Avista Utilities

Washington / Idaho
2014 Demand-Side Management Business Plan

November 1, 2013

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I. Executive Summary

Avista Utilities' 2014 Demand Side Management (DSM) Business Plan describes the Company's planning process and planned expenses as well as the projected energy savings for the implementation of its energy efficiency programs for the 2014 calendar year. This Business Plan describes how Avista's programs are structured and delivered to customers. It provides a "bottom-up" analysis built by measure and/or program.

Avista has continually been providing energy efficiency programs, uninterrupted, since November 1, 1978. The Company's planning process builds on previous years' experiences and addresses a number of challenges in regard to achieving energy acquisition targets, meeting cost-effectiveness criteria, and satisfying regulatory reporting requirements.

Avista provides financial incentives to over 225 prescriptive measures as modeled in the Company's Integrated Resource Planning (IRP) process. This Business Plan shows these are packaged—for ease of customer delivery—into 16 programs. In turn, these programs are targeted to five customer segments: 1) Residential; 2) Low-Income; 3) Nonresidential; 4) Regional (i.e., the Northwest Energy Efficiency Alliance (NEEA)); and 5) Codes and Standards. In addition, Avista may offer pilots and other delivery mechanisms to gauge market demand and program delivery effectiveness.

In 2014, 48 million kWh are projected to be acquired through the implementation of this Business Plan at a cost of $18.7 million with an estimated cost-effectiveness benefit-to-cost ratio of 1.12 per the Total Resource Cost (TRC) test. The kWh savings will be evaluated pursuant to Avista's Evaluation, Measurement and Verification (EM&V) Framework and annual EM&V plans. The Company appreciates the involvement of stakeholders through its regularly scheduled Advisory Group and Technical Committee meetings.

Several recent changes to the DSM landscape are embodied in this Plan. Natural gas avoided costs have significantly decreased to $4.92 per dekatherm since last year's plan was published. Electric avoided costs have fallen to $67 per mWh. This has created multiple challenges for providing robust energy efficiency programs that meet required cost-effectiveness tests and, in turn, places pressure on defining the value to customer's energy efficiency services and right-sizing administrative functions. The value proposition recognizes that, historically, DSM programs have been incentive-based; more recently energy efficiency efforts have expanded the educational focus on benefits to participating customer. Thus, energy savings have traditionally been tied to rebates and financial incentives. As dollar contributions decrease (in part due to lowered avoided costs) and technical and information assistance increase, the

standard metric for administrative costs continues in a downward trend. This Plan addresses these and other elements of DSM operations that are required to deliver upon the core mission of providing value to Avista‘s customers. The Company anticipates that the key challenges to be addressed in 2014 involve:

Repositioning the DSM Portfolio for Success in a Lower Avoided Cost Environment

The Company’s DSM portfolio is in the midst of a substantial transition precipitated by a dramatic decline in both the natural gas and electric avoided costs. Reduced avoided costs creates multiple challenges for providing robust energy efficiency programs that meet required cost-effectiveness tests and, in turn, places pressure on defining the value to customers energy efficiency services and right-sizing administrative functions. For this reason, several changes to Avista's programs and tariffs have been made in the past year. This Plan outlines additional programmatic and evaluation modifications from both planning and real-time (i.e., adaptive management) perspectives. Moreover, the unit cost of acquisition of energy efficiency is increasing for mature programs.

Make Use of Regional Technical Forum (RTF) Unit Energy Savings

As a consequence of agreements to utilize RTF unit energy savings where those values exist, it is of increased importance to ensure that program managers offer programs in a manner that is consistent with RTF assumptions, barring substantial reason to the contrary. By delivering RTF-compliant programs, the Company is able to minimize the EM&V cost burden on the portfolio and reduce the risk of uncertainty in claimed savings. The measures evaluated within this plan used RTF values when they were available for measures and it may be necessary to reposition the implementation of these programs to make use of this opportunity.

This business planning document is a description of a continuous planning process at a particular point in time. To maintain, and enhance, the degree of meaningful external involvement within this process over the course of the following year, revisions and updates to the plans for 2014 are to be expected as part of the task of actively managing the DSM portfolio.

Avista's 2014 DSM Business Plan is responsive to RCW 19.285 and WAC 480-109, the Washington Utilities and Transportation Commission’s (WUTC) related Order No. 01, Docket No. UE-111882, approving Avista’s 2012-2013 Biennial Conservation Plan with conditions, and the Idaho Public Utilities Commission (IPUC) Staff DSM Memorandum of Understanding (MOU).

Appended to the plan is the Company's "2014 Evaluation, Measurement & Verification Annual Plan." The term "conservation" will be used interchangeably with energy efficiency and demand-side management throughout this document.

II. Preface to the 2014 DSM Business Plan

Avista performs a comprehensive business planning process on an annual basis. This planning process begins as a 'blank slate', involving a bottom up approach, and proceeds to develop a plan that meets all DSM portfolio objectives for the upcoming calendar year. The process is generally initiated in the late summer of the previous year and culminates in a final business plan document. This document is required to be filed with the Washington Utilities and Transportation Commission (UTC) on or before November 1st annually and is also submitted to the Idaho Public Utility Commission (IPUC).

During this planning exercise, Avista discards the constraints of existing tariffs and traditional operations and permits the DSM cross-functional team the opportunity to optimize the DSM portfolio for the expected environment and objectives of the following year. If and when these unconstrained planning efforts lead to the need for revisions to existing regulatory or operational functions, the Company identifies the necessary changes and pursues the appropriate actions.

The business planning function is an ongoing process throughout the year. Other planning reviews or even additional comprehensive reviews should circumstances create the need. The formality of potential intra-year reviews is dependent upon the circumstances.

Since the 2013 DSM Business Plan was completed in November 2012, several significant changes in the environment within which the DSM portfolio operates have changed including:

- The suspension of the Idaho natural gas DSM portfolio. This suspension is attributable to the lower avoided costs identified within the most recent IRP, challenging the ability to deliver a TRC cost-effective portfolio.
- The continuation of the Washington natural gas portfolio under a gross Utility Cost Test (UCT) metric rather than the previously applied net TRC metric based upon direction from the UTC. This marks the first time that the Company has employed the UCT test as the primary metric for optimizing portfolio performance.
    - An Interim 2013 Natural Gas DSM Business Plan described the process by which the Company re-evaluated the Washington natural gas DSM portfolio under this new metric. As a consequence of this review, several revisions were made to

the Washington Schedule 190 tariff. The most significant change was the reduction in incentive levels to accommodate the UCT objective under lower avoided costs.

- The substantial fall in natural gas avoided costs has been followed by a related decrease in electric avoided costs. These lower avoided costs substantially reduce the cost-effectiveness of efficiency investments. Though the cost-effectiveness of the electric portfolio is sufficient to warrant the continuation of the portfolio, it will decrease the quantity of cost-effective acquisition identified within this business plan, all other factors held constant.
- Avista's Washington and Idaho Schedule 90 tariff (governing electric DSM operations) was revised during 2013 to improve portfolio performance in 2014. The revisions shifted how the emerging LED lighting technologies are incented, increased the maximum incentive for the most cost-effective measures and clarified the application of incentive caps to prescriptive programs.

This plan also summarizes agreements that the Company and stakeholders have achieved regarding key elements of how the Washington I-937 target will be established and acquisition towards that target measured. These agreements have reduced the degree of uncertainty and increased the control that the Company can exert to meet these goals.

III. 2014 Reporting and Regulatory Issues

Evaluation, Measurement and Verification Commitments

Within its Demand Side Management (DSM) portfolio, Avista incorporates Evaluation, Measurement and Verification (EM&V) activities to validate and report verified energy savings related to its energy efficiency measures and programs. EM&V protocols serve to represent comprehensive analyses and assessments necessary to supply useful information to management and stakeholders that adequately identifies the acquisition of energy efficiency attributable to Avista's DSM Programs, as well as potential process improvements necessary to improve operations both internally and for customers. EM&V includes Impact, Process, and Market analyses, and taken as a whole are analogous with other industry standard terms such as Portfolio Evaluation or Program Evaluation.

A primary responsibility of Avista's EM&V resources within its Policy, Planning, and Analysis team is to support the ongoing activities of the third-party EM&V consultants and evaluators performing the various analyses required to substantiate the conservation acquisition, determine market saturation and penetration, and process evaluations. The 2014 EM&V budget provides for third-party EM&V services that provide an evaluation of 2013 program year portfolio, along with consolidating these findings with results from 2012 for reporting requirements associated with the Washington I-937 biennium. For Idaho, 2013 savings will be measured, verified and reported during 2014.

EM&V procedures are intended to verify the level at which claimed energy savings have occurred, evaluate the existing internal processes, and suggest improvements to the program and ongoing EM&V processes. These findings are reported in the Demand Side Management Annual Report on Conservation Acquisition and include analysis of program, process, and market impacts as appropriate for the portfolio. Per Avista's EM&V Framework, the level of rigor for evaluation is determined by magnitude of savings and level of risk associated with the various programs and measures.

In addition to the external evaluations, Avista EM&V resources support internal evaluations of specific measures and programs, including pilots and other supplemental program activities. The results of these activities are used to inform program management decisions, evaluate program effectiveness, and establish program metrics.

To support planning and reporting requirements, several guiding EM&V documents are maintained and published. This includes the Avista EM&V Framework, an annual EM&V Plan,

and EM&V contributions within other DSM and Avista corporate publications. Program-specific EM&V plans are created as required to inform and benefit the DSM activities. These documents are reviewed and updated as necessary, serving to improve the processes and protocols for energy efficiency measurement, evaluation, and verification.

The Technical Reference Manual (TRM) will be managed as a principal planning and reporting document relative to individual prescriptive measures, their respective unit energy savings (UES) values and accompanying assumptions and sources. The TRM will serve as the compilation of UES values linking the planning and reporting phases of DSM activities and will be updated annually as informed by evaluation findings.

EM&V efforts will also be applied to evaluating emerging technologies and applications in consideration of potential inclusion in the Company's energy efficiency portfolio. Avista may spend up to 10 percent of its conservation budget on programs whose savings impact have not yet been measured, if the overall portfolio of conservation passes the Total Resource Cost test as modified by the Northwest Power and Conservation Council (NPCC). These programs may include educational, behavior change, and other types of investigatory projects. Specific activities can include product and application document reviews, development of formal evaluation plans, field studies, data collection, statistical analysis, and solicitation of user feedback.

Avista and its customers benefit from regional activities and resources in the energy efficiency and conservation domain. To engage with and contribute to regional efforts, Avista EM&V staff has a Voting Member role on the RTF that serves as an advisory committee to the NPCC. The RTF is a primary source of information relating to the standardization of energy savings and measurement processes for electric applications in the Pacific Northwest. This knowledge base provides energy efficiency data, metrics, and references that are suitable for inclusion in Avista's TRM relating to acquisition planning and reporting.

Additional regional activities include engagement with other northwest utilities and the Northwest Energy Efficiency Alliance (NEEA) in various pilot projects or subcommittee evaluations. Portions of the energy efficiency savings acquired through NEEA's programs within the region are attributable to Avista's portfolio. Plans for 2014 include continued participation in NEEA's Industrial Facilities Site Assessment with coordinated data collection and interview activities.

Avista's commitment to the critical role of EM&V is supported by the Company's continued focus on the development of best practices for its processes and reporting. Application of the

principles of the International Performance Measurement and Verification Protocol serves as the guidelines for measurement and verification plans applied to Avista programs. Additionally, the recent compilation of EM&V protocols released under the U.S. Department of Energy's Uniform Methods Project will be considered and applied where possible to support consistency and credibility of the reported results. The verification of a statistically significant number of projects is often extrapolated to verify and perform impact analysis on complete programs within reasonable standards of rigor and degree of conservatism. This process serves to insure Avista will manage its DSM portfolio in a manner consistent with utility and public interests.

To best serve its customers and other stakeholders, Avista will leverage credible sources of quantifiable UES values for energy efficiency measures in consideration of the best and most applicable information available. This encompasses consideration of all data and informational sources that are deemed pertinent to Avista's programs as delivered including the RTF, Avista-specific impact analyses, NEEA, consultant libraries, ENERGY STAR, NPCC's Sixth Power Plan, California's Database for Energy Efficient Resources, and other public sources. The collection of UES values relative to prescriptive measures as delivered by Avista are included in the TRM while the reported savings from custom project evaluations will be subject to rigorous impact evaluations performed by a third-party evaluator with findings available to the Avista DSM Advisory Group for review.

Within Avista's DSM Advisory Group, a Technical Committee subgroup serves primarily within the scope of EM&V applications and currently assists Avista with the development of EM&V protocols and other technically-related conservation program considerations. These activities include providing recommendations and guidance on functional aspects of program implementation along with fundamental evaluation policies and methods. Principal interaction with Avista includes meetings, webinars, and direct interchanges. In addition, Avista provides opportunities for the Technical Committee to review the evaluation, measurement and verification protocols and results.

Cost-Effectiveness Objectives and Methodology

Avista performs cost-effectiveness calculations on a forward looking basis within the Business Plan and retrospectively as part of the DSM Annual Report. The Annual Report includes a calculation of the four basic cost-effectiveness tests on actual operational results. The report of actual 2014 DSM operations will be completed by June 1st, 2015 and will incorporate the results of the third-party evaluation for the 2014-2015 biennium. To the extent possible the DSM Business Plan is a projection of how the DSM Annual Plan will assess the actual performance of the portfolio. Consequently the methodology to be applied to the

measurement of savings and calculation of cost-effectiveness draws from those that are expected to be used within that Annual Report.

The following section provides a summary of the four cost-effectiveness tests utilized by Avista and how they are applied within the planning process. Additional details on the nature of these tests are contained within Appendix C.

Total Resource Cost (TRC) test

The TRC test is a measure of the benefits and costs accruing to the total ratepayer population. This is not a true Societal Test in that non-monetized externalities are not included. Monetized externalities, those that would result in a cost payable by the utility, are included within the TRC calculation. Avista incorporates monetized externality costs into the cost-effectiveness calculation by incorporating these costs into the Company's avoided cost stream. Thus resources lacking adverse non-monetized externality impacts are compared to a higher avoided cost than would otherwise be the case.

Importations of funding to the customer base (e.g. federal or state tax credits) are considered as offsets to the customer incremental cost. With the termination of American Recovery and Reinvestment Act (ARRA) tax credits or ARRA funded rebates for energy efficiency measures this has, for the most part, become irrelevant for Avista's current portfolio.

Incentives costs are considered to be a transfer of wealth within the total ratepayer population and, as such, are neither a cost or benefit under the TRC test.

Avista provides the TRC calculation on both a gross (total participation) and net basis (including only customer participation inspired by the program) in recognition of varying regulatory requirements, Advisory Group members' interest as well as for comparison with other utilities.

Utility Cost Test (UCT), also known as the Program Administrator Cost Test (PACT)

This is a measure of the utility cost of meeting the energy demand of all customers on the utility system. The UCT compares the reduction in the avoided cost of providing energy to the customer with the total utility cost (incentive and non-incentive) of delivering the DSM program. The UCT leads to more favorable (higher) benefit-to-cost

ratios under normal circumstances since the impact of the customer incremental cost and non-energy impacts (included in the TRC but excluded from the UCT) are almost always greater than the utility incentive (which is excluded from the TRC but included in the UCT).

Participant Cost Test (PCT)

The PCT represents the cost-effectiveness of a measure from the perspective of the participating customer. This includes the retail value of the energy savings and non-energy benefits from the project versus the customer project costs net of incentive received. This is a useful measure of potential program adoption levels in that it provides insight into the "traction" that a measure or program may have with prospective participants. The energy simple payback criteria contained within the Company's Schedule 90 and Washington Schedule 190 incentive formals approximate the value of the measure to the participant.

Rate Impact Measure (RIM) or Non-Participant Test

The RIM Test is an indication of the programs' impact upon retail rates. This test provides a comparison between lost retail revenue and sunk program cost versus the incremental reduction in utility avoided energy cost. If retail rates exceed the avoided cost of energy (inclusive of demand and other impacts), any DSM program is mathematically guaranteed to fail this test. Programs that target "underpriced" energy products (e.g. system load coincident energy usage) may conceivably pass the RIM Test. The RIM Test does not consider the impact of upon the customer billing determinants (energy usage) of an efficiency measure and are therefore only applicable to program non-participants.

