or sector level kept close to the planned level of both budget and savings. The major exception to this is in the agricultural sector, where the Company spent six times more than planned but achieved eight times the savings.

[38] Excluding NEEA savings and savings from pilots.

Table 8: Pacific Power's 2014-2015 Conservation Achievements by Program

Program	Anticipated Savings (MWh)	Actual Savings (MWh)	Budget	Expenditures	TRC[39]
Residential (not including Low Income)	43,199	44,553	$5,647,963	$5,778,955	2.2
Commercial	23,799	24,493	$5,208,810	$6,028,463	1.7
Industrial	25,467	27,173	$5,617,240	$5,185,203	
Agricultural	291	2,331	$63,533	$390,775	
Production system	16	2	$2,947	$3,357	5.5
Low Income[40]	330	330	$1,800,000	$1,557,035	0.7
Pilots[41]	-	-	$119,000	$119,690	-
NEEA	14,313	12,277	$2,131,177	$2,059,123	-

Pacific Power's refrigerator recycling program, known as "See ya later, refrigerator," ended sooner than anticipated when the Company was notified by the program administrator that they had gone out of business. While the utility had been planning to cancel the program at the beginning of 2016, this November 2015 abrupt halt impacted 29 Washington customers. After notifying the DSM Advisory Group, Pacific Power engaged a provider through an expedited process. This provider began providing outreach to customers who had scheduled pick-ups that had been cancelled in January 2016.

Staff commends Pacific Power for its prompt response to this challenging situation. It appears that all appropriate steps were taken to ensure customer satisfaction in an expiring program.

[39] Program level cost-effectiveness values for the 2014-2015 biennium provided via email by Kaley McNay on July 18, 2016.
[40] The TRC of 0.7 for Pacific Power's low income program is for 2015 only. In 2014, the low income program had a TRC of 1.1.
[41] The savings impact from Pacific Power's only pilot program "Be wattsmart, Begin at Home" was not measured or reported. This program provides energy efficiency education in schools and the impact would be difficult to measure.

Third Party Verification

Pacific Power contracted with SBW to review the Company's conservation programs and verify its claimed savings. DNV GL assisted as a subcontractor. Generally, SBW found that Pacific Power has employed solid practices in tracking and measuring the achievements of its conservation programs.

Following previous recommendations, the consultant reviewed the Company's new, web-based system for tracking its conservation programs, DSM Central (DSMC). SBW found that, overall, Pacific Power's tracking and reporting procedures are in line with best practices, aided by DSMC.

During an onsite inspection, SBW observed that operation hours on a lighting measure were incorrect. An always-on value (8,064 hours) had been applied when the affected light fixtures were actually in use only 10 hours per day 5 days per week. The correction of operating hours for this project resulted in reduced claimed savings of 13,639 kWh. This example reinforces support for onsite evaluations as an important component of program reviews.

While SBW states that it is "not critical to confirming proper measure implementation or assessing program cost-effectiveness," Staff deems the recommendation that Pacific Power consider assigning a measure-life to all active measures to be sound and encourages its implementation.

Reporting Requirements

These are the first BCRs to be filed since the Commission adopted new rules for EIA enforcement.[42] Pacific Power included a "2014-2015 Plan Condition Requirements and Compliance" checklist in Appendix 1 of their BCR detailing their compliance with Order 01 and WAC 480-109, but the March 2015 updates to the rule were not included in this list. While most of the changes to the rule were previously incorporated in Pacific Power's conditions list to Order 01, one was not.

The only reporting requirement that Staff finds missing from the BCR is a summary of the steps taken to adaptively manage conservation programs throughout the preceding two years. Through participation in the DSM Advisory Group, Staff has witnessed the Company adaptively manage the program and is confident that, at least to some degree, adaptive management is occurring. For example, Pacific Power expanded the Home Energy Reports program in mid 2014, and changed the focus of its lighting program from CFLs to LEDs. However, to be in compliance with the reporting requirements, Pacific Power must file this summary with the Commission. Staff has requested this section be filed in an update to the BCR, but has yet to receive the summary. No order should be issued until this deficiency has been corrected.

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[42] See Docket UE-131723, General Order R-578 (March 13, 2015). The new rule is codified in WAC 480-109.

Issues for Further Consideration

Quantified Health Benefits of Emission Reduction

The EIA requires the inclusion of quantifiable environmental costs and benefits when calculating cost-effective conservation.[43] The Commission has made clear that it prefers a properly balanced total resource cost test.[44] As such, when a benefit is identified as quantifiable, it should be included in a utility's calculations of cost-effective conservation.

Specifically, Staff believes that the health benefits of reduced particulate matter emissions ($PM_{2.5}$) are a quantifiable benefit of energy efficiency measures. Reduction of these particulate emissions occur in two ways. Particulate emissions are reduced when a specific measure reduces reliance on a customer's use of combustion technology, e.g., wood stove heat or an oil/gas fired-furnace or boiler. In addition, because energy efficiency measures reduce load, particulate emissions are simultaneously reduced from the system of utility-scale combustion-based electric generators.

In its December 18, 2015, comments on the Northwest Power and Conservation Council's (Council) Draft Seventh Power Plan, the Commission identified the health benefits of reduced emissions as proven and stated that including the financial health benefits of reduced $PM_{2.5}$ emissions is called for by the EIA.[45]

Staff encourages the utilities to work together with Staff to begin including these quantifiable benefits in future conservation calculations at both the measure and system levels.

Other Upcoming Issues

The energy efficiency industry, like the energy industry in general, is rapidly evolving. In addition to changing technologies, evolving policy trends, and innovations in energy efficiency, the Council released its 7th Power Plan on February 10, 2016. Utilities are required by statute to follow methodologies consistent with the Council's most recent plan.[46] Staff has also identified some further issues that should be kept in mind going forward. These include, but are not limited to: adaptive management, real-time monitoring, treatment of non-traditional conservation, and equity in energy efficiency programs.

Adaptive Management: First, Staff reiterates the importance of adaptive management in the quest to pursue all cost-effective energy efficiency. Staff expects, and the law requires, that utilities continuously review market conditions, research emerging technologies, and implement promising pilot programs. Companies must explore new programs and technologies through a variety of mechanisms, including pilots and participation in research projects and organizations.

Real-time Monitoring: Due to technological and software improvements, it is possible for utilities to reduce measure and savings evaluation costs, and possibly improve the accuracy of its

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[43] RCW 19.285.030(6). Cost-effectiveness is defined at RCW 80.52.030 and include system costs and quantifiable environmental costs and benefits.
[44] UG-121207, Policy Statement on the Evaluation of the Cost-Effectiveness of Natural Gas Conservation Programs.
[45] Commission comment for the Draft 7th Power Plan, December 18, 2015, available at https://www.nwcouncil.org/energy/powerplan/7/draftplan/comments/view?id=1862.
[46] RCW 19.285.040

efficiency savings. Through billing analysis, sub-metering and sensors, and advanced metering infrastructure, utilities can gain access to near real-time impact of both measure and contractor performance.

Staff encourages each utility to begin exploring a pilot for real-time monitoring and evaluation. A good first step is to bring the issue forward to the advisory groups, and identify the challenges and opportunities within the energy efficiency programs.

Solar applications: While not traditional energy efficiency measures, some "direct application renewables" are considered in the Council's 7th Power Plan as potential conservation resources.[47] Solar water heaters are directly included in the residential conservation supply curves, and the Plan further considers distributed solar photovoltaics (PV). The Council finds that "when deployed as a rooftop application, it (PV) typically reduces site electricity consumption more than it adds to grid generation, thus making it appear much like a conservation measure."[48]

Treating PV as a conservation resource may be in conflict with the Commission's definition of conservation as "*any reduction in electric power consumption* resulting from increases in the efficiency of energy use, production, or distribution."[49] Staff believes this is an issue that requires further consideration by the Commission before utilities implement the methodology.

Equal Access to Conservation: The issue of equity in energy efficiency programs is about more than fairness. If certain populations are being consistently underserved, then potential savings are being left on the table. Staff encourages utilities to identify and pursue portions of the population their programs may not be sufficiently serving.

Summary

Staff will review stakeholder comments and provide a recommendation as to whether the Commission should:

1. Accept that PSE, Avista, and Pacific Power complied with the conditions of their respective orders (Order 01 in Docket UE-132043, Order 01 in Docket UE-132045, and Order 01 in Docket UE-132047),
2. Are in compliance with the reporting requirements of WAC 480-109-120 and RCW 19.285.070 in their biennial conservation reports, and
3. Issue an order finding that the companies met their biennial conservation targets at the August 12, 2016, recessed open meeting.

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[47] Seventh Northwest Power Plan, Northwest Power and Conservation Council, Chapter 12 pg. 52 (Feb. 2016), available at http://www.nwcouncil.org/energy/powerplan/7/plan/.
[48] Seventh Northwest Power Plan, Northwest Power and Conservation Council, Chapter 12 pg. 52 (Feb. 2016), available at http://www.nwcouncil.org/energy/powerplan/7/plan/.
[49] *In the Matter of Petition of Puget Sound Energy, Inc., for a Declaratory Order on the Meaning of "Conservation" in Chapter 19.285 RCW*, Docket U-121165, Order 01 ¶ 12.