Management Cost-Effectiveness Objectives

The Company manages the portfolio so as to maximize the residual benefits (benefits minus costs) of the net TRC test for the Washington and Idaho electric portfolios and the gross UCT test for the Washington natural gas portfolio. The focus upon the UCT test for the natural gas portfolio is a recent direction from the UTC as previously explained.

Integrated Resource Plan (IRP) and the Conservation Potential Assessment (CPA)

Avista filed its 2013 Electric IRP in Washington and Idaho on August 30, 2013. This is a 20-year projection of resources, inclusive of conservation and demand response resources, in order to project potential resource shortfalls and the need to acquire new resources to serve load.

Per Avista's Washington I-937 ten conditions in Docket No. UE-111882, the Company is required to complete an independent electric CPA every two years. EnerNOC was retained to update Avista's potential study for its Washington and Idaho electric service territory. This study was used to inform the Company's 2013 Electric IRP.

On November 7, 2012, EnerNOC presented their proposed methodology for evaluating energy efficiency to the Company's IRP Technical Advisory Committee (TAC). On March 20, 2013, EnerNOC presented results of the potential study to the TAC. Some modifications were made based on input from the TAC resulting in the finalized achievable potential.

The methodology proposed to be utilized by EnerNOC made use of the existing LoadMAP model and customer segmentation scheme developed for Avista for its previous CPA. EnerNOC updated the base-year market profiles by incorporating information from the most recent Residential Energy Consumption Survey (RECS) survey as well as the Residential Building Stock Assessment (RBSA) and other survey efforts. EnerNOC utilized the U. S. Energy Information Administration's Commercial Buildings Energy Consumption Survey (CBECS) and Manufacturing Energy Consumption Survey (MECS). These aforementioned surveys informed the current saturation of energy efficiency measures and trends in electricity consumption.

For this potential study, EnerNOC started first with Unit Energy Savings (UES) from the Regional Technical Forum (RTF) where possible and then looked to Avista's Technical Reference Manual and other sources. EnerNOC demonstrated their approach and its continuity with Council methodologies.

In addition to incorporating Avista's most recent avoided costs, EnerNOC updated key assumptions such as retail electricity prices and customer growth. EnerNOC's study used the Council's ramp rates as a starting point for this particular study but adjusted them to reflect Avista's program history as well as estimates of the remaining market potential for the energy efficiency measures and equipment. EnerNOC presented to stakeholders the use of Council's ramp rates as well as where they differed (e.g. program participation of some Avista programs exceeded the Council's ramp rates). Ramp rates were finalized based on feedback from stakeholders with particular attention to the Technical Committee.

The CPA modeling results, complete with Technical, Economic and Achievable Potential by state, was presented at the March 20, 2013 TAC meeting. Energy efficiency was modeled by EnerNOC using Avista's avoided costs. The final IRP document was filed in August 2013 with the accompanying CPA study as discussed above. The IRP's energy efficiency section discussed the historical impact from DSM, the methodology for CPA modeling, potential programs and annual targets for the 2014 and 2015 (until the next IRP).

Avista's 2013 Electric IRP as well as a copy of the CPA can be found at:
http://www.avistautilities.com/inside/resources/irp/electric/Pages/default.aspx

Schedules 90 and 190 Revisions

The Company periodically revises the tariffs governing the operation of Avista's DSM portfolios (Schedule 90 for the electric portfolios, Schedule 190 for the Washington natural gas portfolio) to accommodate changes in technologies, markets or approaches to delivering energy-efficiency to our customers. The need for these revisions may be identified as part of the annual planning process or may occur during the course of the year.

During 2013 the Company made several revisions to the Schedule 90 (electric) DSM tariff. These changes, the motivations behind them and the expected results are outlined below.

Long-lived lighting measures

The Company recognizes that shorter-lived measures are less cost-effective than longer-lived measures, all else being equal. The incentive formula within Schedule 90 and Schedule 190 is applicable to all measures with a life of ten years or more, but lighting measures (typically having a life of 12 years) have a different resource value than non-lighting measures (with an average measure life generally falling in the 20 to 25 year range). Consequently the tariff previously required that lighting measures achieve an energy simple payback of 8 years or less to be eligible for a financial incentive whereas non-lighting measures need only meet a 13 year maximum simple payback requirement. These conditions provide a reasonable TRC cost-effectiveness screen for program eligibility.

The increasing market adoption of long-lived lighting measures (LED lighting technologies in particular) led the Company to request the transition of these selected long-lived lighting measures to the same incentive structure established for non-lighting

measures. Both the IPUC and WUTC approved this revision which is now applicable to lighting measures with independently verified lives of 40,000 hours or more.

In the near-term this is unlikely to have a significant impact upon the acquisition, budget or cost-effectiveness of the overall portfolio. However as the measure decreases and become more attractive to participants the Company does anticipate increased cost-effective throughput from this measure category.

Incentive cap modification

Absent exceptions defined within the Schedule 90 tariff, the Company caps incentives at 50% of the customers incremental cost. This is to ensure that customers have a personal financial investment in the project. The Company believed that this incentive cap was hindering the acquisition of some of the more cost-effective projects. Thus the Company requested and both the IPUC and WUTC authorized an increase in the incentive cap to 70% of the customers incremental project cost for (a) lighting measures with energy simple paybacks of three years or less and (b) non-lighting and long-lived lighting measures with energy simple paybacks of five years or less.

It is uncertain how many additional projects that this potential incentive enhancement will secure, but those that are brought into the portfolio will be some of the more cost-effective projects within the portfolio and will increase the portfolio cost-effectiveness. The revised incentive structure has been incorporated into the 2014 projections.

Incentive cap application to prescriptive projects

The Company has historically adopted the interpretation that the incentive formula within Schedule 90 and Schedule 190 should be granted to an individual site-specific project. When applied to prescriptive projects the fixed prescriptive incentives, including the applicable caps on incentives, are determined based upon the incentive formula as applied to a prototypical project. Individual prescriptive projects have had their incentives capped at 100% of the individual project cost. The wording of the tariff was revised to clarify this interpretation of the Schedule 90 and Schedule 190.

No other revisions to the Schedule 90 or 190 were identified as being necessary as part of the 2014 business planning process.

Washington I-937 Standards for the 2014-2015 Biennium

Since the effective date of the Washington I-937 requirements the Company has communicated concern regarding the impact upon the planning and management of the DSM portfolio caused by various aspects of this regulation. Much of the concern revolves around holding the local utility responsible for events that are difficult to plan for or are outside of the control of the utility. Two circumstances that have been of particular importance to Avista are:

- The potential for intra-biennium changes in unit energy savings that create an asymmetric relationship between how the acquisition target was established and how acquisition toward that target is measured.
- Holding the utility responsible for achieving savings through the Northwest Energy Efficiency Alliance (NEEA) that:
    - The utility does not have full management control over and
    - That is not known to the utility until after the completion of the biennium.

Both of these factors adversely impact the ability of a utility to manage towards achieving the I-937 target with a reasonable degree of certainty while simultaneously delivering energy efficiency resources to customers in an efficient and cost-effective manner.

Through recent discussions with key stakeholders Avista has developed the following understanding that addresses both of these issues.

Establishment of fixed unit energy savings for measurement of I-937 acquisition

An agreement has been reached holding that the unit energy savings used by the third-party completing Avista's CPA (used to establish the I-937 target) will remain fixed for the duration of that biennium. These unit energy savings systematically decrease over time as progressively higher adjusted market baselines are established. Adjustments to measures relying upon Regional Technical Forum (RTF) unit energy savings can occur during a biennium (after the target has been established but before acquisition is reported).

The Company will continue to pursue only those measures that are cost-effective based upon the most recent and best science available in regards to unit energy savings at any time during the biennium, absent compelling individual reasons to the contrary.

Establishment of a local-only I-937 acquisition target

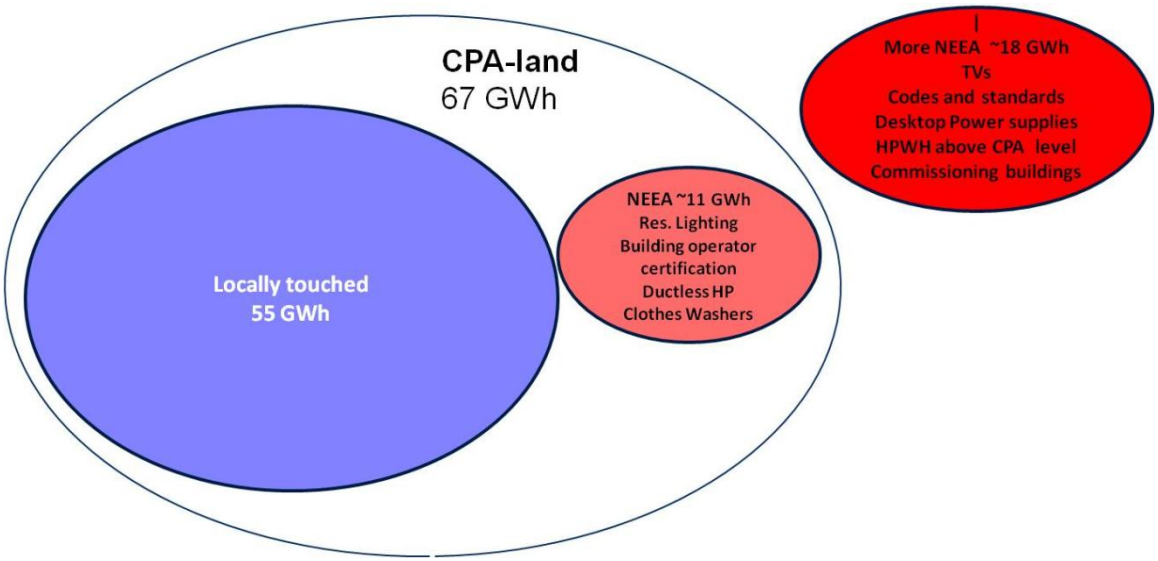
On November 1st, 2012 Avista in collaboration with Puget Sound Energy and PacifiCorp filed a joint methodology with the WUTC for the establishment of a uniform means of reporting savings acquired through regional (NEEA) programs for purposes of meeting acquisition targets established under I-937. This filing fulfilled a previous WUTC Order to offer a joint proposal from the three Washington electric investor-owned utilities. The investor-owned utilities noted that the WUTC's desire for uniformity and the previously explained issue regarding the impact of uncertain NEEA savings upon utility DSM business planning could be simultaneously resolved with an appropriate methodology.

The joint proposal was to redefine the I-937 as referring to local acquisition only. A local-only acquisition target would consist of the CPA-identified achievable potential less expected NEEA acquisition. Actual measured NEEA acquisition would be reported by the utility but not applied towards the local I-937 acquisition target.

When it came time to generate actual calculations of these amounts it was discovered that the CPA's definition of the cost-effective potential is based upon what is cost-effective given markets as we know them whereas NEEA's acquisition was based upon markets as they could be to include a market transformation intervention. Consequently it became necessary to separate the components of the NEEA forecast into that which was within the scope of the CPA and the acquisition that fell outside of that scope.

The Company advanced the task of defining these distinctions to EnerNOC, the third-party evaluator responsible for the original CPA. Upon the completion of the disaggregation it was found that approximately 38% of the NEEA forecast was within the scope and baseline of the original CPA as graphically depicted below.

Figure 1: Depiction of the Development of a Local-Only Washington I-937 Target



The Washington investor-owned utilities will continue to report all NEEA savings and will remain responsible for prudently managing the utilities financial contribution to and role in the NEEA organization. However the uncertainty regarding the impact of a substantial resource acquisition that is not known to the utility until after the close of the biennium and outside of the utility's control has been eliminated as a variable within the planning process.

IV. DSM Portfolio Overviews

The Company offers measures which are aggregated into programs which are in turn aggregated into various fuel, jurisdiction or customer segment portfolios. The following overviews describe the general characteristics of the program.

For the most part, with the exception of detail necessary to fully understand the low income portfolio discussion, the acquisition and cost-effectiveness of each portfolio is represented as part of a later description of portfolio metrics.

The Cascade Strategic Energy Management program and the Opower residential behavioral program are special evaluations contained in Appendix A rather than being incorporated into overviews of the larger segments below.

Residential Portfolio Overview

The Company's residential portfolio is composed of several approaches to engage and encourage customers to consider energy efficiency improvements within their home. Prescriptive rebate programs are the main component of the portfolio, but are augmented by a variety of other interventions. These include: upstream buy-down of low-cost lighting and water saving measures, select distribution of low-cost lighting and weatherization materials, appliance recycling program, a low-interest loan program, direct-install programs and a multi-faceted, multichannel outreach and customer engagement effort.

Prescriptive rebate programs use financial incentives to encourage customers to adopt qualifying energy efficiency measures. Customers must complete installation and apply for a rebate, submitting proper proof of purchase, installation and/or other documentation to Avista, typically within 90 days from project completion. Customers can submit this form in hard copy or online through www.avistautilities.com.

Residential prescriptive programs typically cover single family homes up to a four-plex. For multifamily situations (five-plex or larger), owners/developers may choose to treat the entire complex with an efficiency improvement. In these unique cases, the projects are treated as a commercial project and are evaluated within the site-specific portfolio or the prescriptive commercial windows and insulation program.

Avista offers other programs delivered to residential customers through third-party contractors. These include: refrigerator and freezer recycling, the manufactured home duct sealing program and a regional manufacturer buy-downs for small devices such as compact fluorescent lamps.

A measure-by-measure evaluation of the incremental contribution to the TRC cost-effectiveness of the portfolio is the primary guidance in reaching decisions regarding measure eligibility. In the event that a previously offered measure is no longer cost-effective a termination process to include a transition plan is initiated to equitably treat customers who were in or about to commit to participating in the program. Typically a 90-day notice is provided prior to the termination of the program.

Residential programs have a strong presence and coordination with regional efforts, such as those offered by the Northwest Energy Efficiency Alliance (NEEA). Currently there are significant regional efforts active in the markets for ENERGY STAR homes, consumer electronics, ductless heat pumps, and standard improvements for new heat pump water heating technologies. Avista has offered local rebates in support of many of the NEEA market

transformation ventures and will continue to do so where opportunities for local leveraging of these programs are cost-effective and sensible options.

Low Income Portfolio Overview

The divergence of regulatory expectations in regards to the low income portfolio between Avista's Washington and Idaho jurisdiction has become significant. Consequently the description and the prospects of the two jurisdictional portfolios will be separated below.

The Washington Low Income Portfolio

The Washington low income portfolio is managed to deliver energy efficiency and closely related services to Avista's low income customers. Cost-effectiveness is a criterion in that a more cost-effective portfolio will deliver greater benefits to this customer segment than the alternative, but neither cost-effectiveness nor resource acquisition is not in and of itself considered to be the highest priority.

The Company leverages the infrastructure of Community Action Program (CAP) agencies to deliver low income efficiency programs. The CAP agencies have the ability to income qualify customers and have access to a variety of funding resources, to include Avista funding, which can be applied to meet customer needs. At present six CAP agencies serving Avista's entire Washington service territory receive an aggregate annual funding of $2,000,000. The distribution of these funds across the six agencies is represented in the table below.

Table 1: Washington Low Income Funding by CAP Agency

CAP Agency	Serving counties	2014 funding
Spokane Neighborhood Action Programs	Spokane	$1,335,000
Rural Resources	Stevens, Pend Oreille, Ferry, Lincoln	$194,000
Whitman County Community Action Center	Whitman	$146,000
Opportunities Industrialization Council	Grant, Adams	$75,000
Washington Gorge Action Programs	Skamania, Klickitat	$10,000
Lewiston Community Action Partnership	Asotin	$240,000
Washington jurisdictional total		$2,000,000

Within Washington the agencies may spend their annually allotted funds on either natural gas or electric efficiency measures at their discretion. Included within this annual funding is a permissible 15% reimbursement for administrative costs. An additional 15% of the funds can

be expended upon non-energy health and human safety measures in support of energy efficiency measures installed within the same home. The health and human safety funds are generally intended to contribute to the persistence of the installed measure by either physically safeguarding the measure or maintaining the safe habitability of the home. These funds are included within the contractual caps on funding given to each agency.

Avista has enacted, and will continue to utilize in 2014, a system by which the more cost-effective measures are designated as "pre-approved", allowing the agency to fully incentivize the measure without individual Avista authorization. All measures not on the pre-approved list require individual approval by Avista prior to installation. This process was developed to encourage the focus upon those measures that had the greatest cost-effectiveness from the standpoint of the traditional TRC and UCT metrics as well as generating a more favorable client benefit from the contracted low income funds.

CAP agencies individually prioritize and treat their clients based upon a number of characteristics. Several of the characteristics used to prioritize clients are related to resource cost-effectiveness, but cost-effectiveness based specifically upon the TRC or UCT test is not an explicit priority for the CAP agency.

The Idaho Low Income Portfolio

A two-day 2012 low income program workshop convened by the IPUC Staff for those interested in exploring in greater detail issues related to the funding, implementation and evaluation of utility low income weatherization and energy conservation education programs. The workshop allowed for discussion of the alternative approaches and viewpoints and subsequently led to an IPUC Staff filing and a subsequent IPUC Order. The expectations established within that Order places considerably higher value on the cost-effectiveness of the portfolio. Though the Order does not establish a strict requirement for the low income portfolio to be cost-effective it does clearly state that cost-effectiveness should be considered to be a prerequisite for additional future funding.

Meeting this regulatory expectation is a particularly difficult task given the recent reductions in the electric and natural gas avoided cost. The decline in the natural gas avoided cost led to the Company's filing for and the IPUC approval of a suspension of the Idaho natural gas DSM portfolio. Thus for 2014 the Idaho low income portfolio is limited to electric measures and equipment. Given that the suspended natural gas low income DSM portfolio was less cost-effective its electric counterpart, the suspension will lead to an improvement. Nevertheless, given past performance and the lower electric avoided cost, it was known from the beginning of

this business planning process that constructing a cost-effective electric low-income portfolio would be challenging.

Similar to the Washington jurisdiction, the Idaho low income portfolio is implemented through an annual funding contract with a CAP agency. Avista's Idaho jurisdiction is served through a single CAP agency, the Lewiston Community Action Program. The Lewiston CAP receives the entire $700,000 allotment of Idaho low income energy-efficiency funding and an additional $50,000 for outreach efforts. The outreach funding is considered to be a supplemental expense not associated with the delivery of the 2014 portfolio and therefore not included in the cost-effectiveness calculations. This agency also, under a different name, serves a portion of Avista's Washington service territory in Asotin County (adjacent to Lewiston).

The annual funding contract permits up to 15% of the funds to be expended on non-energy health and human safety measures within homes treated by the utility. Though there are no contractual requirements on how these funds are expended, the funds are generally used for non-efficiency measures related to the installed measure or for related safety measures necessary to maintain the habitability of the home and thereby secure the persistence of the energy savings.

The CAP agencies are also eligible for an additional administrative reimbursement of up to 15% of the installed cost of the measures on any particular home. This amount is included in the overall annual contractual funding,

In previous years the CAP agency could expend contract funding on measures included within the Company's "pre-approved" list of measures or other any other measures subject to approval from the program administrator. Expectations of portfolio performance under this an alternative approaches were evaluated as part of the analysis of and planning for the 2014 portfolio, as described in more detail as part of the summarization of the conclusion of the planning process.

Nonresidential Prescriptive Portfolio Overview

The nonresidential energy efficiency market is delivered through a combination of prescriptive and site-specific offerings. Any measure not offered through a prescriptive program is automatically eligible for treatment through the site-specific program, subject to the criteria for participation in that program. Prescriptive paths for the nonresidential market are preferred for measures that are relatively small and uniform in their energy efficiency characteristics.

Prescriptive paths do not require pre-project contracting, as the site-specific program does, and thus lend themselves to streamlined administrative and marketing efforts.

Incentives are established for these prescriptive programs by applying the incentive formula contained within Schedules 90 and 190 to a prototypical installation. Actual costs and savings are tracked, reported and available to the third-party impact evaluator. Many but not all of the prescriptive measures utilize RTF unit energy savings.

The measures available have changed somewhat significantly since the 2013 DSM Business Plan as a result of the lower avoided costs. Two of these programs, Green Motors and Energy Smart Grocer, are offered through third-party implementers. The cost-effectiveness of the Energy Smart Grocer program is questionable under current avoided costs and will be more closely reviewed upon the renewal of that contract.

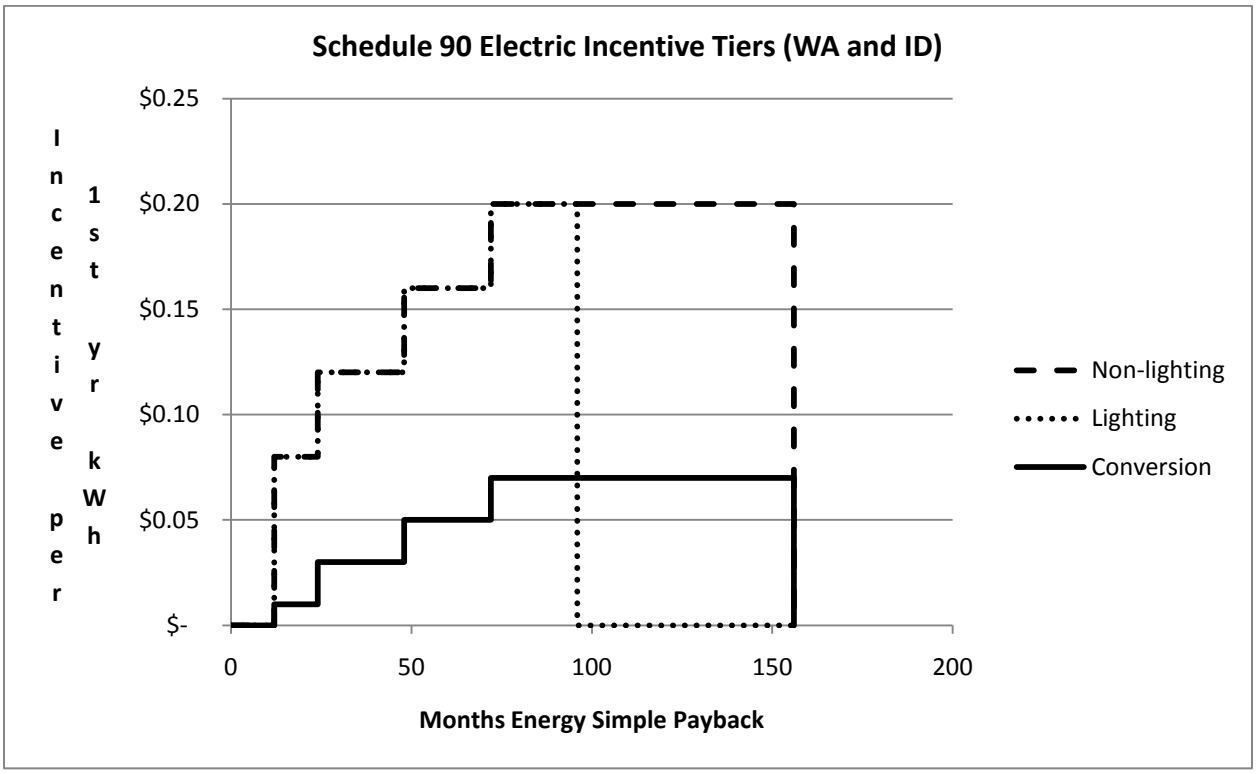
Nonresidential Site Specific Program Overview

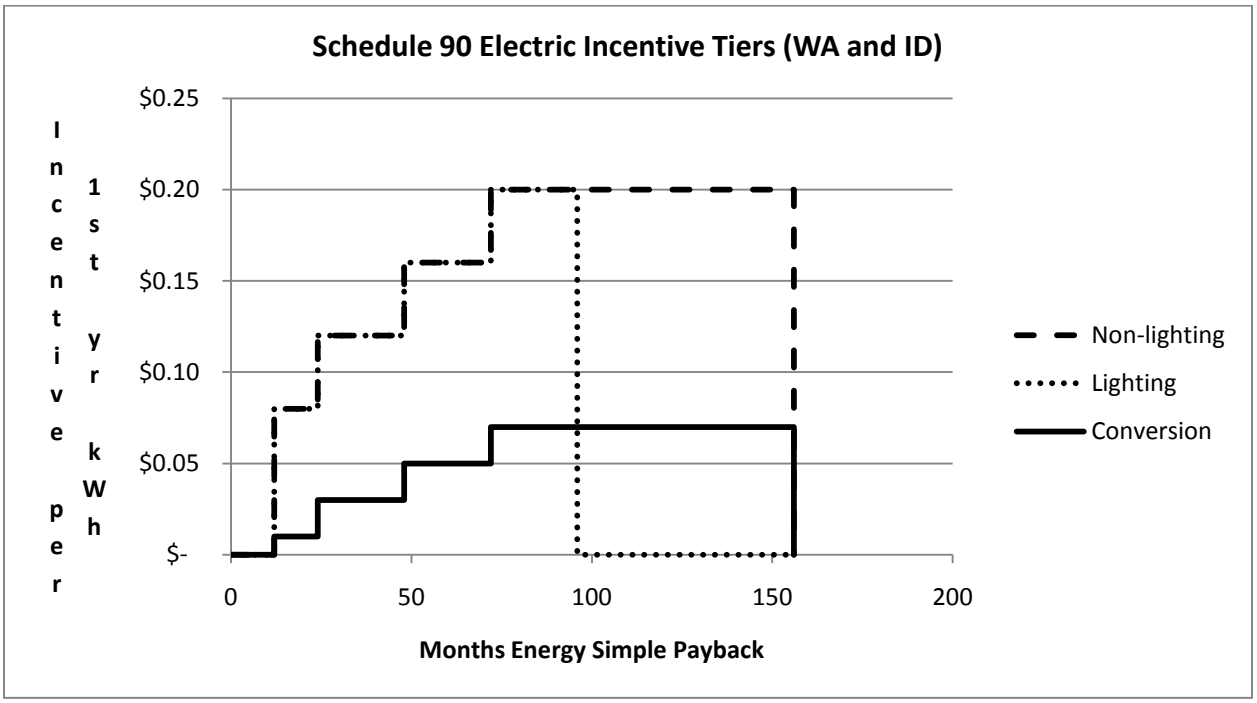
Avista offers nonresidential customers the opportunity to propose any energy efficiency project with documentable energy savings and a minimum ten year measure life (except for those eligible for a prescriptive offering) for a technical review and potential incentive through the site-specific program. Multifamily residential developments may also be treated through the site-specific program when all or a large number of the residences and common areas are treated. The determination of incentive eligibility is based upon the projects individual characteristics as they apply to the Company's electric Schedule 90 or the Washington natural gas Schedule 190 tariffs. The Company has established written policies governing the consistent calculation of project incentives and maintains an Excel model to perform these calculations.

The site-specific program has historically been one of the more cost-effective portions of the greater DSM portfolio as well as generating a substantial share of the energy savings. The year-to-year program performance can be somewhat variable due to the timing of large projects.

The incentives available under the site-specific are based upon a tiered incentive structure established within Schedule 90 (for Washington and Idaho electric efficiency) and Schedule 190 (for Washington natural gas efficiency). The incentive tiers are based upon the projects energy simple payback; the incremental cost of the efficiency project divided by the incremental retail energy savings derived from the project. Associated with each incentive tier is an incentive amount that is granted per first-year kWh or per first year therm (as illustrated below).

Figure 2: Incentive Structure for the Site-Specific Program





Incentives for eligible customer-owned renewable measures are based upon metered energy production. The thirteen year maximum energy simple payback within the tariff has effectively excluded renewable energy projects from the program.

The Company's requested and obtained regulatory approval for several changes to the Washington and Idaho Schedule 90 and Washington Schedule 190 tariffs with an effective date of August 15th, 2013. These changes included:

Schedule 90 (electric efficiency, Washington and Idaho):

- Shift the maximum energy simple payback for incentive eligibility from eight years to thirteen years for lighting measures with independently verified lives of 40,000 hours or more (e.g. LED lighting).
- Increase the maximum incentive from 50% of customer incremental cost to 70% of customer incremental cost for (1) typical lighting measures (those with lives under 40,000 hours) with energy simple paybacks under three years and (2) all other measures with energy simple paybacks less than five years.
- Clarification regarding how incentive caps apply to prescriptive measure applications.

Schedule 190 (natural gas efficiency, Washington only)

- Decrease the incentives of each of the incentive tiers by approximately 1/3rd due to the decrease in avoided costs.
- Eliminate the maximum energy simple payback of thirteen years for incentive eligibility.
- Clarification regarding how incentive caps apply to prescriptive measure applications.

The revisions to the Washington Schedule 190 tariff were part of a larger interim planning process designed to optimize the natural gas DSM portfolio for improved performance against a gross UCT cost-effectiveness metric. The details of that planning process are outlined in the plan itself contained within Appendix E.

Given the recent nature of these tariff revisions no further changes to the tariff were proposed as part of the planning process.

Several implementation improvements, either in-progress or recently completed, were reviewed and their impact upon 2014 program performance was discussed. These improvements include:

- Revisions to the site-specific program implementation processes to improve clarity and promote the timely movement of projects through the pipeline.
- The establishment of two checklists (or "Top Sheets"), one prior to contracting and one prior to the payment of the incentive, in order to ensure consistent documentation and treatment of each project as it progresses through these processes towards completion.

A discussion of program marketing concluded with no major changes to the existing approach that relies heavily upon the Account Executive infrastructure. An Account Executive is assigned to each customer based upon the geographic location or industry and serves as their liaison for all Avista Utilities needs. A substantial portion of the Account Executives effort is expended on coordinating the customer involvement in both the site-specific and prescriptive energy efficiency programs. The program delivery and engineering teams performs additional outreach to customer groups and support of the program marketing as well as serving their functions within the program implementation process. Additionally customers can utilize web tools for automated benchmarking of their energy services or an on-line energy audit using Avista Business Energy Advisor.

In review, few changes beyond the modifications implemented in late 2013 and noted above have been proposed for the 2014 program. These timing and the nature of these changes do pose somewhat of a difficulty in projecting 2014 program performance. These challenges include:

- Uncertain impact of the recently enacted tariff revisions
- General economy impacts upon the customer's willingness to fund efficiency improvements.
- Inherently unique and the potentially large size of the individual projects

Avista has been pursuing a market transformation effort to increase the saturation of natural gas in multifamily housing since 2008. The intent was to demonstrate the feasibility of the use of natural gas space and water heat in multifamily developments by obtaining an increased saturation of successful developments. The increased saturation was to be achieved through an enhancement to the incentive that would normally be payable through the Schedule 90 tariff. Through this effort 808 multifamily units that would have otherwise been served with electric space and/or water heat have been served through natural gas. The Company believes that this completes the initial phase of the market transformation effort whereby those owners and developers have a sound basis for believing that such natural gas applications are feasible. The next phase of this effort will be to utilize these examples to continue to improve the cost-

effective application of natural gas through the standard incentives available through the site-specific program.

Regional Market Transformation

Avista's local portfolio consists of programs and supporting infrastructure designed to enhance and accelerate the penetration of energy efficiency measures through a combination of financial incentives, technical assistance, program outreach and education. It is generally not feasible for Avista, or any individual utility, to independently have a meaningful impact upon regional or national markets due to the lack of economies of scale and the 'leakage' of benefits to other utility service territories.

Consequently utilities within the Pacific Northwest have cooperatively worked together to develop the Northwest Energy Efficiency Alliance (NEEA) to address those opportunities that are beyond the ability of individual utilities to achieve. Avista has been a participating and funding member of NEEA since the 1997 founding of the organization. NEEA is presently in the fourth funding cycle (2010 to 2014 inclusive) of the organization. The current funding cycle has seen a doubling of the contractual funding from a $20 million annual regional budget to $40 million, with actual expenditures subject to approval by the NEEA Board of Directors. This funding cycle has also seen Avista's share of NEEA funding increase from 4.0% to 5.4% due to shifts in the distribution of regional retail end-use load. The Company has budgeted for $2.16 million in funding for NEEA based upon the $40 million regional budget and Avista's 5.4% regional funding share for 2014.