Attachment: Recommended Treatment of Excess Conservation

Glossary for Excess Conservation Examples

Biennial Conservation Target	**All available conservation that is cost-effective, reliable, and feasible. No less than the pro rata share of the ten year potential, at least 20%.**
Excluded Potential	Potential savings which are speculative in nature and excluded from Base UTC Target i.e. NEEA or pilot programs.
Base UTC Target	The Energy Independence Act biennial conservation plan (BCP) energy savings targets approved by the UTC. Generally, the Biennial Conservation Target minus any excluded potential.
Decoupling Commitment	Additional percent of Base UTC Target required per Commission order. Currently 5% for PSE and Avista.
Overall UTC Target	Base UTC Target plus Decoupling Commitment.
Full Target	Biennial Conservation Target plus decoupling commitment. This is the "Target" reported to Commerce.
Utility Program Savings Achieved	Energy Efficiency savings resulting from Utility Programs.
Single Large Facility Savings Achieved	Energy Efficiency savings as defined in WAC 480-109-060(26).
Total Utility Savings Achieved	Utility Program Savings Achieved plus Single Large Facility Savings Achieved.
NEEA and Other Savings Achieved	Any savings that result from programs excluded in the Base UTC Target calculation.
Total Savings Achieved	Total Utility Savings Achieved plus NEEA and Other Savings Achieved.
Excess Savings Earned	Total Savings Achieved minus the Full Target.

Example Excess Conservation Calculations (MWh)

Biennial Conservation Target All available conservation that is cost-effective, reliable, and feasible. No less than the pro rata share of the ten year potential, at least 20% . A **1,000**	**Excluded Potential** NEEA, pilots. (Potential savings which are speculative in nature are excluded from eligibility for penalty under the Commission's standard practice.) B **50**	**Base UTC Target** The Energy Independence Act biennial conservation plan (BCP) energy savings targets approved by the UTC. A -B = C **950**	**Decoupling Commitment** Additional percent of Base UTC Target required per Commission order. 5% of C = D **48**	**Full Target** Biennial Conservation Target plus decoupling commitment. This is the "Target" reported to Commerce. A + D = E **1,048**
Utility Program Savings Achieved (i) **950**	**Single Large Facility Savings Achieved** (ii) **0**	**Total Utility Savings Achieved** (i) + (ii) = X **950**	**NEEA and Other Savings Achieved** Y **100**	**Total Savings Achieved** X + Y = Z **1,050**
		UTC Target Achieved Test IF X > C "Achieved" **Target Achieved**	**Decoupling Commitment Achieved Test** IF X > D + C "Achieved" **Decoupling Commitment Shortfall**	**Excess Savings Earned** Z - E **3**

PSE Excess Conservation Calculations (MWh)

Biennial Conservation Target All available conservation that is cost-effective, reliable, and feasible. No less than the pro rata share of the ten year potential, at least 20% . A **55,8301**	**Excluded Potential** NEEA, pilots. (Potential savings which are speculative in nature are excluded from eligibility for penalty under the Commission's standard practice.) B **72,533**	**Base UTC Target** The Energy Independence Act biennial conservation plan (BCP) energy savings targets approved by the UTC. A -B = C **485,768**	**Decoupling Commitment** Additional percent of Base UTC Target required per Commission order. 5% of C = D **24,288**	**Full Target** Biennial Conservation Target plus decoupling commitment. This is the "Target" reported to Commerce. A + D = E **582,589**
Utility Program Savings Achieved (i) **552,595**	**Single Large Facility Savings Achieved** (ii) **0**	**Total Utility Savings Achieved** (i) + (ii) = X **552,595**	**NEEA and Other Savings Achieved** Y **110,527**	**Total Savings Achieved** X + Y = Z **663,122**
		UTC Target Achieved Test IF X > C "Achieved" **Target Achieved**	**Decoupling Commitment Achieved Test** IF X > D + C "Achieved" **Decoupling Commitment Achieved**	**Excess Savings Earned*** Z - E **80,533**

* PSE has agreed that it will not count NEEA savings as excess, thus they report a different amount that Staff accepts, although it is lower than their entitlement.

Avista Excess Conservation Calculations (MWh)

Biennial Conservation Target All available conservation that is cost-effective, reliable, and feasible. No less than the pro rata share of the ten year potential, at least 20% .	**Excluded Potential** NEEA, pilots. (Potential savings which are speculative in nature are excluded from eligibility for penalty under the Commission's standard practice.)	**Base UTC Target** The Energy Independence Act biennial conservation plan (BCP) energy savings targets approved by the UTC.	**Decoupling Commitment** Additional percent of Base UTC Target required per Commission order.	**Full Target** Biennial Conservation Target plus decoupling commitment. This is the "Target" reported to Commerce.
A **76,261**	B **11,130**	A -B = C **65,131**	5% of C = D **3,257**	A + D = E **79,518**
Utility Program Savings Achieved (i) **70,959**	**Single Large Facility Savings Achieved** (ii)	**Total Utility Savings Achieved** (i) + (ii) = X **70,959**	**NEEA and Other Savings Achieved** Y **11,130**	**Total Savings Achieved** X + Y = Z **82,089**
		UTC Target Achieved Test IF X > C "Achieved" **Target Achieved**	**Decoupling Commitment Achieved Test** IF X > D + C "Achieved" **Decoupling Commitment Achieved**	**Excess Savings Earned** Z - E **2,571**

Pacific Power Excess Conservation Calculations (MWh)

Biennial Conservation Target All available conservation that is cost-effective, reliable, and feasible. No less than the pro rata share of the ten year potential, at least 20% .	**Excluded Potential** NEEA, pilots. (Potential savings which are speculative in nature are excluded from eligibility for penalty under the Commission's standard practice.)	**Base UTC Target** The Energy Independence Act biennial conservation plan (BCP) energy savings targets approved by the UTC.	**Decoupling Commitment** Additional percent of Base UTC Target required per Commission order.	**Full Target** Biennial Conservation Target plus decoupling commitment. This is the "Target" reported to Commerce.
A **89,016**	B **14,313**	A - B = C **74,703**	no decoupling (D) **0**	A + D = E **89,016**
Utility Program Savings Achieved (i) **98,881**	**Single Large Facility Savings Achieved** (ii)	**Total Utility Savings Achieved** (i) + (ii) = X **98,881**	**NEEA and Other Savings Achieved** Y **12,279**	**Total Savings Achieved** X + Y = Z **111,160**
		UTC Target Achieved Test IF X > C "Achieved" **Target Achieved**	**Decoupling Commitment Achieved Test** IF X > D + C "Achieved" **Decoupling Commitment Achieved**	**Excess Savings Earned** Z - E **22,144**

August 24, 2016 CRAG Meeting

Summary Notes

Contents

Attendees

CRAG

Joni Bosh, NW Energy Coalition
Lea Fisher, ICNU
Charlie Grist, NW Power & Conservation Council
Michael Karp, The Energy Project
Stan Price, NEEC
Jennifer Snyder, WUTC

PSE

Dan Anderson
Corey Corbett
Andy Hemstreet
Nate Hill
Bill Hopkins
Elaine Markham
Lance Rottger
Bob Stolarski
Jeff Tripp

Guests

Deborah Reynolds, WUTC
Cooper Wright, WUTC

Meeting Topics

1. Welcome and Agenda Review
2. Standing Agenda Items,
    a. Safety Moment
    b. Filings, emails, biennial timeline status
3. 2016 YTD Performance & Year-End Forecast
4. 2017 ACP Development
    a. Energy Reports
    b. LED Savings Values
    c. 2017 ACP Financial Accounting
5. Demand Response Update
6. Energy Efficiency Program Updates
    a. DSMc Implementation Status
    b. ShopPSE Financial Overview
    c. Refrigerator Replacement Program
    d. Energy Upgrades Campaign
    e. Large Power User/Self-Directed Program
7. Wrap Up

Discussion Highlights and Notes

PSE thanks the Northwest Energy Efficiency Council and the Smart Buildings Center for their gracious hospitality. The meeting attendees learned some fascinating facts about the building and the SBC itself.

Please note that the following summaries are ordered by topic and may not be in chronological meeting or conversation order. Bolded page numbers at the beginning of each topic indicates the corresponding PowerPoint slide number.

The primary focus of the August 24 meeting was to discuss a number of issues pertaining to the development of the 2017 Annual Conservation Plan. The PowerPoint slides provide ample details about the individual topics; accordingly, this meeting summary will focus on agreements and action items resulting from the presentations, rather than reviewing the details of each slide's contents.

Standing Agenda Items

Page 7: After Bob Stolarski welcomed the attendees and there were introductions all around, Jeff Tripp began with a safety moment discussing the effects of cumulative injuries, such as hearing loss resulting from not wearing earplugs, joint damage from not wearing knee pads, etc. It is quite important to wear appropriate safety gear for any physical activity.