Avista's criteria for funding NEEA's electric market transformation portfolio calls for the portfolio to deliver incrementally cost-effective resources beyond what could be achieved through the Company's local portfolio alone. The Company believes that these criteria will continue to be met in the foreseeable future.

In order to provide NEEA with the additional flexibility to deliver a high-value portfolio, Avista has taken the approach that sector equity (across residential, commercial, industrial and agricultural markets) should not play a significant role in the evaluation of the regional portfolio. Historically NEEA's success has most frequently been in large markets composed of individually small customers (predominately the residential market). Avista believes that those local utilities that value sector equity are responsible for implementing local programs that, when aggregated with the regional portfolio, meet their desired equity objectives. Avista has a strong nonresidential local program founded upon an account executive marketing structure that meets our needs for sector equity should NEEA adopt a strategy of disproportionately

pursuing residential markets. It is Avista's intent to continue to speak in favor of this flexibility as a means to improving NEEA's value to Avista and other regional utilities.

The Company has continued to explicitly communicate to NEEA that the delivery of cost-effectiveness resources to our service territory is our primary criteria for success. This demands a strong consideration for the geographic equity in the distribution of NEEA benefits throughout the region. This position also indicates a need for NEEA to focus upon acquisition and not infrastructure. This has been a primary focus of Avista since the founding of NEEA and will remain so in 2014.

Though the savings derived from the NEEA program will no longer be incorporated within the I-937 target or acquisition, the Company will continue to report it for both Washington and Idaho. The current estimate of the savings accruing to the Avista system in the 2014-2015 biennium is 29 GWh in Washington and 12 GWh in Idaho based upon the Company's typical 70% Washington and 30% Idaho electric allocation.

NEEA continues to work on improving the ability to quantify the distribution of energy savings throughout the region. Avista intends to use the best available methodology for determining the benefits that accrue to Avista customers for purposes of monitoring geographic equity.

The Company has and will continue to work with NEEA to develop options for cost-effective market transformation interventions into the natural gas market. The Company was one of the key stakeholders in advancing this concept in the past and co-funded with other regional natural gas utilities an initial investigation of the market potential. Though avoided costs have fallen dramatically since that work was completed the Company believes that market transformation remains a viable opportunity to obtain natural gas efficiency resources.

It is important in 2014 and beyond for Avista to continue to play an active role in the organizational oversight of NEEA. This is critical to ensure that geographic equity, cost-effectiveness and resource acquisition continue to be the primary foci.

V. DSM Outreach

In late 2007, Avista increased its promotion of energy efficiency through the *every little bit* campaign. Based on market research it was noted that there where perceptual barriers about energy efficiency which supported the creation of the outreach effort. It is believed that the overall campaign over the years has contributed significantly to residential and nonresidential program participation although many efforts have been directed to the residential segment.

The *every little bit* campaign was built on a foundation of broad reach, multi-media outreach designed to inform customers about general energy efficiency program availability while providing educational energy efficiency messages with the intent of driving increased participation as well as build awareness of low-cost and no-cost energy saving tips.

Since the inception of this campaign, there has been regional research that suggests the same issues and perceptions are present and that customers need to have a reason to participate based on their personal values. While the Company has driven increased participation in programs as well as general awareness of our programs continued effort is needed in helping the customer understand where waste may be occurring and motivating them towards action. The number of programs offered decreased significantly and differed by state in 2013 driving us to evolve the media approach from a broad reach to a more targeted approach using community partners for leveraging and endorsement.

The intent is to educate and encourage customers to install energy efficient measures and practice energy-conserving behaviors with the "call to action" being a visit to the Company's website (avistautilities.com) to get more information or download a rebate form. We have slowly been integrating content from everylittlebit.com (ELB) to avistautilities.com as technology allows, decreasing customer confusion on where to locate information provided by Avista about energy efficiency.

Social Media Channels

Avista continues to use Facebook as both a viable and cost effective outreach channel. The latest awareness research conducted at the end of 2010 shows awareness of energy efficiency and Avista's programs high among audiences aged 45+, while the 18-44 aged audience remains difficult to reach, giving social media opportunities. With this in mind Avista continues to use Facebook to house energy efficiency promotions and activities, like the programmable thermostat, the energy use house and weekly messages on low-cost no-cost ways to be more

efficient. The page has been renamed this year to Avista's *every little bit*, allowing Avista to maximize the long-standing positive message of energy efficiency.

Community/ Media Partnerships

Avista launched the updated Home Energy Advisor product and Avista promoted this through a partnership with The Inlander as well as a direct mail postcard to residential customers to drive traffic to the tool and rebate programs contained within the 2013 portfolio.

The Company continued with a fourth year of partnership with KREM TV and Toyota to increase awareness of Avista's energy conservation measures and rebate programs. This program drove a 36% increase in visits year over year to the ELB website. The goal of this program is to promote a general awareness of efficiency and Avista programs.

WEB

In 2013 Avista began a targeted web-based search optimization campaign for residential program awareness. Whether consumers are searching via PC or laptop, smart phone or tablet, search shows our text ads to consumers located in the Spokane designated market area who are searching for keywords related to Energy Rebates and Tips.

Commercial and Industrial Outreach

In 2011, the Company developed a comprehensive print campaign designed to educate nonresidential customers about the many prescriptive and site-specific programs available. The focus of the campaign profiles business customers within Avista's service territory and features the measures they have implemented and savings achieved. This campaign targets the business community and shares the value of energy efficiency and Avista's energy efficiency incentives from a customer perspective. This campaign launched in late 2011 and continued through 2012.

The C&I campaign evolved in 2013 to include customer case studies that not only demonstrated the partnership with Avista but the other business benefits of participating in energy efficiency initiatives. This campaign was indented to drive customer awareness of programs and ways to help position facility improvements as an operational business strategy.

Multi-Department Collaboration

The outreach effort is coordinated with ongoing updates to sub-TRC analysis by Avista's Policy, Planning and Analysis (PPA) team. It is integrated into and directly supports the long-term program management and planning process. Efficiency messages that are not associated with individual programs come out of an internal collaborative process incorporating input from DSM engineering staff, program managers, program outreach specialists and the PPA team. The intent is to maintain a fresh and informative appeal to the overall outreach effort.

The additional throughput that can be obtained from our outreach investments also takes into consideration the opportunity to leverage the growing efficiency messaging in the general media and partnerships with utility and non-utility organizations. The *everylittlebit* campaign is also integrated into earned media opportunities through Avista's External Communications Department.

Energy Efficiency messaging will continue into 2014 as a primary means to reach customers with low-cost/no-cost opportunities for saving energy, to increase customer participation in our energy efficiency programs and to underscore the value of saving energy. Broad reach media will continue to be evaluated and adjusted as campaigns are developed.

VI. Analytical Review of Expected 2014 Operations

Several unique characteristics of Avista's DSM portfolio and regulation require that the Company augment industry-standard analytical methodologies and practices to address Avista specific management needs, regulatory requirements and stakeholder communication commitments. A high-level overview of these methodologies is necessary in order to understand the analytical results and the role they play in the business planning process.

Defining the Appropriate Cost-Effectiveness Metric

Historically the Company has utilized the net TRC metric as the cost-effectiveness standard for all programs and portfolios. The objective of the TRC metric is to determine cost-effectiveness from the perspective of all customers of a particular utility.

During 2012 a precipitous fall in natural gas avoided costs and subsequent mid-year re-evaluation of the Company's natural gas DSM programs led the Company to conclude that would be impossible to field a net TRC cost-effective portfolio. Consequently the Company filed for the suspension of the natural gas DSM portfolio in both Washington and Idaho. The IPUC approved the requested suspension. The WUTC chose to direct the Company to manage the natural gas DSM portfolio based upon a gross UCT metric in place of the past net TRC metric.

The UCT metric measures the cost-effectiveness of a portfolio based solely upon those costs and benefits accruing to the utility. A high-level summarization of the differences between these two tests as applied by Avista consistent with northwest utility industry practice is represented below.

Table 2: Comparison of the TRC and UCT cost-effectiveness tests

Test	TRC	UCT
Benefits		
Energy saved at avoided cost	Yes	Yes
Quantifiable non-energy benefits	Yes	No
Costs		
Utility incentive cost	No	Yes
Utility non-incentive cost	Yes	Yes
Customer incremental cost	Yes	No

Note: All capacity costs, transmission and distribution losses and monetized environmental costs are incorporated into Avista's avoided cost stream.

As a general rule cost-effectiveness from the UCT perspective will be more favorable than a TRC perspective since incentives costs are almost always lower than the customer incremental cost (low income programs and the appliance recycling program being two notable exceptions).

The WUTC did not instruct the Company to change the use of the net TRC metric for the electric DSM portfolio. Therefore both the electric DSM portfolio will be managed to maximize net TRC performance in both jurisdictions.

It is the Company's primary goal to maximize the residual benefits (benefits less costs) of the cost-effectiveness metric appropriate for each portfolio. This tends to lead to a larger portfolio than managing towards a particular benefit-to-cost ratio somewhere above 1.0 in that it encourages the inclusion of measures and programs that marginally contribute to the overall portfolio but performance that is less than the average program being offered.

Avista-Specific Methodologies and Analytical Practices

Cost-Effectiveness Calculations (Net-to-Gross Adjustments, Baselines

The Company performs TRC cost-effectiveness calculations based upon those electric program participants who were influenced to adopt the measure as a consequence of the utility program or interaction. To the extent that some customers participating in the program would have adopted the measure even in the absence of the program, this adjustment (known as a "net-to-gross adjustment" based upon a "net-to-gross ratio") eliminates both the benefits and costs for the proportion of customers who are determined to be "free-riders" (those who participated in the program but would have adopted the measure in the absence of the program). It is worthwhile to note that the industry term "free-riders" should not be construed so as to indicate that these customers have not contribute to the DSM tariff rider. Only those customers who contribute to the portfolio are eligible for DSM services.

The establishment of a baseline which is appropriate for the project and the nature of the cost-effectiveness calculation are critically important. The Company often applies RTF unit energy savings that are inherently based off an "adjusted market baseline" that represent the typical existing inventory. In these circumstances the net-to-gross adjustment would be duplicative and therefore was not applied.

The majority of those measures where RTF unit energy savings was available did have the aforementioned net-to-gross adjustment incorporated into all valuations of net cost-effectiveness. Under these circumstances the baseline is generally considered to be the code minimum, industry standard or lowest first-cost option (whichever is higher). For prescriptive measures this is based upon the typical project that the Company is encountering whereas for site-specific projects it is based upon the individual nature of that project. These assumptions are subject to review and modification through the third-party evaluation process.

The methodology for the establishment of the baseline applies equally to the UCT test in and the TRC test. The UCT test can also be adjusted for the net-to-gross ratio, though for the residual gross UCT benefit metric that the Washington natural gas DSM portfolio is being optimized this adjustment would be inapplicable.

The participant perspective is primarily represented within the analysis by an energy simple payback rather than the utility standard practice Participant Cost Test. The energy simple payback is highly correlated to the Participant Cost Test and is a required exercise for determining incentive levels to be offered for prescriptive programs. This metric simultaneously provides an insight into the traction that a measure may have based upon the participant economics as well determining the financial incentives for which it may qualify.

Sub-Measures, Measures, Programs and Portfolios

The terminology of the various levels of aggregation of Avista's DSM portfolio is important to understand the approach that has been taken to the business planning and portfolio optimization process. This is of additional importance in recognition of the Company's commitment to offer only those measures that are cost-effective at the most granular level possible as represented in the IPUC Staff DSM Memorandum of Understanding and verbal commitments to Washington stakeholders.

The Company has established the following definitions:

Sub-Measure: A sub-measure is a component of a measure that cannot be coherently offered without aggregating it with other sub-measures. An example would be the difficulty that would occur in offering two-pan fryers and four-pan fryers without also offering three-pan fryers. Avista may offer sub-measures that fail cost-effectiveness criteria if the overall measure is cost-effective. This is the only area where Avista permits the bundling of technologies for purposes of testing offerings against the cost-

effectiveness screen. There are relatively few sub-measures meeting the criteria specified above within the portfolio.

Measure: Measures are stand-alone energy efficiency options. Consequently measures are expected to pass cost-effectiveness requirements barring justifiable exceptions. Exceptions include, but are not necessarily limited to, measures with market transformation value not incorporated into the assessment of the individual measure, significant non-energy benefits that cannot be quantified with reasonable rigor and cooperative participation in larger regional programs.

Programs: Programs consist of one or more related measures. The relation among the measures may be based upon technology (e.g. an aggregation of efficient lighting technologies) or market segment (e.g. aggregation of efficient food service measures). The aggregation is generally performed to improve the marketability or management of the component measures.

Portfolio: Portfolios are composed of aggregations of programs. The aggregating factor will vary based upon the definition of the portfolio. The following portfolios are frequently defined in the course of Avista's DSM reporting and management:

Customer segment portfolio: An aggregation of programs within a customer segment (e.g. low-income, residential, nonresidential).

Fuel portfolio: Aggregating of electric or natural gas DSM programs.

Regular vs. low income portfolios: Separating the income qualified elements of the portfolio from those elements of the portfolio that are not income qualified.

Jurisdictional portfolio: Aggregating programs within either the Washington or Idaho jurisdiction.

Local or Regional portfolio: Aggregating all elements of the local DSM portfolio vs. the regional market transformation portfolio.

Fuel/Jurisdictional portfolio: Aggregating all programs within a given fuel and jurisdiction (Washington electric, Washington natural gas, Idaho electric or the now terminating Idaho natural gas portfolio).

Overall portfolio: Aggregating all aspects of the Washington and Idaho, electric and natural gas DSM portfolio.

Methodology for Allocation of DSM Costs

The Avista methodology for cost-allocation builds from the measure or sub-measure analysis to the program and ultimately portfolio analysis. At each level of aggregation those costs that are incremental at that stage of aggregation are incorporated into the cost-effectiveness analysis. Incremental customer cost and benefits are fully incorporated into measure-level analysis. Utility costs (both labor and non-labor) may be recognized at the measure, program or portfolio level of aggregation depending on what stage of aggregation those costs are determined to be incremental.

Though all costs associated with the DSM portfolio being delivered in the planned year are ultimately incorporated into the cost-effectiveness at the portfolio level, whether the costs are recognized at the measure or program is dependent upon the often subjective determinations of the incremental vs. fixed nature of the cost. The guiding principle remains whether the measure or program creates an additional cost burden that would have been incurred in the absence of that component within the business planning period. Labor costs are partially allocated at the program or portfolio level, other costs are generally assigned entirely at a single level of aggregation.

The level at which these costs are realized have important consequences in building a portfolio that maximizes residual net TRC value. It is possible for measures that improve the portfolio value to be inappropriately excluded if they are forced to bear an assigned share of fixed cost. By carefully structuring the level of aggregation that these costs are realized it is possible to include measures (or programs) that favorably contribute to the overall portfolio even if those programs are not sufficiently cost-effective to offset allocated fixed costs. This benefits the cost-effectiveness of the portfolio in that it promotes the inclusion of all incrementally beneficial measures and programs.

It should be noted that costs not associated with the delivery of local DSM within the planned year are not incorporated into the cost-effectiveness calculations. These are termed "supplemental costs" and consist of NEEA funding, funding low income educational outreach programs, continuing payment streams for two resource contracts acquired approximately ten years ago, Idaho research funding and similar expenses unrelated to the planned 2014 portfolio.

Net-to-Gross Adjustments

Avista reports cost-effectiveness based upon both net and gross participation. It is our objective to offer electric measures that are cost-effective from a net sub-TRC test perspective, although for many purposes (including Washington I-937 compliance) we report only gross acquisition.

To modify the TRC calculations from a gross to a net basis, the Company excludes the costs and benefits of all non-net participants (those who would have adopted the measure in the absence of the program). Non-incentive utility costs are not adjusted for the net-to-gross ratio since these costs occurred regardless of the net or non-net status of the participant. Those utility costs that are included within the cost-effectiveness calculation (non-incentive costs only in the case of the TRC calculation) create a 'wedge' between the net and gross cost-effectiveness. The size of this wedge is dependent primarily on these utility costs. Since incentive costs are included within the UCT metric the differential between the net and gross calculations is considerably larger than the comparable TRC values.