Page 8 - 9: There was no discussion during the review of significant filings & CRAG-related activities since the May 18 CRAG meeting. CRAG members confirmed that PSE's FTP site is convenient and functions well for downloading large Energy Efficiency files.

2016 Year-to-Date and Year-End Forecast Performance

Pages 12 - 15: Dan Anderson reviewed the year-to-date electric and natural gas savings and expenditure performance, as well as Energy Efficiency's year-end projections. Jeff noted that a couple of key drivers of the YE forecast electric savings in the Residential Sector include retail lighting and showerheads. Corey Corbett indicated that Business Sector natural gas projects are difficult to forecast, due to the estimated project completion timeframes. Bob noted that managers review the performance and forecasts monthly, and indicated that PSE would be able to provide more program-specific and outlier information in future CRAG meetings.

2014-2015 Wrap-up: Biennial Conservation Report

Pages 16 – 23 Dan facilitated a discussion around key (not all) comments on PSE's 2014-2015 Biennial Conservation Report (BCR). After a very brief overview of the excess savings issue, (in which PSE believes that any excess savings should be allowed to apply to potential future decoupling commitment shortfall, while some Stakeholders are opposed to this view), there was a general discussion on where (what docket), and the process of PSE's petition for the treatment of excess savings should be filed. Dan indicated that the petition should be ready for CRAG review within two weeks. PSE will await direction from the Commission. The attendees also discussed the background on how excess savings are determined and why utilities are allowed to carry over a specific percentage of excess savings from biennia to biennia.

The attendees also had a discussion around single large facilities; all of which in PSE's territory are Schedule 258 (Large Power Users/Self-Directed) customers.

The discussion centered around why these types of customers are specifically identified in the excess carry-over calculation, and how it would be very difficult for PSE to provide a savings estimate on these specific customers (of the 20, 13 pay into the Rider, with 7 do not). It was agreed that reporting on the *actual* savings achieved by this set of customers (NOT the *specific* customers) is acceptable, and will be included in Energy Efficiency's Annual Reports.

The attendees generally agreed that Energy Efficiency's extensive adaptive management discussions on continuous improvement through the application of TQM in its Annual Reports could be held up as exemplary. Dan also pointed out that Energy Efficiency's pilot programs are comprised of more than just a single line item in Exhibit 1; there are many NEEA initiatives that should be considered pilots, ideas that are considered by the Business Sector's Energy Efficiency Technology Evaluation organization, and innovative measures that are incorporated directly into a program's suite of offerings, rather than starting off as pilots. Some attendees pointed out that pilots are often the "pushing the envelope" part of the energy efficiency continuum, with some providing energy savings, while others may not save energy in the short-term.

After sharing that Dan's Evaluation staff are already in careful consideration of a program that could qualify for "Real-time monitoring" (also referred to as "EM&V 2.0"), there was a general discussion about how Energy Efficiency addresses equity in underserved markets, and members' request for addition information and background on this. Bob, Dan, and Jeff shared initiatives that Energy Efficiency, and PSE in general, have consistently pursued, including multi-language fliers and brochures, "Rock the Bulb" campaigns that were targeted at hard-to-reach areas, low income weatherization (which has no spending cap) and Multifamily programs' efforts to engage hard-to-reach customers, and PSE's Energy Efficiency Outreach team's focus on hard-to-reach areas and customer classes.

The group discussed differences—and overlap—of "hard to reach" versus low income, and the challenges associated with identifying these customer types in the first place, including issues such as the specific geographies, agency interactions, data sources, privacy issues, etc. It was pointed out that a discussion on hard-to-reach classes is included in the 7th Power Plan, and that the RTF has a focus team for hard-to-reach markets. The conversation also touched on an additional item, the concept of the equity of the spread of Rider dollars throughout the PSE service territory—potentially by county—and how that correlated to the PSE customer population and participation. PSE related some of the significant challenges associated with potentially performing an analysis of that magnitude. The attendees agreed that it is a good idea for PSE to add discussions on how the programs focus on under-represented segments in their 2017 Annual Conservation Plan overviews.

2017 Annual Conservation Plan Development

Pages 24 - 33 Andy Hemstreet provided the attendees with an overview of Energy Efficiency's 2017 ACP development. He walked CRAG members through a brief and high-level tour of Exhibit 1's Excel™ workbook, illustrating hyperlinks and navigation buttons. Andy also briefly discussed Energy Efficiency's Measure Revision Guidelines' measure UES value timing and archiving process, how the Exhibit 1 measure tables are updated, and that budgets are built from the bottom-up. During the discussion, the topic of the number of low-income households served also arose.

Andy then provided general overviews on Energy Efficiency's responses to the 2014-2015 BECAR recommendations; in general, Energy Efficiency has or will put into place actions that follow the majority of those recommendations. The exception is for the recommendation to provide more detail in its Annual Report program discussions. On this issue, PSE committed to continue to working with the CRAG to meet their expectations for reporting content.

Pages 34 - 36 Jeff conducted an overview of energy reporting pilots and legacy programs. He clarified that the expansion group was the pilot, and that the Business pilot consisted of 10,000 small-to-medium businesses. There were no behavioral energy savings confirmed for the SMB segment in the evaluation. The residential evaluation indicated what steps customers are taking in aggregate, and may indicate that there may be programmatic savings that resulted from the pilot. PSE hasn't seen the result of the business evaluation. Jeff indicated that one potential reason for the disparity of business versus residential savings is that in businesses, there are too many people to train, whereas in residences, it's a much smaller group.

Jeff clarified that when PSE dropped 10,000 customers from the legacy program to test persistence, there was an average drop-off in savings of approximately 15 to 20 percent per year. There was a brief discussion on the concept of comparing the program with a resource and the need to "re-purchase the resource" every two years (the program has a two-year measure life, where the full savings is reported in the first year, with the second year reporting only the incremental savings). Jeff explained that PSE is seeking advice from the CRAG—and wishes to ensure that the CRAG is comfortable with the level of expenditures--on whether to proceed with both the legacy Home Energy Report program (as behavioral savings are included in the 7th Power Plan) and the energy report pilot.

The general consensus of the CRAG was that PSE should continue to run the programs as long as the savings are cost-effective. Jeff also indicated that he'd be willing to provide a more detailed overview of the programs' operations in future CRAG meetings or for individual CRAG members.

Page 37 Jeff then provided an overview of the impact of lower LED UES values on the developing 2017 electric savings target. He pointed out that, although aggregate savings are lower than for 2016, lower unit prices may offset any overall savings reduction.

2017 ACP Development – Financial Accounting

Pages 38-45 Following lunch, Dan provided the attendees with an overview of a new budget category: micro-overhead, that CRAG members will see in the 2017 Exhibit 1. Dan explained that, in essence, it is designed to mimic the "assessments" that were former added to the "labor" category, and will not have an incremental budget impact. CRAG members indicated that they were comfortable with the concept of enhancement.

Demand Response Update

Pages 48-52 Elaine Markham shared a brief review of the demand response background and the status of the proposed RFP. She also provided some summaries of the comments filed on the draft RFP, as well as responses to those comments. While the commercial program is open to a wide range of potential initiatives, the residential focus is more targeted. PSE doesn't have a preference for the number of bidders, although will consider the resource management impacts of potential multiple vendors across a geography. PSE presumes that most bidders will focus on either residential or commercial, rather than both; PSE is prepared to deal with the potential of a single vendor managing both, however.

On this issue of funding, Bob pointed out that, in order to be cost-effective, the program would have to cost less than the annual avoided cost of approximately $20 million. He also clarified the distinction between PSE's request to fund certain costs associated with Conservation Voltage Regulation (CVR) and demand response. Bob reminded CRAG members that, although two demand response pilots were funded through the Rider, there could be a case for considering demand response as a power purchase expense. The attendees also discussed issues related to the ownership of assets (page 51); there was a general thought that if PSE owned the asset, then those costs should be in the rate base. Issues related to funding may be dealt with by the Commission on a case-by-case basis.

Another consideration is how demand response is used; for peak shaving, load balancing—akin to acting like a generator, etc., with dispatchable load rather than power. A concept was expressed that, under ideal conditions, the generation would match the load. A new concept forming in the industry is that the load can be shaped to match generation. This makes a case for excluding demand response from the Rider.

The group also discussed concepts related to the relationship between demand response and energy efficiency, as they relate to energy and capacity issues; there may be times when demand response "competes" with energy efficiency, causing potential "trade-offs". It was pointed out that that demand response and conservation are both demand-side programs, and that both have an energy and capacity component. It is hoped that the costs of providing capacity are offset by demand response. Additional discussions centered on measuring the cost-effectiveness of the program if there aren't energy savings on the customer side.

Bob emphasized that these, and several other strategic and policy issues are rapidly approaching; .

There was also discussion around a regional study of end-use load profiles. Utilities have been asked to contribute funding to this study. PSE's IRP organization has retained a consultant to look at their needs and compare to what the regional study will provide. Additional work, such as oversampling, might be required, and the timing might need to be accelerated. The study would be for electric only, and PSE isn't quite sure of its scale at this point. The CRAG generally agreed that an end-use load study is sensible and that PSE should provide a budget estimate for this study to the CRAG for ~~funding~~ consideration of inclusion in its 2017 ACP.