From a management perspective it is useful to understand that a net cost-effectiveness calculation only allows utility costs to be distributed only across those who were motivated to adopt the measure by the program instead of all program participants. Managing the net-to-gross ratio becomes more important as the proportion of utility costs within the overall costs recognized by the appropriate cost-effectiveness metric increases.

In recognition of this increasing need to manage the net-to-gross ratio the Company engaged Cadmus to perform a net-to-gross study in 2010, with a small follow-up in 2011 and 2012, to assess the net-to-gross ratio of eight categories of the non-low-income DSM portfolio. These results have been applied to the calculations within this business plan. The low-income portfolio has been deemed to be 100% net.

Sub-TRC and Sub-PACT Cost-Effectiveness Tests

Given that the Company is performing cost-effectiveness calculations on components of the portfolio that do not include their full allocation of fixed infrastructure cost, the Company has developed a terminology to avoid misunderstandings of these calculations. The term "sub-TRC" (or sub-UCT) calculation is applied to calculations that are made on individual components of the portfolio that do not include allocated fixed infrastructure costs. It is the key metric for determining if that component (measures or programs) should be included in the portfolio or not.

The sub-TRC and sub-UCT calculation can be expressed as a residual benefit (benefits minus costs) or as a benefit-to-cost ratio. It can also be applied on either a net or gross basis.

Given the revisions that have been made to the Washington Schedule 190 natural gas incentives, revisions that bring the incentive level down below the avoided cost value, it is nearly certain that natural gas DSM measures will pass the gross sub-UCT test screen. Only if the measure or program brings with it significant non-incentive utility costs is there the potential for these programs to fail the cost-effectiveness screen. As measures and programs are aggregated towards the overall portfolio and fixed infrastructure costs are allocated it is possible for these costs to overwhelm the portfolio. Lower avoided costs and the potential for less throughput (as a consequence of lower incentives) can exacerbate this potential.

Unit Energy Savings

The quantification of energy savings applicable towards achieving Washington I-937 acquisition targets has been an ongoing topic of discussion since the effective date of this requirement became effective. For the 2014-2015 biennium it has been agreed that the unit energy savings used to establish the target should be applied to calculate the energy savings applicable towards achieving that target.

Where possible these unit energy savings are derived from the most current values approved by the RTF. Lacking such information the values are obtained from Avista's TRM, which generally reflects recent impact evaluations on the same measure. If neither RTF nor TRM values exist the business plan applies other methods to develop an estimate of what the third-party impact evaluation will yield at the close of the year.

The Company is committed to continuing to perform impact evaluations when appropriate to improve the quality of future energy saving estimates. These efforts will be more focused upon measures that do not have an approved RTF unit energy savings since those are the portfolio components where the impact evaluation would have the greatest value. The DSM Annual Report will use the results of these impact evaluations for purposes of calculating measure, program and portfolio cost-effectiveness. The TRM is also updated to incorporate the most recent information from the impact evaluations.

For planning purposes the business plan has applied the same assumptions regarding unit energy savings to the Idaho portfolio as our best current estimate of savings. However, the

retrospective Energy Efficiency Annual Report will displace these assumptions with the results of actual impact evaluations when available and appropriate.

Analytical Methodology Applicable to the Low Income Programs

Avista has developed several analytical methodologies that are specific to the evaluation needs of the low income portfolio. These include the (a) accommodation of incentive levels equal to the entire cost of the measure, including the cost of the baseline measure and (b) the treatment and quantification of the considerable non-energy benefits incorporated within the low income portfolio. Beyond these two rather significant analytical issues the treatment of the low income portfolio is similar to that applied to the other portfolios.

Unlike any other Avista portfolio the full cost of the installed measure is incentivized for low income customers treated through a partner Community Action Program (CAP) agency. There is a need to appropriately represent this expenditure within the overall DSM expenditure budget, but at the same time it is necessary to recognize that only a portion of this expenditure is dedicated toward energy efficiency. The Company does so by recognizing the full expenditure as a cost but also recognizing that there is a non-energy benefit associated with the provision of base case end-use services. The full cost net of the end-use services non-energy benefit is equal to the amount invested in energy efficiency. The cost-effectiveness of the energy efficiency investment is appropriately based upon the value of the energy savings of the efficient measure in comparison to this cost.

The Company has also defined the expenditure of non-energy health and human safety funds as a non-energy benefit (on a dollar-for-dollar basis). This quantification is based upon the individual assessment of each of these expenditures by the CAP agency prior to the improvements being made. This approval process provides reasonable evidence that the improvements are worth, at a minimum, the amount that has been expended upon them through CAP agency funds.

As a consequence of these two assumptions the low income portfolio accrues considerable non-energy benefits. For 2014 system low income portfolio it is projected that 42% of the TRC benefits will be derived from non-energy benefits.

The 15% administrative reimbursement permitted to the CAP agency is considered to be a component of the measure cost. This amount reimburses the CAP for back office costs that would, in a typical trade ally bid, be incorporated into the project invoice.

As a result of establishing incentives equal to the full cost of the measure and the large proportion of non-energy benefits, the low income portfolio sees a reversal of the typical circumstance of the TRC cost-effectiveness test being less demanding than the UCT. The exclusion of non-energy benefits from the UCT test and the equality of the incentive amount and the customer incremental cost are responsible for this reversal. For this reason the Company has chosen to apply the TRC test to the combined fuel Washington low income portfolio rather than the more restrictive UCT test that would otherwise be applied to the natural gas low income DSM portfolio.

Analytical Review of 2014 Avista Measures and Programs

A description of the analytical approach to determining the expected acquisition, cost-effectiveness and budget for Avista's 2014 local portfolio has been split into three categorizations; (1) prescriptive programs, (2) the site-specific program and (3) the Opower residential behavioral program. One additional program, a Cascade Strategic Energy Management Pilot, contributes only a very small amount of savings to 2014 acquisition and is represented within the program plans contained in Appendix A. The approaches used for each of these three categories are discussed below.

Prescriptive Program Analysis

The analysis of prescriptive programs begins at the lowest possible aggregation (measure or sub-measure). Each measure or sub-measure is characterized based upon the following key inputs:

- Electric savings and natural gas savings per unit
- Non-energy impacts (including any impacts upon non-Avista energy usage) per unit
- Customer incremental cost per unit
- Incremental non-incentive cost per unit
- Measure life

This measure characterization leads to a calculation of an incentive that is based upon a strict application of the Company's Schedule 90 or Washington Schedule 190 tariff. Program managers use this incentive level as guidance to developing the incentive to be offered to customers. It is regarded as acceptable to round incentive amounts, adjust them to fit within a continuum of other measures (e.g. the incentives for efficient motors of different horsepower classifications), maintain consistency with regionally offered programs and other marketability considerations. Program managers are encouraged to be within 25% of the strictly calculated

incentive amount, which generally is ample room to incorporate practical considerations surrounding the implementation of a prescriptive program.

Incremental cost data is generally based upon reference to RTF values, equipment pricing catalogs, recent program experience and/or local market surveys. Equipment cost can vary significantly based upon locality (particularly urban vs. rural markets), project scale and other product characteristics. To the extent possible Avista values only the incremental cost associated with energy efficiency upgrade holding all other features constant. The incremental cost chosen for use in the analysis is based upon the expected typical cost for the participants in the prescriptive program. The energy efficiency Annual Report will base retrospective cost-effectiveness upon actual incremental customer cost.

Capturing and quantifying measure non-energy impacts are frequently a difficult task. Avista's standard practice is to incorporate only those non-energy impacts that are quantifiable and defensible to a reasonable but critical audience.

Measures or programs with a defined non-incentive cost per unit is generally limited to those that are implemented through third-party resources that include a per unit payment to the program delivery contractor. This includes the residential refrigerator rebate program, Simple Steps, Smart Saving, Green Motors and the ENERGY STAR Grocer program.

This measure characterization serves as the foundation to calculate the sub-TRC value for each measure, which is in turn used as a guide to the program managers as they deliver programs and portfolios. Absent the exercise of defined exemptions (market transformation, non-quantified non-energy benefits, low-income applications, and regional cooperative programs) it is the expectation that all measures offered will deliver favorable net benefits to the portfolio.

Additional costs incremental to the program level but not the measure level are incorporated when measures are aggregated into programs. Thus the program must not only be cost-effective based upon the aggregation of all of its component measures, but it must also be sufficiently cost-effective to offset any additional incremental cost that is assigned to the program.

The last phase of the discussion between analytical and program coordination staff revolves around various optimizations to the program and ultimately, once the program is sufficiently mature in its proposed design for 2014, an estimate of the unit throughput is made for each measure.

The aggregation of measures into programs is subject to revision within each annual business plan and over the course of the operational year to tie coherently related programs together for purposes of analysis. The linkage may be based upon the measure type, the market being targeted or the packaging of regional or third-party implementation agreements.

Analytical Review of the Site-Specific Program

The site-specific program has long been a centerpiece of Avista's nonresidential portfolio. Any energy-efficiency measure in a nonresidential application and not otherwise incorporated into a prescriptive program are eligible for the site-specific program. Multifamily residential applications are also eligible under certain circumstances. Incentive availability is subject to energy simple payback criteria established within Schedule 90 and Washington Schedule 190. Unlike the prescriptive programs, the site-specific program requires a contract prior to purchase of the equipment and each project is individually evaluated.

The best foundation upon which to build the 2014 expectations is the most recently completed energy-efficiency Annual Report. A significant degree of effort was expended in scrutinizing approximately 430 individual natural gas and electric site-specific projects incorporated into that Report. This is the most recent and reliable evaluated data to start with in characterizing the likely 2014 program performance. This data is in need of modification to represent, to the degree possible, the changes that have been made in the program not represented within the foundational data. These modifications to the historical data include:

- The removal or addition of projects no longer compliant with the tariff due to Schedule 90 or 190 revisions.
    - The removal of the requirement for Washington natural gas DSM projects to achieve a 13 year energy simple payback.
- The increase in caps on incentives (expressed as a maximum percentage of customer increment project cost) for lighting projects with energy simple paybacks less than three years and non-lighting projects with energy simple paybacks of less than five years. This is expected to increase the incentive budget as well as the acquisition. In this case the increased acquisition would be targeted for these most cost-effective (shortest energy simple payback) projects.
- The shift of long-lived lighting technologies with independently measured lives of 40,000 hours or more from the lighting incentive category to the non-lighting incentive category. This revision allows for financial incentives to be granted to projects with energy simple paybacks as long as 13 years rather than the eight years applied to other lighting technologies.

It is fairly easy to identify and remove projects that no longer meet tariff requirements from the data to more accurately reflect 2014 expectations. What is more difficult is to determine the impact of program revisions that may bring forth projects that were not part of that historic record.

For the Washington natural gas site-specific program the recent tariff revisions have reduced incentive levels by approximately 1/3rd across all previous incentive tiers. The Company has not had the opportunity to calculate incentive elasticity (the sensitivity of acquisition to changes in incentive levels) in the recent past, but a previous estimate of 25% elasticity tends to indicate an 8% reduction in acquisition would be likely to occur, all else being equal. It is recognized that this estimate is based upon a single study performed many years ago, thus minimizing its value in making projections of 2014 performance.

The Washington natural gas site-specific program will also see the elimination of the requirement that projects meet a 13-year energy simple payback requirement. The termination of this requirement was one of the revisions that the Company has made (with WUTC approval) to optimize the natural gas DSM portfolio for performance against a gross UCT metric. Since the 2012 history included only very few of these projects ("legacy" projects qualified under a written transition policy) it is likely that this will lead to an increase to some unknown degree in 2014 acquisition relative to the 2012 foundation. Past experience, when these longer payback projects were eligible under the program, is of limited value given the changes in the incentive levels, participant economics and retail rates since that time.

Lacking any opportunity for a more rigorous analysis the planning team concluded that the 2012 actual program performance with adjustments limited to those noted above would be the best foundation for projecting aggregate 2014 program performance. The incentive elasticity and the elimination of energy simple payback maximums act in offsetting directions and were generally considered to have impacts of roughly the same magnitude.

<u>The Behavioral Program</u>

In May 2013 the Company launched a residential behavioral program delivered by Opower for a 70,000 residential customer treatment group. The energy savings will be determined based upon comparison to a control group that was sized and selected by Cadmus, the Company's third-party evaluator for 2012-2013. Ultimately Cadmus will perform the measurement and verification of savings from the program for the 2013 program year.

Since launching the program the Company has been following analysis investigating the persistence of behavioral energy efficiency savings beyond the cessation of the program. While the Company has not reached any definitive conclusions regarding the appropriate measure life for the Avista program, for purposes of the 2014 Business Plan a life of two years will be used. Additional information in the future may extend that to a longer life.

In assuming a two year measure life it is necessary for the Company to remove savings acquired in the first year from that which would be claimed in the second year given the two year measure life assumption. It is the Company's expectation that only 38% of the savings measured in comparison to the control group in 2014 will be claimable during that year (the remaining energy savings would have been claimed in the prior year). Similarly only 30% of the natural gas savings measured in 2014 will be claimed in that year.

The assumption of the two year measure life will adversely impact the 2014 projection of program performance, but it must be remembered that this analysis represents only the incremental contribution of the program during that year and not the performance of the program over the entire three-year contract period.

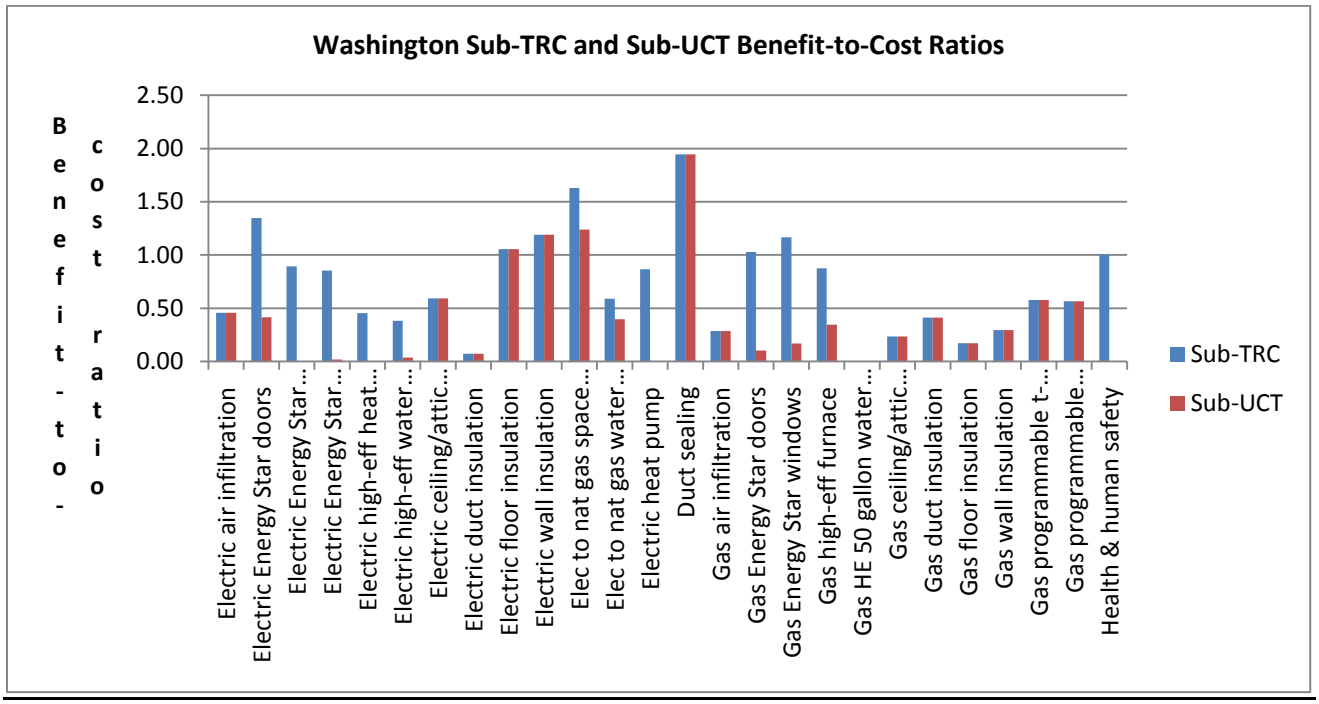
The Low Income Portfolio

The significant difference between the planning criteria for the 2014 Washington and Idaho low income portfolios create the need for them to be separately addressed below.

2014 Prospects for the Washington Low Income Portfolio

An initial screening of the sub-TRC values for the low income portfolio measures indicated that few of the measures would fully satisfy this requirement and even fewer measures would pass the sub-UCT screen that the Company is applying to the 2014 natural gas DSM portfolio.

Figure 3: Sub-TRC Benefit-to-Cost Ratios for Low Income Measures



Maximizing the residual TRC benefits under these circumstances would call for the exclusion of any measure failing to meet the sub-TRC test from the "pre-approved" measure list. However, of the three core insulation measures (wall, floor and ceiling) all fail to meet that criteria in both electric and natural gas heated homes. In 2012 (the last year for which fully evaluated results were available) a total of 42% of Washington CAP agency expenditures were for these core shell measures. Although the inclusion of these measures on the pre-approved list does significantly compromise the cost-effectiveness of the portfolio, excluding these measures would detract from the CAP agencies ability to serve the needs of their clients and materially compromise what the Company believes to be the spirit of the regulatory direction provided for the low income portfolio. Consequently these six measures (three measures as applied to both electric and natural gas homes) are proposed to remain on the Washington pre-approved measure list.

The inclusion of other measures on the pre-approved list are based upon both the sub-TRC test results as well as maintaining consistency to the extent practical between electric and natural gas programs. Based upon those considerations the full pre-approved list is as follows:

- Wall insulation in homes with electric or natural gas space heat
- Ceiling insulation in homes with electric or natural gas space heat
- Floor insulation in homes with electric or natural gas space heat

- ENERGY STAR doors in homes with electric or natural gas space heat
- Conversion of space heat appliances from electric to natural gas
- Conversion of water heat appliances from electric to natural gas only when performed in conjunction with an electric to natural gas space heat conversion
- Installation of air source heat pumps in homes where natural gas is not available
- Installation of ENERGY STAR refrigerators

The program will continue to provide funding of non-energy health and human safety measures up to 15% of the total expenditures by the CAP agency. Administrative reimbursement of up to 15% of the total expenditures will also continue to be available.

Estimating the portfolio cost-effectiveness can be difficult given that the mix of pre-approved measures pursued is within the control of the CAP agency and it is also difficult to predict the quantity of individually approved measures that are not on the pre-approved list. Using 2012 actual results and the 2014 pre-approved list as a guide the following results are very generally expected:

Table 3: Expected 2014 Washington Low-Income Portfolio Performance

Measure	Units	Incentives	kWh's	therms	Sub-TRC	WA Sub-UCT
Electric air infiltration	-	$ -	-	-	0.33	0.33
Electric ENERGY STAR doors	28	$ 46,845	7,401	-	1.16	0.19
Electric ENERGY STAR refrigerator	67	$ 46,658	58,253	-	0.89	0.89
Electric ENERGY STAR windows	30	$ 66,508	745	-	0.89	0.01
Electric high-eff heat pump	-	$ -	-	-	0.45	0.45
Electric high-eff water heater	-	$ -	-	-	0.25	0.02
Electric ceiling/attic insulation	28	$ 48,367	11,352	-	0.29	0.29
Electric duct insulation	8	$ 3,228	228	-	0.05	0.05
Electric floor insulation	39	$ 135,798	69,863	-	0.63	0.63
Electric wall insulation	11	$ 23,608	15,154	-	0.78	0.78
Elec to nat gas space heat conversion	70	$ 242,624	612,255	(18,492)	2.12	1.69
Elec to nat gas water heat conversion	-	$ -	-	-	0.69	0.52
Electric heat pump	1	$ 5,255	6,368	-	0.87	0.87
	10	$ 6,632	18,060			
Gas air infiltration	-	$ -	-	-	0.14	0.14
Gas ENERGY STAR doors	87	$ 102,719	-	577	1.00	0.04
Gas ENERGY STAR windows	65	$ 115,628	5,944	1,132	1.13	0.13
Gas high-eff furnace	77	$ 107,987	(13,649)	6,207	0.71	0.21
Gas HE 50 gallon water heater	-	$ -	-	-	0.29	0.02
Gas ceiling/attic insulation	155	$ 304,837	-	3,843	0.09	0.09
Gas duct insulation	11	$ 12,919	-	488	0.19	0.19
Gas floor insulation	136	$ 275,268	-	4,123	0.10	0.10
Gas wall insulation	73	$ 156,239	-	3,112	0.14	0.14
Gas programmable t-stat (no A/C)	-	$ -	-	-	0.19	0.19
Gas programmable thermostat (w A/C0	-	$ -	-	-	0.37	0.37
Health and human safety	119	$ 288,731	-	-	1.00	0.00
Washington portfolio total		$ 1,989,852	791,975	991	0.75	0.51
		Washington natural gas low income portfolio only			0.43	0.20
		Washington electric low income portfolio only			1.23	0.96
		Washington combined fuel low income portfolio only			0.75	0.51

Though the overall combined fuel portfolio is not cost-effective from either a sub-TRC or sub-UCT point of view this represents the best compromise between cost-effectiveness and the expressed desire to offer Washington CAP agencies the ability to meet their priorities in serving clients.

2014 Prospects for the Idaho Low Income Portfolio

The assessment of the Idaho low income portfolio began with a projection of portfolio performance in the absence of any management changes and with the exclusion of natural gas measures consistent with the suspension of that program. Having established this updated foundation alternative approaches to the portfolio were evaluated.

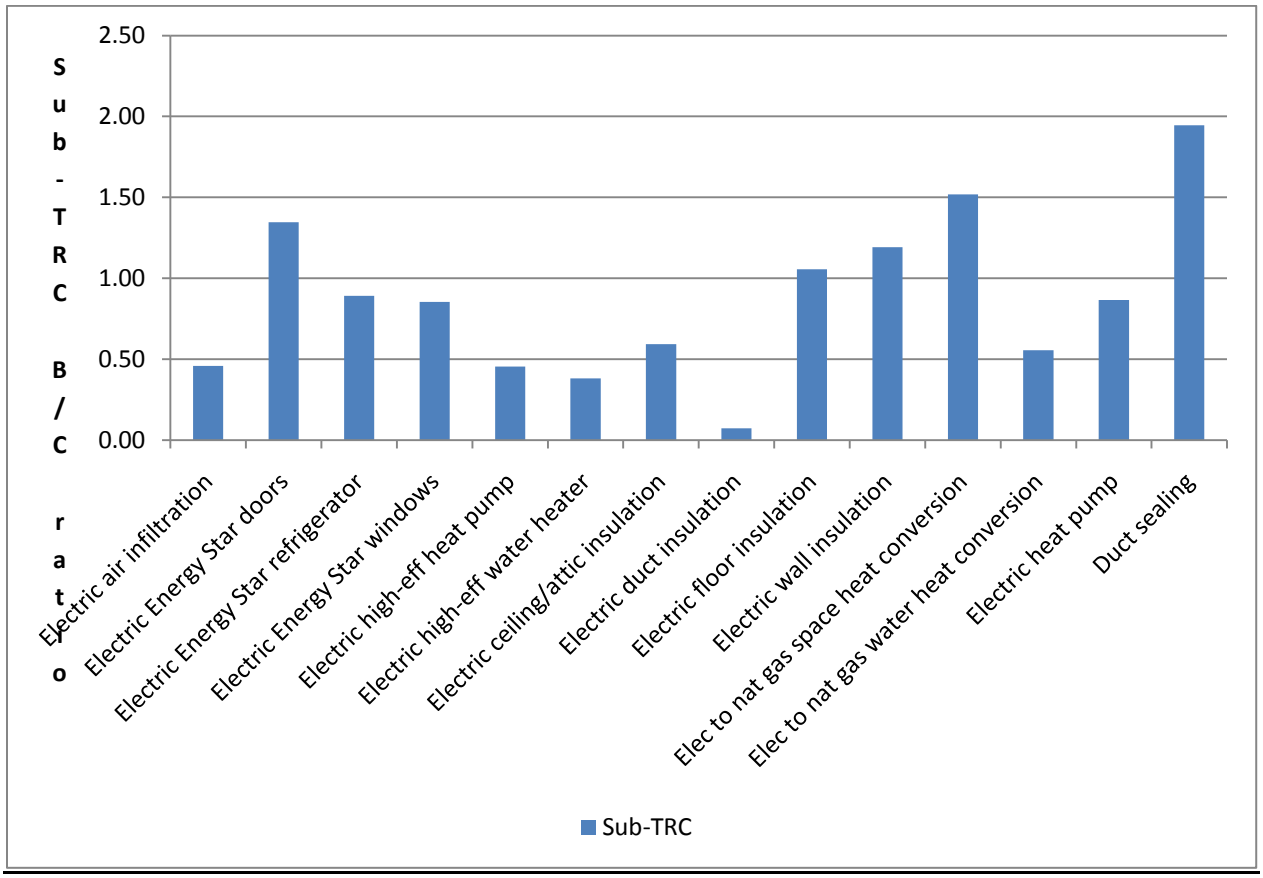
Previous impact and process evaluations as well as business planning efforts identified two tools with the potential to improve the portfolio cost-effectiveness:

1. Under the 'existing' approach to the low income portfolio, establish a pre-approved measure list screened through a calculation of the sub-TRC cost-effectiveness of each measure using updated avoided costs and unit energy savings from the Company's TRM. This creates an updated "pre-approved" measure list.
2. Establish a 'revised' approach to the portfolio implementation permitting the funding of any efficiency measure on a per unit basis, with contracted energy-efficiency funds, up to 100% of the avoided cost of that measure subject to a cap equal to 115% of the full measure cost (including the 15% administrative reimbursement). Continue to allow the use of 15% of the total funding for health and human safety measures, including the co-funding of measures which are partially funded through energy-efficiency funds. The health and human safety funding would continue to be quantified as a non-energy benefit equal to the full investment including the administrative reimbursement to the CAP.

Neither of these approaches can absolutely guarantee cost-effectiveness. While the most recent electric low income realization rate was 102%, there is no certainty that future realization rates be as favorable. Additionally there is no guarantee that either of these two approaches will exceed their sub-TRC cost-effectiveness levels by a sufficient amount to offset assigned and allocated non-incentive utility cost. However, either of these approaches would lead to more customer benefits from the contracted funding than the pursuit of the previously existing mix of measures when reviewed under updated avoided cost and unit energy savings.

An initial review of retaining the 'existing' approach of pre-approved and individually approved measures with a more aggressive screening of measures indicated that only four measures historically pursued by the CAP agency and one additional measure would be funded under this approach. The sub-TRC cost-effectiveness of these measures is represented graphically below.

Figure 4: Sub-TRC Cost-Effectiveness by Measure



Those measures that are cost-effective in 2014 accounted for only 22% of the non-health and human safety expenditures during 2012 (or 40% of the electric non-health and human safety expenditures). The continued application of the 'existing' approach to funding the low income portfolio screened for sub-TRC cost-effectiveness would severely limit the ability of the CAP agency to fully expend the contracted funds.

The 'revised' approach would allow funding for all measures, but restrict the amount of the energy funding to the energy value of the measure. Such a proposal would focus the 85% of the low income portfolio funding intended for energy-efficiency more tightly upon measures producing cost-effective energy savings, but would do so without limiting the measures that could be funded. The CAP agency would retain the opportunity to augment the funding of any measure with the 15% of funding for non-energy health and human safety purposes.

A review of individual measures and the funding permissible for each of the two approaches under consideration indicated that all but one measure (ENERGY STAR doors) that would meet the cost-effectiveness criteria for funding under the 'existing' approach would be funded at

115% of the cost (including the 15% administrative reimbursement) under the 'revised' approach in 2014. (ENERGY STAR doors would qualify for 48% funding of the material cost). A subsequent review of these alternatives with stakeholders indicated a desire to more thoroughly investigate the ENERGY STAR doors and infiltration measures. Consequently the proposed approach was modified to fully fund these two measures at 115% of their historic per unit measure cost.

Table 4 below summarizes how each measure would be treated under the 'existing' approach (categorizing each measure as eligible for full funding or ineligible for any funding, absent individual approval) and the 'revised' approach (indicating the level of funding for each measure as a percent of historic cost). The 2014 funding contract under the 'revised' approach would establish a per unit or per square foot funding level for each measure rather than payment of a percentage of the cost, thus rewarding the CAP agency for directing funding toward more energy savings measures and as well as any success in cost control that they may be able to secure.

Table 4: Comparison of measure eligibility under 'existing' and 'revised' approach

Measure	Status under 'existing approach'	% of material funded under 'revised approach' *	Sub-TRC including NEB's	Energy value as a % of sub-TRC benefit
Air infiltration	Ineligible	53% / 115% **	0.46	100%
ENERGY STAR doors	Qualified	48% / 115% **	1.35	31%
ENERGY STAR refrigerators	Ineligible	103%	0.89	17%
ENERGY STAR windows	Ineligible	2%	0.85	2%
High-efficiency heat pumps	Ineligible	52%	0.45	2%
High-efficiency water heaters	Ineligible	4%	0.38	9%
Attic insulation	Ineligible	68%	0.59	100%
Duct insulation	Ineligible	8%	0.07	100%
Floor insulation	Qualified	115%	1.06	100%
Wall insulation	Qualified	115%	1.19	100%
Elec to nat gas space heat	Qualified	115%	1.63	76%
Elec to nat gas water heat	Ineligible	46%	0.59	67%
Heat pump to nat gas conversion	Ineligible	100%	0.87	74%
Duct sealing	Qualified	115%	1.95	100%

* Funding is capped at 115% to allow for a 15% administrative reimbursement to the CAP.

** The calculation will be adjusted to reflect the full historic cost of the measure for CY 2014

Based upon this planning effort it is the intent of Avista to offer the Lewiston CAP a 2014 funding contract for all measures up to 100% of their avoided cost (using updated avoided costs and current TRM values) subject to a cap at 115% of the actual measure cost. This funding

contract would include exceptions for infiltration and ENERGY STAR doors, which would be funded at 115% of their historic cost per unit and re-evaluated at the end of the year.

Since the suspension of the natural gas portfolio and the above proposed revision to the electric portfolio are a significant deviation from the current program there is some difficulty in estimating how the CAP agency will redeploy their funding in 2014. The business plan proceeded with the assumption that the CAP agency will focus upon those measures that can be fully funded under the program plus the attic insulation measure. Attic insulation is a core measure for the CAP agencies and would have 68% of the material cost funded based upon its avoided cost value. This would require approximately $28,000 in co-funding from other sources (including the CAP's allotment of up to $105,000 in health and human safety funding). A total co-funding requirement of $28,000 out of a total of $700,000 in energy efficiency funding seemed a tradeoff that the CAP agency would likely consider necessary to incorporate a core measure into the portfolio.

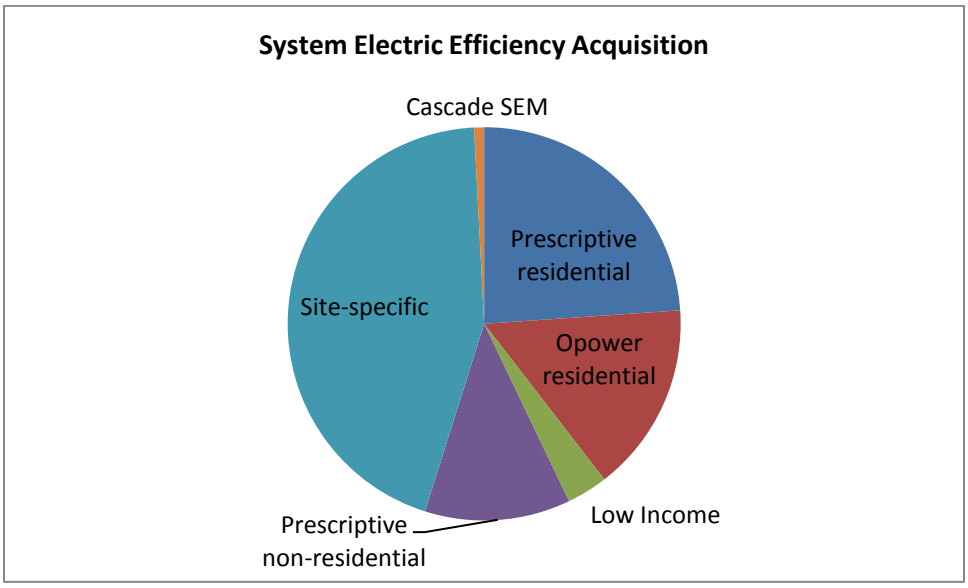
Given these assumptions regarding the distribution of the contracted funding a portfolio sub-TRC benefit-to-cost ratio of 1.32 was projected. The full portfolio TRC benefit-to-cost ratio, including assigned and allocated non-incentive utility costs, was projected to be 1.. This approach represents $272,000 improvement in the benefits received by this customer class relative to a continuation of the previous approach.