ShopPSE

Pages 57 - 58 Jeff provided an overview of the online service ShopPSE. He indicated that, due to low participation numbers, PSE isn't able to offer free shipping, and that product is being warehoused at PSE fulfillment contractor's location. PSE provides links to its retail partners' sites and expansion will depend on customer demand.

Refrigerator Replacement Program

Pages 59 - 61 Jeff shared that the Retail refrigerator replacement program is cost-ineffective unless it's bundled with other measures, and so will be ending soon. The clothes washer replacement program and refrigerator decommissioning program will continue for 2017, however.

Energy Upgrades Campaign

Pages 62 - 65 Jeff provided a status update on the Energy Upgrades campaign, indicating that there are four different partners, and he shared some campaign success statistics.

Large Power Users/Self-Directed Program Overview

Pages 66 - 74 Corey Corbett provided the attendees with an overview of the Large Power User/Self-Directed, or Schedule 258 program. He clarified the distinction that 449 customers can only receive incentives as part of the Schedule 258 offerings, whereas non-449 customers can participate in CI Retrofit, CI New Construction, or Commercial Rebates programs in addition to using their 258 allocations.

All eligible customers pay into the program funding, regardless of their participation level. EMEs and PSE account managers ensure that customers are aware of this practice. Corey provided the approximate number of each customer type in the program, and outlined the competitive and non-competitive processes. He confirmed that not very many projects are turned down by PSE. Some customers make use of their allocated funding during the non-competitive phase, and then submit RFPs in order to secure additional funding in the competitive phase.

Corey provided background on what leads to the four-year cycle “hockey stick” effect. He also reinforced the concepts noted in the 2014-2015 Biennial Conservation Report comments discussion earlier in the day, in that single large facilities make up the majority of the 449 class of these customers, and that it would be very difficult to perform an analysis their savings potential prior to the commencement of a 4-year cycle. Although these are large customers and are included in the Schedule 258 target and savings result reporting, they do not make up the majority of the program’s overall savings. There was a brief discussion about the recently-completed 2012-2013 Schedule 258 evaluation, and Corey indicated that he’d be happy to respond to any CRAG follow-up questions.

2016-2017 BECAR Status

Pages 75 - 80 Dan provided a brief overview of the current activities going on as a part of the 2016-2017 Biennial Electric Conservation Achievement Review.

Wrap-Up

No additional upcoming activities or events were noted.

Parking Lot & Questions

Items captured in the parking lot:

There were no issues relegated to the parking lot at this meeting.

Agreements, Decisions

1) PSE agreed to provide more detailed program outlier performance data in future CRAG meetings.
2) PSE will await direction from the Commission as to the docket into which its treatment of excess savings petition is to be filed.
3) Rather than provide a specific estimate of single large facilities in its planning documents, PSE will report on the actual savings of this customer classification in its Annual Reports of Energy Conservation Accomplishments.
4) It is a good idea for Energy Efficiency to add underserved/hard-to-reach discussions in its 2017 ACP program overviews.
5) Bob agreed to be the point person for PSE on the RTF's hard-to-reach segment initiative.
6) The CRAG agreed that as long as Home Energy Reports and the energy reports pilot has cost-effective savings, PSE should continue to run the programs.
7) The CRAG agreed that it was sensible for PSE to provide a funding estimate to the CRAG for the end-use load study ~~through~~ for potential inclusion in the 2017 ACP budget.

PSE Action Items

1. PSE will add specific program outliers to future savings performance meeting agenda.
2. PSE will add underserved/hard-to-reach discussions in its 2017 ACP Overview document.
3. Corey will provide the docket number for the open access Order (relative to Schedule 258's 449 customers).

Fall Energy Efficiency - DSM Advisory Group Meeting
September 25-26, 2017
Avista Corporate Office, Rm 130
Day 1 - 10:00 am – 4:00 pm
Day 2 - 8:00am – 3:00pm

Day 1 Attendance

Dan Johnson - Avista
Tom Lienhard - Avista
Kevin Holland - Avista
Amber Gifford - Avista
Ryan Finesilver - Avista
Mark Baker - Avista
Renee Coelho – Avista
Collette Bottinelli - Avista
Kathi Scanlon - WUTC
Tina Jayaweera - Power Council
Stacey Donohue - IPUC
Donn English – IPUC
Billie Jo McWinn - IDPower
Bing Tso - SBW (Phone)
Shawn Collins - Energy Project
Amy Wheeless - Energy Coalition
Chuck Murray - Commerce

Notes

10:10 Avista Welcome & Review – Dan Johnson

- Org chart review. Kelly Norwood upcoming retirement and Rates falling under Kevin Christie
- Kevin Holland provided Bio
- Advisory Group goals and ground rules

10:20 Avista Program Financials – Amber Gifford

- Tariff Rider Balances – Historical Trends
    - Underfunded WA $14M (End AUG)
        - Approved in WA
    - Underfunded ID $10M (End AUG)
        - Pending Approval in ID
    - Gas was level for both
    - No questions/comments.
- WA Electric Savings
    - 76k MWH Goal – Current 122k Biennial TYD (Unverified)
- WA Gas Savings
    - 620k Therms Goal – 615 YTD (Unverified)
- ID Electric Savings Goal – IRP 13k MWh Current 40k YTD (Unverified)
- ID Gas Savings Goal – IRP 197K Therms Current 148k YTD (Unverified)

10:30 Draft Biennial Conversation Plan Review – Ryan Finesilver

- Handed out current tariffs for schedule 190 and 90 for WA & ID. No questions/comments.
- Advisory Group Webinar Recap:
    - Discussed how Biennial Conservation target was set – discussed in 1st web-ex.
    - 10 year savings potential is 368,181 MWh, 20% is 73,636 MWh which is larger than the 2 yr. target.
    - The draft total conservation commitment/BCP TARGET is 93,724 MWh – (this includes decoupling commitment and NEEA)

    - Draft 2018-2019 BCP PLAN is 94,847 MWh – will have a chart describing this in detail later. (This # excludes Fuel conversions).
    - Program Tariff – talks about eligibility, funding, incentives, etc. We are proposing no changes to schedules 190 and 90. There are links to these on our website.
    - Deliverables have now been met through all of the Web-Ex meetings over the summer.
- Kevin spoke to our energy needs – we are well situated as a company going forward to meet our load obligations.
- Tina would like to see the work papers on the avoided costs – Tina is going to look at the IRP. (James Gall will come in later to answer some questions).
- BCP
    - Timeline – Draft to AG 9/29
    - Review Period for AG 9/29-10/30 – would like to have comments back by 10-20 if possible so that we have time to incorporate changes.
    - Filing date 11/1
- Details of the 93,724 MWh BCP target reviewed – see table.
    - Shawn asked to clarify Behavioral savings - Opower forecast is being left in our savings goals even though we are sunsetting the program.
    - Tina asked if the NEEA forecast would change our goal – it will remain.
    - The Draft Biennial Conservation Plan # is 94,847 MWh (includes NEEA, excludes fuel conversions).
    - The detailed slides to follow exclude NEEA

WA Draft Biennial Conservation Plan Overviews:

- Electric Overview
    - Ryan provided a chart showing highest savings measures
        - Simple Steps making up approx. 23,000 MWh
        - Site specific next largest and so on.
- Natural Gas project savings 1,174,000 therms
    - Chuck Murray asked how our rebates are set and would like to understand how we determined to reduce our water heater rebate to $175.
- Residential Programs
    - Electric - Comparing our 2016-2017 to 2018-2019
        - We expect more savings in the next biennium overall – mostly due to LED lighting
        - Shawn would like to understand the changes in electric residential prescriptive as to why it has dropped.
        - Tom discussed that our pilots and efforts
        - Chuck brought up the point that 26% of our IRP was around insulation measures, but this slide does not reflect that.
            - Ryan addressed this question in day 2
    - Gas – comparison of current and future biennium
- Tina questioned the budget and if there is a cap on it. Ryan explained we don't have a cap, we look at programs that are cost effective and check for reasonableness.
- Non-Residential Electric

- Higher amount of interior lighting is expected
    - Tina would like to see the comparison of actuals for 2016-2017 compared to our forecasted for both current and future BCP. Also would like to know the achievable potential.
        - Ryan provided the BCP comparison in Day 2
    - Exterior lighting and site specific are expected to be slightly less.
    - Tina feels it would be helpful to have the actuals included on the slides for comparison purposes.

- Non-Res Gas
    - Tom explained why Energy Smart Grocer (ESG) showed up for 18/19 BCP, but was not in our 16/17 BCP, gas projects were performed under site-specific work in 16/17.
- Tina wants to know why the Site-specific Budget is drastically reduced for 18/19 - $2.9 vs. $4.2.
    - Tom thought partially due to being down 1 engineer. We will need to look into this.
- Low-Income
    - Electric and Gas reviewed
- Fuel Conversions

  Low Income:
    - 3 conversion types – furnace, water heater, & heat pump.
    - Clarification – heat pump – electric resistive baseboard heat converting to high efficiency heat pump. This should not fall under the fuel conversions category.
    - Questions came up around Low Income efficiency rating – is lower than standard residential furnace (>=90 AFUE). They pay on 80% AFUE. Typically a 90% goes in unless there are installation barriers.
- Residential
    - Changes to Furnace and Water Heater (wall heater = no change)
    - Tina would like to know how the incentive calculation is done – Ryan explained it starts with our tariff rider – could go to $2,800, but that is a significant jump over $1,500.
    - Chuck would like to know the assumed cost of the measures.
    - Tina would like to know the efficiency level of the water heater – since this is just in respect to conversions, there is not a requirement that customers install above code. It is just the switch in fuel.

- Multifamily Market Transformation – more discussion later.
    - This is for new construction projects – Gas.

Fuel Conversions: Proposed Budget – Kathi would like to see a 16/17 Comparison of budget and savings. Chuck would like to understand how these are represented in the IRP. Ryan explained it is in the model as it frees up capacity of electric.

- ID DSM
    - ID Conservation Target
        - Agreed to use UCT
        - We are grossing up the TRC to UCT conservation (30% adjustment)
        - ID Commitment is 19,705 MWh
    - Cost-Effectiveness – comparing TRC vs. UCT.

- Breakdown of Electric programs – Interior lighting, site Specific, and Fuel efficiency/conversions make up the top 3.
- Tina asked how the 30% adjustment came to be – Dan explained we did some research on UCT vs TRC and found some representative numbers to come up with the estimate.

12:00 Lunch

1:05 CPA RFP – Ryan Finesilver

- Electric and Gas CPAs are being done together through 1 RFP
- Additionally, there is an additional study for Demand Response for 2019.
- It isn't shown to be a needed resource in our IRP until 2026…
- RFP went out last week, looking for responses back mid-October so vendor is on board in November.
- Chuck encouraged Kathi to discuss the new standards practices manual. He is recommending our potential vendors be aware.
- October 2nd workshop around DR and cost-effectiveness. (Cancelled by UTC staff)

1:15 ID Research & Development - Tom

- Residential Static Var Compensation (RSVC) – optimizing voltages for lines so that we are not giving more voltage than is necessary on that line. Want to get optimal voltage to the customer.
- Trying to get a product out so that we can see what we are saving customers.
- Micro Grid – we are using smaller power systems so that we can make up for needs in a micro grid area. Could we eliminate the need to get power from other resources? Looking into how this could save us.
- Simulation Based Commissioning of Buildings - Energy Management System to find out how ideally they are running.
- CAES – Large industrial processes – tracking the full energy use. Tried out at Lighthouse Dressing.
- Phase 4 – RSVC – may be able to use solar, cars and other things to make the quality of power better for customers.
- Energy Storage for Enhanced Performance of the Avista System
- Aerogel Insulation System – prices are coming down on this composite so that it may be able to be used in the next 5 years. Has an R value of 40.
- Managing Efficiency Based on Operative Temperatures – helping customers do the right things to gain efficiencies. Need to get better information to customers.
    - Tom can provide full papers on these if anyone is interested
    - We spend approx. $230-$240K/year on these projects
    - University of ID involvement is some cases

1:30 IRP Questions – James Gall

1. Conversions – conversions are embedded into the load forecast. There is not anything assumed for conversions in the IRP.
    a. Chuck is clarifying that we simply make an adjustment for the number of customers and the load/types of those customers.

    b. The model chooses between the conservation measures and the supply side measures to meet the load forecast.
    c. Tina is clarifying – there isn't anything specific around conversions in our load forecast and James agrees.
2. Chuck's question around 26% insulation – comparing the business plan to the potential. We still need to look into this.
3. Tina's question around avoided cost – would like to understand the components. Capacity, market price…etc. What drives measures being chosen?
    a. James explained that we start with all the conservation measures each having a measure of energy to deliver, as well as each season. Model looks at cost effectiveness, amount of energy supplied….this is about $35/MW. Price is adjusted based on when it is delivered. Model will favor a product that helps a winter deficit for example (capapcity value). Capacity needs are summed up.
    b. See page 11 of IRP for more details around this.
    c. Stacey wants to know what the energy resources the model picks from – natural gas fired peaker, batteries, etc.
    d. Stacey wants to understand more on calculating the T&D Deferral – historical study showed $10. This year Ryan calculated a book value of our system which resulted in a higher value. Need to decide internally how to calculate this going forward.
        i. Tina mentioned getting a group together to work on this and come up with a standard method for all.

1:47 EM&V RFP - Amber Gifford

- Discussion around Nexant: Donn & Chuck both find value in changing EM&V providers
- Donn - Going with the lowest bidder may not be the best way to go – we may see better work by going with a higher cost option.
- Kevin – what is the values in switching thigs up? Stacey – concern that recommendations start being rounded out and presenting things in a "sunny light". Difficult to stay objective. Donn – feels it better to have a fresh set of eyes.
- Tom wants to know if Cadmus would be okay to repeat (since it's been 4 years). Stacey feels like it's more of a perception issue. It's very efficient in that they know how the business works and data can easily flow back and forth, but the downside being the two companies becoming too comfortable with each other. Other utilities have mixed things up a little more. Looks better for the company if we switch vendors.
- Donn thinks a good evaluator will find things in our programs that we are doing wrong.
- Tom brought up the point that this group voiced that we should let the evaluator decide what should be evaluated. That way we provide the programs and the evaluator decides what to look into.
    - We will be setting up a Skype meeting once we have evaluation criteria so we can discuss our options. The evaluation team is comprised of folks in our department.
- An additional potential bidder was added to the EM&V bidder pool: Research Into Action (which was not documented in the slide deck presentation).

2:05 Behavioral Program Discussion – Dan

- Alternatives to Behavioral Program as Opower contract ends 12/31/17 – proposal is to take our behavioral program to the next level…2.0, 3.0….
- See timeline slide for plan for 2018-2019
- AMI: 2018 deployment
- Would like to layer in the active data channel – proactive approach by texting, messaging, etc.
- Proposal – allow persistence to settle out over 2018 so we have a clear baseline and then implement new plan.
- Tina brought up the question as to whether we should quantify the persistence through Opower contract.
- Powerley (a home energy management platform) – providing load disaggregation to the customer through their phone to find energy efficiency opportunities. Allow customers to set up their communication preferences.
- Shawn asked the question if we were going to use the funds slated for Opower towards these new options. No is the direct answer, we will use EE funds for a pilot like we would any other pilot and determine the value for a program going forward. (Dan feels we are going to spend a lot less than the $2M we spend on sending out home energy reports now).
- Stacey is wondering if there are any utilities doing this. Dan is not aware of any.
- Kathi wanted to verify that we are committed to the Opower savings goal (15,386 MWh) that is in the plan, and Dan confirmed that yes, we are. We will need to work with our evaluator to determine passive/active savings channels.
- Stacey asked if we could roll out the analytics to our small business customers. Dan indicated we sure could.

2:45 Summer Advertising Campaign – Colette Bottinelli

- Goal is to increase awareness of EE programs for residential customers
- TV, Social media, print, etc.
- C&I – Cenex/Zip Trip Advertorial
- Colette shared the ads for EE tips and rebates

3:00 Products and Services Update

Kevin Hennessey – Avista Marketplace

- Providing a way for Avista customers to be able to review and research any appliance purchase they may be making for their home.
- Customers can research for EE models and then go to any retailer to purchase the product.
- Every appliance is given a score 0-100 as far as the best rated products and the list is updated every night.
- Can equate this to consumer reports for energy efficiency.

Rendall Farley – Electric Transportation Strategic Initiative

- Moving things and people using alternative approaches to fossil fuels. Better cost, more reliably, and cleaner.

- EVSE – Electric Vehicle Supply Equipment
  - Supplying charges to customers at work and at home. (Cars are parked 95% of the time). Charges can communicate via web.
- Avista wants to best serve our customers and be ready for EV. Could potentially reduce rate pressures.
- EVSE Charger – we own the charger, companies use it, we get to collect the data and move the load if needed. Facility owner pays for the energy (up to property owner if they want to require a user fee).
- This is a global phenomenon so Avista is trying to get ahead of it.
- Future R&D
  - Mass transit
- RethinkX – Interesting report to take a look at.
  - Autonomous – Level 5 vehicles (vehicle drives itself).

3:50 Day 1 Wrap Up – 4:00 Adjourned

8:15 Day 2

Day 1 attendees, plus the following additional Attendees: David Schafer, Greta Zink, Rachelle Humphrey, Lorri Kirstein, Camille Martin, Ana Matthews, Roxanne Williams, & Matt Iris.