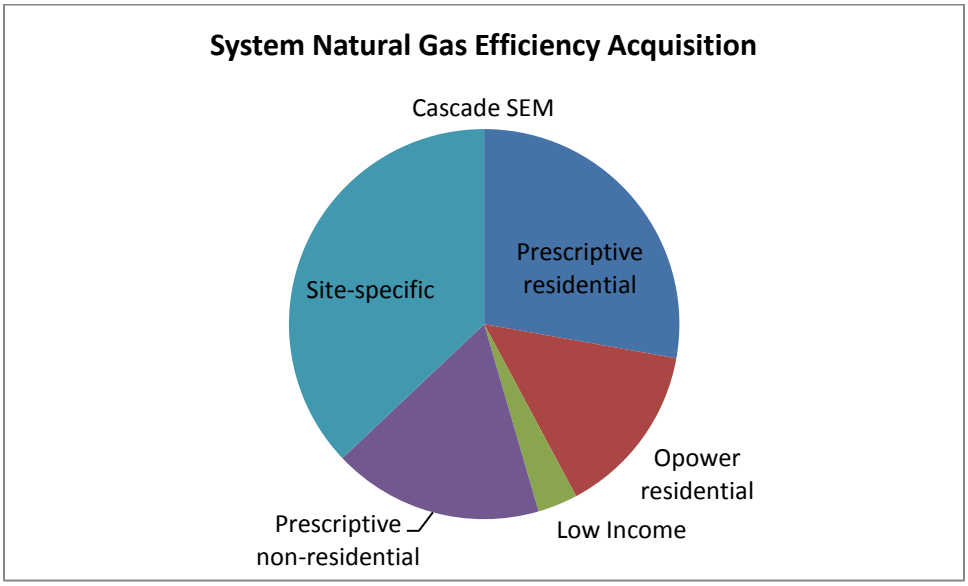
Resource Acquisition Projections and Targets

The Company's management of the DSM portfolio is fundamentally based upon the obligation to achieve all cost-effective resource savings available through utility intervention. Targets are developed based upon projections of that cost-effective potential. The business planning process identifies and pursues cost-effective measures, but it is not until the end of the process that a comparison between verified and target acquisition is made. The key business planning objective, to maximize the residual benefits accruing to our customers from the energy efficiency portfolio, is consistent with and generally leads to achieving acquisition targets.

The following tables summarize the composition of the electric and natural gas efficiency savings derived from each component of the overall DSM portfolio. Notably the Opower residential acquisition program is credited, in 2014, only with those first-year energy savings that are incremental in that year and not those that are persisting from the prior year. The methodologies used to develop these estimates are as previously defined for each program.

Figure 5: Electric and Natural Gas Efficiency Acquisition Summary





The table below summarizes the application of the previously defined methodologies and assumptions to the Company's 2014 portfolio. The aggregation of prescriptively offered measures into meaningful programs has been modified to some extent since the prior year to more accurately reflect the recent revisions. Not included in the table below are those programs terminated early in the planning process to include a residential solar and a nonresidential tenant efficiency program.

Table 5: Summarization of Resource Acquisition

	WA I-937 kWh savings	WA kWh savings	ID kWh savings	System kWh	WA therm savings
Prescriptive residential portfolio (below)	8,008,529	8,194,266	3,485,160	11,679,426	163,736
Appliance recycling	817,600	817,600	350,400	1,168,000	-
Appliances	-	-	-	-	-
ENERGY STAR Homes	64,795	64,795	44,669	109,464	203
Fuel Efficiency	621,588	621,588	200,342	821,930	-
HVAC	545,859	731,597	300,542	1,032,139	117,270
Lighting	5,408,824	5,408,824	2,321,175	7,729,999	-
Shell	488,631	488,631	178,778	667,409	39,753
Water heat	61,232	61,232	89,254	150,486	6,509
Opower residential behavioral program	5,163,522	5,163,522	2,470,620	7,634,142	84,704
Low income portfolio	187,425	799,679	845,602	1,645,282	19,484
Nonresidential portfolio (below)	4,092,933	4,092,933	1,754,114	5,847,047	102,760
EnergySmart Grocer	245,000	245,000	105,000	350,000	-
Food Service Equipment	362,644	362,644	155,419	518,063	22,493
Green Motors	108,208	108,208	46,375	154,583	-
Motor controls HVAC	350,000	350,000	150,000	500,000	-
HVAC	-	-	-	-	15,491
Nonresidential appliances	3,227	3,227	1,383	4,610	376
Nonresidential Prescriptive lighting	2,605,748	2,605,748	1,116,749	3,722,497	-
Power Mgmt for Personal Computers	103,180	103,180	44,220	147,400	-
Prescriptive Shell	294,350	294,350	126,150	420,500	64,400
Standby Generator Engine Block Heater	20,575	20,575	8,818	29,393	-
Site-Specific	14,138,289	15,523,689	6,128,799	21,652,488	218,215
Cascade Strategic Energy Management	225,000	225,000	175,000	400,000	-
Total	31,815,696	33,999,089	14,859,295	48,858,384	588,900

Resource Acquisition Projection Relative to Acquisition Targets

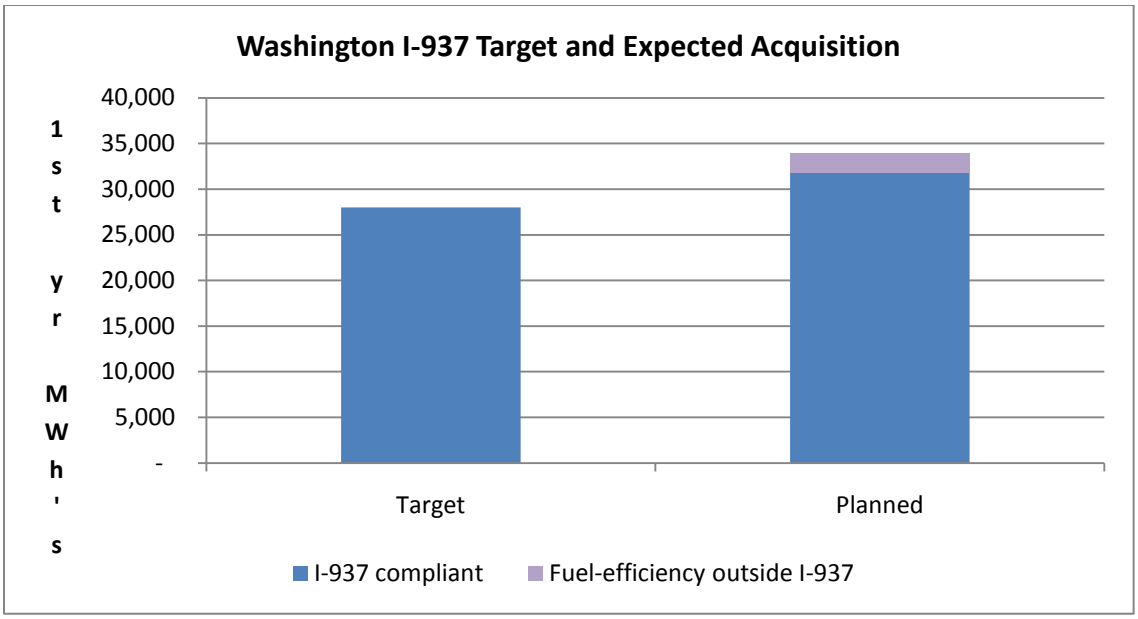
As previously stated, Avista's primary objective is to maximize the residual net benefits of the DSM portfolio. The first iteration of the business planning effort does not include consideration of a need to meet any particular resource acquisition target. As the portfolio optimized for net benefits is consolidated it is compared to the resource acquisition targets appropriate for each jurisdiction and fuel. It has been Avista's experience that optimizing around the cost-effectiveness objective leads to a projected acquisition that is sufficient to meet both of these resource acquisition targets.

The Washington I-937 Acquisition Target

The filed I-937 acquisition target for the 2014-2015 biennium based upon local acquisition only is 56,002 first-year MWh. The Company's projected 2014 qualifying acquisition (excluding fuel-efficiency programs) is 31,816 MWh, or 57% of the biennium total. This should put the Company moderately ahead of being on track towards achieving the biennial target.

The relationship of the Company's projected performance relative to the acquisition target including fuel efficiency acquisition not within the scope of I-937 is illustrated below.

Figure 6: I-937 Acquisition Relative to the Anticipated Target



The use of fixed unit energy savings for a significant portion of the savings applicable towards the Washington I-937 target and the exclusion of regional market transformation acquisition has reduced the planning uncertainty surrounding these projections.

Given that the projections show acquisition to be slightly ahead of the target and the significant reduction in uncertainty surrounding how the acquisition will be measured and since this is the first year of the biennium there has been no discussion of contingency plans to meet unexpected acquisition deficiencies.

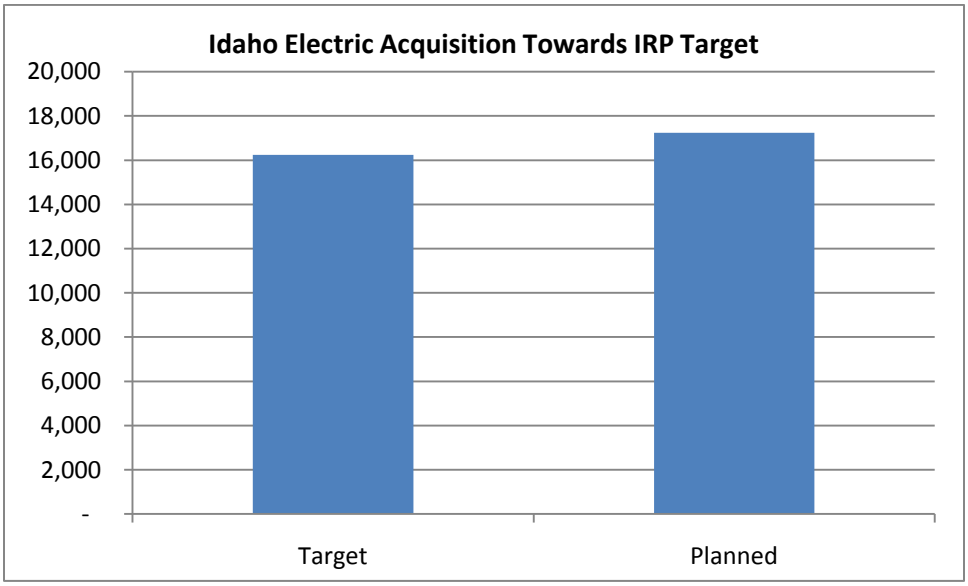
Resource acquisition from fuel-efficiency programs have been excluded from the I-937 acquisition calculation but are included in the overall electric DSM portfolio projection.

Regional acquisition achieved through Avista's funding and participation in NEEA is also excluded from the acquisition consistent with the previously described methodology for developing a local-only I-937 target.

The Idaho IRP Acquisition Target

The Idaho electric DSM acquisition target was established by the 2013 electric IRP at 16,238 first-year MWh. This business plan projects an achievement of 17,245 MWh (14,859 MWh coming from local DSM operations and an additional 2,386 MWh being derived from NEEA achievements within Avista's Idaho service territory). This projected acquisition is 6% in excess of the target, as illustrated below.

Figure 7: Idaho Electric Resource Acquisition Relative to the IRP Target



In prior years it has been assumed that all NEEA acquisition was within the scope of the IRP target. Due to the analysis performed to develop a local-only Washington I-937 target it is now possible to quantify that portion of the projected NEEA acquisition that is outside the scope of the IRP target. The NEEA acquisition that is outside the scope of the IRP target, as ascertained through the CPA, has not been included within the calculation above, consistent with the methodology applied to the Washington I-937 approach.

Had all of the expected NEEA acquisition been incorporated into the acquisition applicable towards achieving the Idaho IRP target and additional 3,824 MWh would have been included

within the acquisition. This would have pushed the expected portfolio performance from 106% of the target to 130% of the target.

Cost-Effectiveness Projections and Related Metrics

The Company performs and uses several cost-effectiveness metrics for different purposes. As previously explained, the primary portfolio objective has been defined as maximizing the residual net TRC (for electric) or gross UCT (for Washington gas) benefit of the portfolio. This is achieved through screening individual measures for their sub-net TRC or sub-gross UCT performance and absent justifiable exemptions screening out those that would not favorably contribute to the portfolio. This in itself is insufficient to guarantee that a program consisting of an aggregation of measures will fully meet cost-effectiveness requirements since additional costs are recognized as being incremental at each successive stage of aggregation. All costs that are not deemed to be incremental at the measure or program level are recognized at the portfolio level, creating the potential for an aggregation of incrementally cost-effective programs leading to a non-cost-effective portfolio. This approach increases the likelihood that all measures and programs that can contribute to the overall cost-effectiveness of the portfolio are recognized.

Since the 2014 DSM Business Plan reflects the expected performance of a measure or program only within that single calendar year there are circumstances where this limited period of time may not fully capture the long-term costs and benefits of a program. Misrepresentations may occur as a launch of a program with front-loaded costs (e.g. the Cascade SEM program), the continuation of a program with many of the benefits claimed in prior years (e.g. the Opower behavioral program), programs with anticipated market moving characteristics not recognized in the calendar year (e.g. LED lighting measures) or mature programs with declining costs and continuing energy benefits (e.g. many of the individual CFL measures). Under these circumstances the Company will favor a long-term view of program performance even if a particular measure is projected to fail to perform well during a defined calendar year.

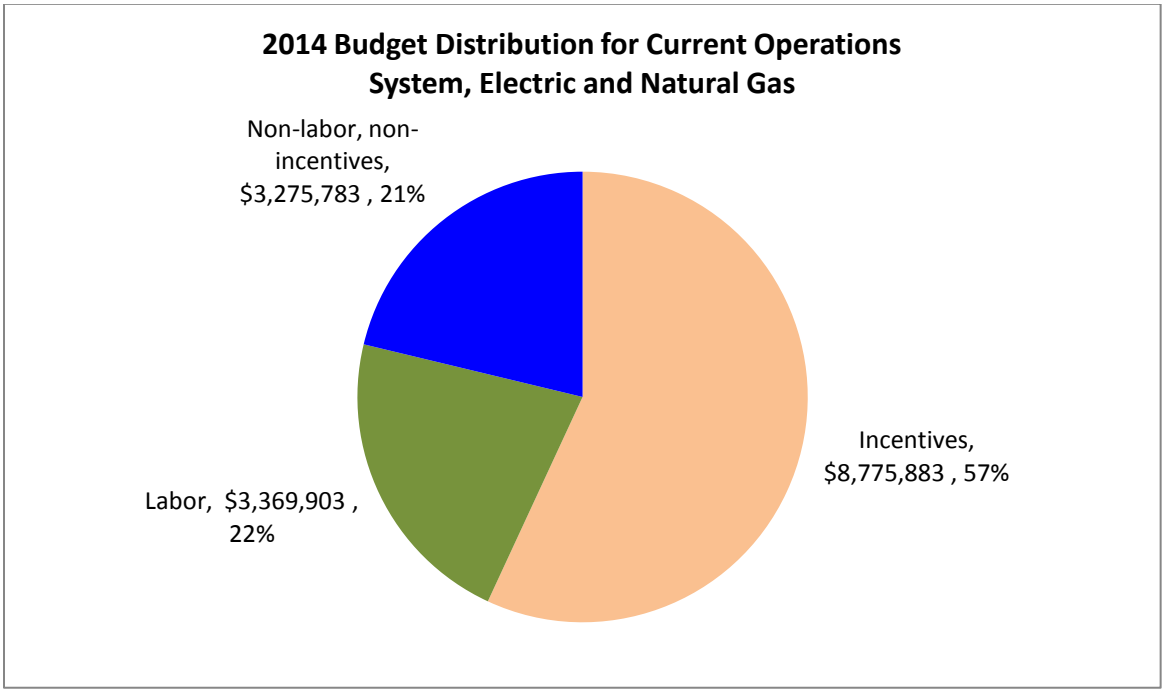
To be consistent with the DSM Annual Report, and to accurately measure the cost-effectiveness of current DSM operations, the DSM Business Plan incorporates only those costs which are relevant to current operations. Expenses that are not associated with local 2014 programs are defined as 'supplemental expenses' that are excluded from cost-effectiveness calculations but included in the estimate of the overall budget and will be part of future tariff rider funding calculations. Supplemental expenses for 2014 amount to $3.2 million and are composed of the following components:

- $50,000 in Idaho low-income outreach funds (Idaho only)
- $75,000 to perform an evaluation of Avista's 2012/2013 distribution efficiency initiative acquisition (Washington only)
- $300,000 in Idaho research and development funding (Idaho only)
- $2,160,000 funding for Avista's participation in NEEA (system)
- $650,000 in payments for resources acquired in prior years subject to a multi-year payment stream (Washington and Idaho)

The 2014 costs for purposes of calculating the cost-effectiveness of current operations (excluding these supplemental costs) is $15.4 million. Of this amount $8.8 million are returned to customers in the form of financial incentives and the remainder are non-incentive utility costs. The non-incentive utility costs are a combination of Avista labor and non-labor costs and the cost associated with implementing programs through third-party entities. A total of 43% of the non-supplemental utility cost associated with the current program year (excluding supplemental expenditures) is non-incentive in nature. This category has been trending upwards in recent years.