Pilots – David Schafer & Tom Lienhard

- Residential Smart thermostats - load disaggregation. Honeywell or other. Tom indicates that we will be working with all different brands of smart thermostats...nest, eco bee, Honeywell, etc.
  - Tina questioned who the data will be made available to. David indicates we will work with an analytics company to access the data (Whisker Labs for example).
- In Home Energy Audit Plus Weatherization - customers could opt-in for this audit. Direct install or mail option.
  - Chuck - encourage expanding insulation to floors and walls (not just attic). Since drive time is a lot of it, do what you can while you are there.
  - Shawn asked about the cost to the customer - we will try to get the audit costs down. Tom said we will cover the costs during the pilot and then go from there.
  - Kathi questioned if we are modeling this after other companies.
- Wall Insulation - going to take a group of homes and pay for the cost of exterior treatment.
  - Chuck would like to be in the loop on this going forward. Would like to help outline the approach. There is a company in Portland that did a lot of research on different wall insulation so - would be a good place to start.
- Multi family - hard to Reach
  - Low-hanging fruit in common areas. Tom would like to know if it is okay to change the scope of the contractors - transitioning out of small business.
- Ecova Pilot - Should we continue down the path and go out for RFP to get the monthly data. We could do this with some other company, Ecova is just one option.
  - Stacey indicates this sounds similar to load disaggregation. Asked what kind of businesses are being targeted. Under 50K sq ft.
- EUI (Energy Utilization Index) New Construction Pilot - offering twice the incentive (.40 electric, $6 gas) for a customer that uses 1/2 the energy when building a new home. We don't worry

about any costs tests with this. We need to work with architects and engineers to move this forward. This is a commercial pilot. "Performance Based Incentive".
    - We are asking if we can continue to move this pilot forward. Kathi asked what kind of buildings we have looked at. 1 industrial and 1 commercial office space.
    - Chuck encourages us to continue.
- Real Time M&V 2.0 - Pullman interval meter data. The idea is we would like to be able to do this with all customers. Should have the data available in January.

9:10 Low-Income Weatherization Multi-Family Pilot - Shawn Collins

- Provided letter regarding this pilot proposal.
- Determine if there are Weatherization opportunities working with the CAP agencies. Since this would be working with agency owned buildings we would have eligibility verified. Trying this out at Avista could be a model for working with other parts of the state. Low-income multi family is an underserved market. Would like to get some feedback.
    - Dan asked what the funding vision is - Shawn proposes using Avista funds to gain the efficiencies and bring in other funds for labor and coordination expenses.
    - Renee indicates that the low-income funding that currently exists is doing some similar work as this proposal.
    - The proposed list is all agency owned buildings.
    - Kathi questioned how the project costs estimates were derived - Shawn said they worked with contractors to get estimated numbers.
    - Chuck supports this. He recommends finding specifically what the research question is. Advocates for utilities talking to each other so that there is a uniform methodology around this. In addition, PSE is running an effective insulation program with King County - he suggests we visit with them about what they are doing. Lastly, pre and post inspections. Using cell phones/web cams for verifications. Dan mentioned that at E-Source they were showing customers and utilities utilizing face-time as well for showing/discussions.
    - To answer a prior question, Bing mentioned he has run a MF pilot program in the last few years in California that was successful--well-received and highly cost-effective.
    - Dan says we support the proposal and questions what is next. Discuss funds and determine a plan to move forward.

9:40 Program Updates:

Small Business - Greta

- SBW - sun setting program at the end of this year.
- The reason ID customer count is a little less is due to no gas programs in ID in 2015.
- Feels this would really be a great transition into multi-family.

    - Stacey wondered how this program got started. Greta - We have been trying to reach this segment for many years. We had to figure out a count of how many customers fit into this segment. Our target of 8,000 customers to hit the majority (we eliminated gov't and multi jurisdiction). Stacey wants to know the Cost effectiveness of this program. Ryan indicated a 1.63 TRC and 1.49 UCT for 2016 using the updated avoided cost numbers.

Low Income - Renee

- CEEP (WA state funded only) - converting 85 homes with alternative fuels over to natural gas. We had no problem finding homes with alternative fuels - oil and wood. Unsure whether the program will continue next year as WA capital budget is not set. The program has been well received by customers (there was no cost to the Cust).
    - Chuck advises that we share this information with our legislature. Renee indicates that we were featured in WSU Energy Office Newsletter.
- 7 Agencies serve WA and ID. Funding starts and ends at different times. Low-income participation can be a bit "lumpy".
- Will be able to fund more this year than in 2017 because of the move to UCT. Stacey questions this - she said usually UCT harms low income programs. Renee is going to look into this and get back to Stacey.
- We are almost always able to spend the funds ($2 M WA, $700K ID). Kathi questions why the goal for WA is so high in 2015. Renee will investigate*** (she knows there are several factors).

Commercial Lighting - Rachelle

- CFL buy-down through simple steps will not be offered in 2018.
- Tom indicates that we react to what simple steps does.
- ClearResult results are evaluated through our evaluator - Nexant gets the data directly from them.
- Dan brought up that the CFL recycling program will continue next year as we see CFLs drop off.
- Residential - David
- Kathi asked what app is being used with smart thermostats. David - we are not brand specific. As far as the pilot we are going to try and leverage customers already using smart thermostats.
- Highlight of the Changes: Electric to NG furnace was $1500, now $2000, E to heat pump was $450, now $500, tankless NG water heater was $200, now $175. See slide for discontinues and new rebate offerings.
    - Tina questioned "built-green" vs. Energy Star. David eluded to checking with Ryan on the RTF values...built-green is a brand so we don't have RTF values on that.
    - With respect to E to NG furnace and the $2,000 rebate, we could max out at $2,800, but we needed to find balance. Also to note, ID does not have the advantage of the LEAP program since it is a WA program only.

Natural Gas Conversions LEAP - David

- Chuck asked if the gas portion was considered in our TRC. David answered this is all totally separate. No DSM dollars go towards this program.
- Amy circled back to the increase in incentive for E to NG furnace - since this is already a robust program and is questioning if it is necessary. David indicated we are trying to balance and remove barriers. Amy also questioned adding an income component to this - David indicated we have not looked into that.

Site Specific - Lorri

- Fuel Efficiency program is mostly comprised of the multi-family market transformation program (90% approx).
- Tina questions the large increase in kWh for 2017 and Tom and Lorri eluded it's due to the larger size of projects.
- Stacey asked about 2017 goal...Tom indicates it is 1.5 M and we are currently at over 3x that now. The projects come in very "lumpy".
- Clarification of the chart - it should not be in dollars, should just be #s.
- Kathi asked about multi-family market transformation and why the incentive went down from $3,500 to $3,000 for this year's BCP - she would like to see the trend in incentives. Collette mentioned that the cost to the customer is around $8,000 so we are not even covering half of the cost.

Behavioral Programs - Camille

- Kathi asked about the program costs for Opower vs. AMI. Opower is approx $2M for the 2 years. Dan - We won't know the AMI costs until down the road and once we move through a pilot.

Community Outreach – Ana

12:50 DSM iEnergy Discussion – Matt Iris

- One stop location for DSM – location for internal and stakeholders
- Goals for implementation – Matt explained how the program will eliminate many manual entries and manual processes.
- Stacey – was there a RFP?
    - Tom: We did create a process to determine what we need and what the software could do. We did work through the business requirements and we can provide.

2:00 Ryan Finesilver – Draft BCP questions Follow-up

Residential Prescriptive Change

- The Windows incentive will probably drop to $1.44 to be consistent between gas and electric.
- Residential Weatherization - showing what was selected for our 10 yr achievable.
- Will address through some site-specific. A portion of this has already been accomplished through UCONS (which AEG did not capture). Difficult to find the customers in need of some of these categories.

WA BCP Actual Savings Comparison

- Interior Lighting - substantial difference between 16/17 and 18/19 we feel a lot of the savings have been front-loaded and we feel there will be a falloff in 2018.

Low-Income Gas

- Ultimately the measures fluctuate based on what the agency decides to go after.

Fuel Conversions Comparison

- The group would like to see the Excel calculations for how the incentive level is set as well as the cost-effectiveness calculations.

3:00 Round-table

- Future Webinar Topic - Amy request: walk through why gas is more efficient/cost-effective for our customers. Kathi would like to see this take place sometime in October, before the BCP is filed.
- Also need a webinar for our RFP results, criteria, and discuss how to move forward
- Behavioral/AMI Incentive calculation process
- Kathi - Oct 2nd meeting to discuss DR and the standards practices manual. PSE will be there to discuss DR.
- On-Bill repayment question from Kathi - it is on our technology road map. There is not a lot of customer interest.
- PM 2.5 - we are in contract right now with ABt. They will also study BTU numbers.
- Per Amy - NW Energy Coalition - November 2nd Conference Hilton in Downtown Seattle
- RFP Question - we have a bidder that is interested in bidding on both the EM&V and the CPA. What does the group think? Consensus seems to be that there is not a conflict, but Kathi needs to think about it and get back to us.
- Spring Meeting - possibly in Olympia (Chuck could possibly get us a room).
- Seeing comparisons at this meeting really helps put things into context (Stacey). Pace of the meeting was good - 2 days ideal

4:04 Adjourned

Deliverables to Provide Post-Meeting:

- Notes from the meeting
- Fall Meeting Slide Deck
- Conversions Cost-Effectiveness Model

Future Webinars to Schedule:

1. Fuel Conversions – An overall walkthrough from the top down
2. RFP results for both the CPA & EM&V: results, criteria, and discuss how to move forward
3. Incentive calculation process
4. Behavioral/AMI Data Presentment for Customers – future state

From:	Colamonici, Carla (ATG)
To:	Amy Wheeless; Baker, Mark; Ben Otto; Beverly Baker; Bing Tso; Bryan, Catherine; Chris Davis; Christie, Kevin; Christina Zamora; Murray, Chuck (COM); Colamonici, Carla (ATG); Johnson, Dan; Reynolds, Deborah (UTC); Donn English; Osborne, Elizabeth (COM); Finesilver, Ryan; Gervais, Linda; Gifford, Amber; Holland, Kevin; Jeff Harris; Scanlan, Kathi (UTC); Kevin Keyt ; Kristi Sherlock; Lienhard, Tom; Lisa Gorsuch; Ron Gaunt; Shawn Collins; Simon ffitch; Stacey Donahue; Tim Stout; Tina Jayaweera
Cc:	Gafken, Lisa (ATG)
Subject:	Public Counsel"s Engagement in Avista"s Advisory Group
Date:	Thursday, October 12, 2017 12:31:10 PM

Hello Everyone,

I hope this message finds you well. This message is to inform you about a shift in our ongoing engagement with utility IRP processes and conservation advisory groups. Public Counsel is reallocating and refocusing its resources, particularly as it relates to conservation advisory groups and the BCP/ACP process. As you may be aware, we do not yet have a full analyst team and, thus, need to prioritize our workload.

Public Counsel will continue to engage in the IRP process and advisory groups, but we will only monitor conservation advisory group activity in the future. We will be submitting comments and plan on participating in this upcoming BCP filing, as much as our schedule will allow.

Please keep us on the conservation advisory group email distribution, but know that we may not be able to attend meetings or participate as fully as we have in the past.

The Advisory Group's work remains important, and we look forward to maintaining contact. Furthermore, as our team reestablishes in numbers, we may adjust our focus and resume work on the BCP/ACP process at a later date. In the meantime, if you have any questions, please do not hesitate to contact me or Public Counsel Unit Chief, Lisa Gafken.

Thanks,

Carla Colamonici

Regulatory Analyst

Public Counsel Unit of the Washington State Attorney General's Office

800 5th Avenue, Suite 2000

Seattle, WA 98104

(206) 389-3040

CarlaC@ATG.WA.GOV

From:	Reynolds, Deborah (UTC)
To:	bob.stolarski@pse.com; Anderson, Dan; Hemstreet, Andrew W (andrew.hemstreet@pse.com); "Dan.Johnson@avistacorp.com"; "Amber.Gifford@avistacorp.com"; Don.Jones_JR@PacifiCorp.com; Ariel.Son@pacificorp.com; "linda.gervais@avista.com"; ken.s.johnson@pse.com
Subject:	Comments on Draft 2018-19 Biennial Conservation Plans
Date:	Monday, October 23, 2017 10:05:00 AM

Greetings,

Staff has been diligently reviewing the draft 2018-19 Biennial Conservation Plans. I have some overall guidance to offer, which you may or may not have time to incorporate before making your formal filings. You can expect these issues to recur in our formal comments if they are not addressed in your filings.

1. Inclusion of NEEA in the target: Staff has closely watched the impact of excluding NEEA from the target. Each year, it has created confusion and unnecessary discussion. Staff believes that NEEA should be restored to the target for the 2018-19 Biennium, which will match the approach taken by non-investor-owned utilities.
2. Implement the National Standard Practice Manual: Staff has worked closely with the National Efficiency Screening Project, and believes that a review of the resource value tests will streamline and optimize cost-effectiveness analysis. Each BCP should include a proposal and timeline for this review, to be completed in 2018. This will include the identification of non-energy impacts that should be quantified.
3. Evaluation, Measurement and Verification 2.0: Each BCP should discuss implementation of new approaches to EM&V, taking particular notice of new metering capabilities.
4. Fuel Conversion: These programs have continued to draw controversy each year. Staff believes these programs need to be completely removed from conservation programs. This includes cancelling any tariffs.
5. On-bill Repayment: This program has obvious benefits to moderate-income customers, with less access to capital. Without a demonstration that existing conservation programs are proportionally used by low- and moderate-income customers, utilities should offer on-bill repayment as a way to provide fair access to conservation programs.

Best regards,

Deborah Reynolds
Assistant Director, Conservation and Energy Planning
(360) 664-1255
dreynold@utc.wa.gov

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circumstances change or additional information be brought to our attention. Staff's opinions are not binding on the commission.

From:	Reynolds, Deborah (UTC)
To:	Dahl, Corey (ATG); Colamonici, Carla (ATG); joni@nwenergy.org; "Wendy@nwenergy.org"; "ShawnC@oppco.org"; "jec@dvclaw.com"; Edward Finklea (efinklea@nwigu.org)
Cc:	Cebulko, Bradley (UTC); Twitchell, Jeremy (UTC)
Subject:	FW: Comments on Draft 2018-19 Biennial Conservation Plans
Date:	Tuesday, October 24, 2017 4:27:00 PM

Greetings,
I sent these comments to the utilities yesterday. Please give me a call if you have any questions, and feel free to forward to other interested people.

Deborah Reynolds
Assistant Director, Conservation and Energy Planning
(360) 664-1255
dreynold@utc.wa.gov

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From: Reynolds, Deborah (UTC)
Sent: Monday, October 23, 2017 10:05 AM
To: bob.stolarski@pse.com; 'Anderson, Dan' <Dan.Anderson@pse.com>; Hemstreet, Andrew W (andrew.hemstreet@pse.com) <andrew.hemstreet@pse.com>; 'Dan.Johnson@avistacorp.com' <Dan.Johnson@avistacorp.com>; 'Amber.Gifford@avistacorp.com' <Amber.Gifford@avistacorp.com>; Don.Jones_JR@PacifiCorp.com; Ariel.Son@pacificorp.com; 'linda.gervais@avista.com' <linda.gervais@avista.com>; ken.s.johnson@pse.com
Subject: Comments on Draft 2018-19 Biennial Conservation Plans

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National Efficiency Screening Project, and believes that a review of the resource value tests will streamline and optimize cost-effectiveness analysis. Each BCP should include a proposal and timeline for this review, to be completed in 2018. This will include the identification of non-energy impacts that should be quantified.

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4. Fuel Conversion: These programs have continued to draw controversy each year. Staff believes these programs need to be completely removed from conservation programs. This includes cancelling any tariffs.
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Best regards,

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January 5, 2018

SENT VIA UTC WEB PORTAL AND U.S. MAIL

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

Re: Avista Corporation, Report identifying its ten-year achievable electric conservation potential and its electric biennial conservation target, Docket UE-171091
Low-Income Fuel Conversion

Dear Mr. King,

The Energy Project respectfully submits these comments as a follow up to our letter dated November 30, 2017. As stated in that letter, we strongly encourage retention of fuel conversion incentives for the Avista low-income weatherization program. We are pleased that Commission Staff also supports retention of low-income fuel conversion, as stated in the Staff Open Meeting memorandum of December 20. Should the Commission decide to terminate or curtail Avista's existing fuel conversion program for non-low-income customers, The Energy Project requests Commission support for any actions necessary to ensure that funding levels for low- income fuel conversions are maintained at existing levels without any gap in offerings. As discussed below, we see two potential pathways for retention of the low-income fuel conversion program offerings.

According to Avista's Biennial Conservation Plan (BCP) budget for 2018-2019, low-income fuel conversions represent $296,672, or 12 percent of the $2.36M total electric low-income weatherization budget and slightly less than one percent of the total electric energy efficiency portfolio budget of $31.5M.[1] As explained in our prior letter, low-income fuel conversion measures have always been administered and offered separately from Avista's residential fuel conversion program. Because these measures serve as another important option to help reduce the energy burden for low income households, we believe existing offerings should be preserved.

In our view, there are two options for retaining funding for the low-income conversion program, in the event the Commission wishes to

[1] Avista 2018-2019 BCP, Appendix A.

the Energy Project
Shawn Collins
Director

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a project of:
opportunity council

change the existing general program: (1) modify Avista's electric tariff Schedule 90 to clarify that fuel conversion measures for the low-income weatherization program are to be retained as eligible expenses within the tariff; or (2) modify Schedules 92/192, as proposed by Staff, to allow for LIRAP funds to be used for the purpose of allowing gas conversions for eligible low-income Avista customers. The Energy Project is in support of either approach, however, if the second option is implemented, we believe it is essential for the Commission to hold existing LIRAP funds harmless. To that end we request that the BCP budget for low-income conversions be added to the existing LIRAP budget to ensure that funding for low income fuel conversions, as well as LIRAP, is not diminished and that no gap in service offerings occurs.

Again, we appreciate the opportunity to comment on this important matter and look forward to discussing it in person at the Commission's January 10th Open Meeting.

Sincerely,

/s/ Shawn Collins
Shawn Collins
Director
The Energy Project

Public comments in the matter of the Avista Utilities electric general rate case (UE-170485) submitted by:

Jon Powell
12402 N Division
PMB #288
Spokane WA 99218

Submitted to:

Steven V. King
Executive Director and Secretary
Washington Utilities and Transportation Commission
P.O. Box 47250
1300 S. Evergreen Park Drive S.W.
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These comments have been submitted in electronic form to the Commission Records Center at records@utc.wa.gov

On January 5, 2018 the Commission shifted the discussion of Avista's fuel-switching programs from the Biennial Conservation Plan (docket UE-171091) to the Company's electric general rate case (docket UE-170485), which was scheduled for hearing very shortly thereafter. At that time the Commission stated a preference for comments regarding the fuel-switching elements of the Avista's demand-side management portfolio to be submitted as part of the general rate case proceedings. These comments are being submitted in accordance with the Commission's stated preferences.

The shift of this topic out of the biennial conservation plan to the general rate case, and the timing of that shift, has made it challenging for full public participation in the discussion of this topic. Nevertheless, I wish to submit written comments relating to two issues regarding the Company's fuel-switching programs; (1) the validity, or lack thereof, of the "direct-use of natural gas" policy that has served as the foundation for the fuel-switching programs since they were launched in 1992 and (2) the mischaracterization of Avista's multifamily fuel-switching program as a market transformation venture.

<u>"Direct-use of natural gas" policy</u>

Avista's first interventions into utilizing ratepayer demand-side management funds to influence customer fuel choice decisions were based upon what has been termed the "direct-use of natural gas" policy argument. That argument contends that it is more cost-effective to send a therm of natural gas directly to the home for use in space or water heating rather than the alternative of sending that same therm of natural gas to a natural gas turbine and then, indirectly in the form of electricity, to the home to serve space and water heating needs. Calculations based upon then-prevailing natural gas turbine

heat rates, electric and natural gas appliance efficiencies and costs, distribution losses and incremental utility infrastructure costs were offered in support of the cost-effectiveness calculations.

The direct-use argument is critically reliant upon the assumption that the deferrable supply-side resource for Avista was exclusively a natural gas turbine, and would remain so for the relevant life of that fuel choice decision. The foundation of the argument is that the only alternative to sending a therm of natural gas directly to the home was to supply that home with natural gas turbine generated electricity to serve the same end-uses. In recognition of this foundational policy, Avista limited their intervention in the fuel choice decision to that of electric versus natural gas. Other potential alternative end-use fuels, such as propane and biomass (wood burning), were excluded based upon the recognition that those fuels were not relevant to the deferrable natural gas turbine alternative.

Twenty-six years later, the assertion that natural gas turbines are the sole deferrable electric resource is definitively not true based upon current and future renewable portfolio standard requirements. Furthermore, the policies and the economics of the generation of electricity can be reasonably expected to further erode the role of the natural gas turbine in the deferrable resource mix of the future. Though natural gas turbines will likely always be an element of the deferable resource mix, it is certain that carbon costs, advancements in renewable generation and a variety of other foreseeable and unforeseeable factors will ensure that they will share a substantial part of that role with other generation sources.

Not only is the foundational argument for intervention in the customer fuel choice decision no longer valid today, it is certainly no longer valid for the life of the customers fuel choice decision. Avista's intervention into that decision process is not limited to the life of the appliances (furnace or water heater) involved as these appliances will almost certainly be replaced with similarly fueled appliances for the remaining of the life of the dwelling. Thus the consequences of the fuel choice decision will have an impact for the remaining life of the home. Today's fuel choice decision has implications which extend forty, fifty or sixty years or more into the future, and needs to be consistent with the markets of that period. Given the trends in the deferrable electric generation resource mix it is implausible to assert that natural gas turbines will sufficiently dominate the deferrable resource mix to the extent necessary to support the continued application of the foundational direct-use policy argument justifying a ratepayer funded intervention into the fuel choice decision.

Based upon this factor alone, the continued ratepayer financing of these programs through the demand-side management tariff rider mechanism (Avista's Schedule 91) should be terminated.

But there is additional cause to question the wisdom of the continuation of the fuel-switching programs from a customer perspective. When the intervention into the fuel-choice decision was originally proposed it was argued that it was in the public interest partially because not only were natural gas turbines assumed to be the sole deferrable resource for Avista, it was also the regional deferrable generation resource. Consequently, the market price (and therefore the avoided cost of electricity) could reliably be determined based upon the fuel and variable operations and maintenance cost of the last gas turbine in the region that needed to be brought into operation to serve regional electricity demand. The link between natural gas prices and electricity prices was so strong that it was expected that their future avoided costs would move in lock step. Those avoided costs may go up or down, but it was believed that one could safely rely upon them doing so in a parallel fashion. As it is no longer plausible to assert that natural gas turbines will be the definitive deferrable electric generation resource

of the future, this assumption is greatly compromised. Future avoided cost streams can be expected to move more independently. It is even possible, depending on natural gas and renewable generation efficiency trends and future monetized carbon costs, that those avoided cost streams will cross at some point. This adds an additional risk to the fuel decision calculus that erodes the ability to represent Avista's fuel-switching programs as being in the public interest.

To summarize my discussion of this issue, I contend that the assumptions necessary to accept the foundational policy arguments supporting utility intervention in the fuel choice decision are no longer true. Lacking the legitimacy of those assumptions, the direct-use argument itself no longer supports the Company's ongoing intervention into fuel choice decisions that will remain in place for a forty to sixty year horizon. The ratepayer funding of the intervention in the fuel choice decision should be terminated. This does not limit the Company's ability to pursue natural gas marketing efforts with shareholder dollars, but as these programs no longer serve a public interest a continuation of ratepayer funding is not supportable.

<u>The multifamily fuel-switching market transformation program</u>

Ten years ago Avista presented to their Advisory Group a proposal to intervene into the fuel-switching decisions of the developers, managers and owners of multifamily residential dwellings through a market transformation program. The market transformation tool had been successfully applied regionally by the Northwest Energy Efficiency Alliance and had a strong performance record on a portfolio basis, though it has always been recognized that it is inevitable for individual ventures to fail.

Avista proposed a three-phase approach to a market transformation that would enhance the share of natural gas in new and existing multifamily buildings. The proposed three phases were:

1. A super-incentive phase of sufficient duration to secure a toe hold in the market so as to demonstrate the technical feasibility of using natural gas in multifamily buildings.
2. Curtailment of the super-incentive phase with the substitution of an educational campaign targeting building developers, managers and owners emphasizing the Company's beliefs regarding benefits of natural gas and their technical feasibility.
3. Once a sufficient number of natural gas buildings existed, the augmentation of the phase 2 educational campaign with a marketing campaign driving future tenants towards natural gas buildings.

The market transformation was complete with metrics, triggers for moving to each phase and an exit strategy.

Avista is now proposing to continue the ratepayer funding of this program a full decade after it was originally presented to the Advisory Group. This is far longer than the active phase of accepted market transformation ventures. The Company has also suggested that it is premature to even move the program out of that first "super-incentive" phase that was originally designed to secure a toe hold in the market.

Since originally launching this program the Company has increased the incentives for their fuel-switching programs from a range of one to seven cents per first year kWh (dependent on project simple payback)

to a flat 20 cents per first year kWh. The Company pays the same amount to transfer a kWh from the electric meter to the natural gas meter as they do to save the same kWh through pure efficiency. Beyond that, for fuel-switching programs the payment is made on the entire end-use load shifted, not just on the portion of the end-use load saved through efficiency as is the case in electric efficiency programs.

Schedule 90 does impose a cap on the incentives that can be granted to a customer as a percentage of the customer cost. However, by representing this program as a market transformation program the Company is triggering a provision of Schedule 90 that allows for the ratepayer funding of up to a full 100% of the project cost.

As Staff has noted, this has driven a tremendous increase in the incentives paid per dwelling unit for these projects. Staff has also noted that the ratepayer funded incentives are concentrated into the hands of a very small number of building developers.

Though this project was originally represented as a market transformation project, it has not been implemented in accordance with the accepted principles of the management of a market transformation program. It has instead become an opportunity to fund all or a very large portion of the project cost of a select few developers of multifamily buildings. The Company should be directed to terminate the program based upon its ongoing misrepresentation of the program as a market transformation venture as well as the previously cited flaws in the general fuel-switching program policy.

Concluding remarks

Avista's twenty-six year history of fuel-switching programs has achieved many laudable outcomes and has served as a positive example of wise market intervention. But the history of these programs was based upon different circumstances and futures than we are facing today. Lacking the legitimacy of the foundational policy arguments which led to the original implementation of these fuel-switching programs it is unwise to authorize the continued ratepayer funding.

The Company, instead of taking stock of changing circumstances and reacting accordingly, has not only failed to adaptively manage these programs towards termination but have aggressively ramped them up. Other stakeholders have noted in their written comments that these programs comprise 43% of the Company's demand-side management portfolio and that for every one heat pump incentivized by the Company twenty natural gas fuel-switching incentives will also be incented.

It seems clear that the fuel-switching programs are more about building natural gas infrastructure and rate base rather than serving the interest of individual customers or the ratepayer population at large. Natural gas marketing may well be in the interest of the shareholder, and the pursuit of such marketing programs should be permitted, but they should not be funded by the electric ratepayer.