The breakout of these costs by program and portfolio are represented in the table below:

Figure 8: Non-Supplemental 2014 DSM Costs



The budget is represented in a more detailed manner in the table below.

Table 6: 2014 Non-Supplemental Utility Expenditures

	WA electric incentives	Idaho electric incentives	WA gas incentives	Total incentives
Prescriptive residential portfolio (below)	$ 1,237,241	$ 540,931	$ 328,726	$ 2,106,898
Appliance recycling	$ 52,500	$ 22,500	$ -	$ 75,000
Appliances	$ -	$ -	$ -	$ -
ENERGY STAR Homes	$ 5,800	$ 5,200	$ -	$ 11,000
Fuel Efficiency	$ 46,500	$ 15,000	$ -	$ 61,500
HVAC	$ 102,280	$ 50,180	$ 285,000	$ 437,460
Lighting	$ 972,761	$ 417,412	$ -	$ 1,390,173
Shell	$ 53,998	$ 24,635	$ 34,336	$ 112,969
Water heat	$ 3,402	$ 6,004	$ 9,390	$ 18,796
Opower residential behavioral program	$ -	$ -	$ -	$ -
Low income portfolio	$ 793,991	$ 699,983	$ 1,195,861	$ 2,689,835
Nonresidential portfolio (below)	$ 566,966	$ 249,615	$ 141,209	$ 957,790
EnergySmart Grocer	$ 48,716	$ 20,878	$ -	$ 69,595
Food Service Equipment	$ 18,314	$ 7,154	$ 37,618	$ 63,086
Green Motors	$ 9,534	$ 4,086	$ -	$ 13,620
Motor controls HVAC	$ 28,624	$ 12,267	$ -	$ 40,891
HVAC	$ -	$ -	$ 33,250	$ 33,250
Nonresidential appliances	$ 601	$ 291	$ 828	$ 1,720
Nonresidential Prescriptive lighting	$ 405,213	$ 173,663	$ -	$ 578,875
Power Mgmt for Personal Computers	$ 5,250	$ 2,250	$ -	$ 7,500
Prescriptive Shell	$ 45,987	$ 27,000	$ 69,513	$ 142,500
Standby Generator Engine Block Heater	$ 4,726	$ 2,026	$ -	$ 6,752
Site-Specific	$ 1,822,165	$ 642,661	$ 457,635	$ 2,922,461
Cascade Strategic Energy Management	$ 51,550	$ 47,350	$ -	$ 98,900
Total	$ 4,471,913	$ 2,180,539	$ 2,123,431	$ 8,775,883

	Total incentives	System assigned labor	System assigned non-labor	System allocated labor	System allocated non-labor	Total cost assigned to program *
Prescriptive residential portfolio (below)	$ 2,106,898	$ 370,952	$ 793,266	$ 373,973	$ 431,909	$ 4,076,999
Appliance recycling	$ 75,000	$ 51,651	$ 272,500	$ 26,510	$ 34,164	$ 459,825
Appliances	$ -	$ -	$ -	$ -	$ -	$ -
ENERGY STAR Homes	$ 11,000	$ 2,407	$ -	$ 2,620	$ 3,296	$ 19,323
Fuel Efficiency	$ 61,500	$ 17,143	$ -	$ 18,655	$ 24,113	$ 121,411
HVAC	$ 437,460	$ 93,193	$ -	$ 101,412	$ 94,845	$ 726,910
Lighting	$ 1,390,173	$ 161,227	$ 520,172	$ 175,447	$ 226,102	$ 2,473,120
Shell	$ 112,969	$ 38,214	$ -	$ 41,585	$ 41,467	$ 234,235
Water heat	$ 18,796	$ 7,117	$ 594	$ 7,744	$ 7,922	$ 42,173
Opower residential behavioral program	$ -	$ 66,396	$ 624,425	$ 173,271	$ 223,024	$ 1,087,116
Low income portfolio	$ 2,689,835	$ 23,451	$ -	$ 50,300	$ 58,323	$ 2,821,908
Nonresidential portfolio (below)	$ 957,790	$ 173,977	$ 151,358	$ 201,047	$ 227,671	$ 1,711,843
EnergySmart Grocer	$ 69,595	$ 1,672	$ 31,500	$ 7,944	$ 10,238	$ 120,949
Food Service Equipment	$ 63,086	$ 9,855	$ -	$ 26,717	$ 27,552	$ 127,210
Green Motors	$ 13,620	$ 1,294	$ 6,037	$ 3,509	$ 4,522	$ 28,981
Motor controls HVAC	$ 40,891	$ 4,186	$ 113,821	$ 11,348	$ 14,625	$ 184,872
HVAC	$ 33,250	$ 3,800	$ -	$ 10,302	$ 8,539	$ 55,890
Nonresidential appliances	$ 1,720	$ 131	$ -	$ 355	$ 342	$ 2,548
Nonresidential Prescriptive lighting	$ 578,875	$ 132,242	$ -	$ 84,489	$ 108,884	$ 904,490
Power Mgmt for Personal Computers	$ 7,500	$ 1,234	$ -	$ 3,346	$ 4,312	$ 16,391
Prescriptive Shell	$ 142,500	$ 19,317	$ -	$ 52,371	$ 47,798	$ 261,986
Standby Generator Engine Block Heater	$ 6,752	$ 246	$ -	$ 667	$ 860	$ 8,525
Site-Specific	$ 2,922,461	$ 1,290,897	$ -	$ 636,560	$ 754,190	$ 5,604,108
Cascade Strategic Energy Management	$ 98,900	$ -	$ -	$ 9,079	$ 11,616	$ 119,594
Total	$ 8,775,883	$ 1,925,673	$ 1,569,049	$ 1,444,229	$ 1,706,734	$ 15,421,569

43% of current DSM expenditures for non-incentive purposes

*Supplemental charges not incorporated within the analysis of 2014 DSM program operations for cost-effectiveness purposes are not included.

One of the major reasons to track the proportion of non-incentive funding is to gauge the 'wedge' that these expenditures drive between net and gross cost-effectiveness. The greater these expenses are as a percentage of total utility expenses, the larger the difference between net and gross cost-effectiveness. Over recent years Avista has increased its reliance upon outreach and technical assistance as a means to improve program throughput. Though this has been a successful strategy for increasing throughput during this time, it does create two important risks that need to be managed:

1. The fixed nature of the investments in outreach and technical assistance infrastructure create a higher risk of poor cost-effectiveness if the acquisition is not achieved or if the

measure is less cost-effective than anticipated. This demands a greater degree of due diligence and planning in comparison to programs that are driven primarily by incentives. Incentives are variable with throughput and do not impose the same risk as fixed investments in infrastructure.

2. The increasing wedge between the net and gross TRC calculation requires additional attention to the management of the net-to-gross relationship. Historically the Company has relied heavily upon the formulaic tiered incentive incorporated into the tariff rider funds to target utility dollars to where they are likely to have their greatest impact. Approaches to improving the management of this net-to-gross relationship is of increased importance given trends in the cost structure of the portfolio

The benefits associated with the programs are, as one would expect, primarily the avoided cost of electric and natural gas energy resources. The Company determines a present value based upon the current 7.01% nominal discount rate and the estimated measure life. The RTF's estimate of the measure life is used when one is available. Interactive impacts of measures, whether favorable or unfavorable, are incorporated into the present value calculation. The 2014 analysis of physical efficiency measures does not assume the degradation of the energy savings during the measure life.

In Washington, where the Company offers both electric and natural gas DSM portfolios, measures that generate both electric and natural gas savings based upon the same technology (e.g. shell measures generating both electric cooling and natural gas heating savings) are treated as dual-fuel projects. The incremental costs are split between the two portfolios based upon the relative BTU content. Incentives are directly assigned to each portfolio. Similar projects in Idaho are treated as electric efficiency projects only, since a natural gas portfolio is not being offered, and any non-electric savings are considered to be interactive in nature.

The Company does include a valuation of non-energy benefits when they can be quantified in a sufficiently rigorous fashion as to be defensible to a reasonable but critical audience. RTF valuations of the non-energy benefits are applied when they are available. The quantified non-energy benefits are most frequently associated with efficiency measures that also include labor savings (primarily lighting measures) or those that lead to water, detergent or sewage savings.

The Company recognizes that many of the efficiency measures offered also generate other non-energy impacts that are not included in the cost-effectiveness calculation. These impacts are most frequently benefits but occasionally non-energy costs. Despite the inability to rigorously quantify these values the Company does take them into consideration on a subjective basis both in determining what measures to include within the portfolio as well as in developing

program outreach strategies. The Company can and has represented measures, programs and portfolios as cost-effective despite benefit-to-cost ratios that are less than one if we believe that the non-quantified non-energy benefits push the program past the point of cost-effectiveness.

The following table summarizes the benefit-to-cost ratio for all programs to include the allocation of fixed infrastructure costs to each of the programs. In some cases these fixed allocations did push programs that are favorably contributing to the portfolio on an incremental basis into a benefit-to-cost ratio less than one.

Table 7: Summary TRC and UCT Cost-Effectiveness

	Net TRC benefit / cost ratio			Gross UCT benefit / cost ratio		
	WA electric	ID electric	WA natural gas	WA electric	ID electric	WA natural gas
Prescriptive residential portfolio (below)	0.75	0.78	1.73	1.91	1.98	1.65
Appliance recycling	0.64	0.64		0.52	0.52	
Appliances						
ENERGY STAR Homes	2.49	2.18	-	4.99	5.01	-
Fuel Efficiency	2.00	2.17		4.05	4.41	
HVAC	0.91	0.97	1.78	2.48	2.74	1.78
Lighting	0.59	0.59		1.72	1.74	
Shell	1.56	1.61	1.04	4.77	5.11	1.04
Water heat	2.75	1.55	3.34	1.23	0.53	1.19
Opower residential behavioral program	0.61	0.60		0.61	1.23	
Low income portfolio	1.16	1.24	0.42	0.92	1.04	0.20
Nonresidential portfolio (below)	1.28	1.55	0.40	3.08	3.15	1.71
EnergySmart Grocer	0.68	0.68		1.04	1.05	
Food Service Equipment	1.91	1.93	0.43	3.57	3.62	0.96
Green Motors	1.35	1.36		1.61	1.63	
Motor controls HVAC	1.02	1.02		1.63	1.64	
HVAC			0.95			1.34
Nonresidential appliances	1.18	1.18	0.51	2.27	2.29	1.02
Nonresidential Prescriptive lighting	1.92	1.93		2.46	2.48	
Power Mgmt for Personal Computers	0.95	0.96		1.60	1.63	
Prescriptive Shell	1.46	1.47	-	4.14	4.17	-
Standby Generator Engine Block Heater	0.47	0.47		1.34	1.35	
Site-Specific	1.23	1.60	0.40	3.41	3.64	1.99
Cascade Strategic Energy Management	0.07	0.06		0.12	0.11	
Total	**1.09**	**1.20**	0.54	2.28	2.19	**1.00**

The overall customer impact of the portfolios can also be summarized as the residual benefit (benefits less costs). The table below represents these residual benefits.

Table 8: Residual TRC and UCT Benefit Summarization

	Residual TRC benefits	Residual UCT benefits
Washington electric portfolio	$ 1,137,583	$ 8,485,427
Idaho electric portfolio	$ 1,053,479	$ 3,717,553
Electric-only system portfolio	$ 2,191,063	$ 12,202,981
Washington natural gas portfolio	$ (2,299,832)	$ 6,231

The electric portfolio (both Washington and Idaho) were optimized to deliver residual TRC benefits and were successful in doing so. The Washington natural gas portfolio was optimized to deliver residual UCT benefits and essentially broke even in this regard. However it should be noted that this portfolio also received an allocation of $613,000 that could arguably be considered to be less than incremental to the program.

Notably there are eight individual electric programs that fail to meet the expected sub-net TRC criteria by some significant amount. Program managers have described the following reasons for pursuing these programs despite their apparent 2014 cost-effectiveness:

1. The residential appliance recycling program is offered through a third-party contract. Substantial revisions in the unit energy savings for these measures have reduced the cost-effectiveness significantly. The program will undergo additional review as the contract comes up for renewal.
2. The electric component of the residential HVAC program is mildly cost-ineffective when burdened with allocated infrastructure costs. However, absent these allocations, the program does not significantly detract from the electric portfolio and does favorably contribute to the natural gas portfolio.
3. The residential lighting program is composed of CFL and LED lighting offerings that Avista offers both directly and through the regional Simple Steps, Smart Savings program. The LED components of the program are considered to be market-moving in nature and are supportive of regional efforts to accelerate the adoption and therefore reduce the cost of these lamps. However from a calendar year 2014 perspective the LED measures are not immediately cost-effective. It has also been noted that these programs are relatively heavily burdened with allocated infrastructure cost due to the large amount of savings and, in the case of CFL's, a relatively short useful life.
4. As previously explained, the Opower behavioral program is cost-effective over a the planned life of the program, but the decision to treat the energy savings as having at least a two year measure life has created the need to remove 38% of the expected

electric and 30% of the expected natural gas savings from 2014 and treat them as a persisting 2013 resource acquisition.

5. The nonresidential ENERGY STAR Grocer program is delivered to Avista by a third-party (PECI) implementer in a manner consistent throughout the region. The cost-effectiveness under current avoided costs and absent allocated fixed infrastructure costs will be reviewed when the contract is renegotiated. For purposes of the 2014 DSM Business Plan it is presumed that an acceptable resolution to this issue will be reached.
6. The power management for personal computer programs is mildly cost-ineffective when burdened with allocated fixed infrastructure costs but, on an incremental basis, does not detract from the electric portfolio performance.
7. The standby generator engine block heater program is cost-ineffective based upon the best and most current regional evaluation. However the Company has scheduled an impact evaluation and review of measure life to determine if the Avista pilot performs differently than that which is being regionally delivered. If the program is determined to be cost-ineffective the measure will be transitioned to becoming eligible on a site-specific basis and subject to individual evaluation for incentives on a timely basis.
8. The Cascade Strategic Energy Management program will be initiated during 2014. This program is front-loaded with costs, a disproportionate amount of which will occur during the calendar year. The Company's longer run analysis of this pilot program led to the conclusion that it will ultimately be cost-effective.

Additionally there are two programs that fail to meet the gross UCT cost-effectiveness test applied to Washington natural gas DSM programs.

1. The natural gas portion of the Washington low income portfolio falls significantly short of being gross UCT cost-effective. This part of the portfolio is also not TRC cost-effective. As a program targeted for the low income customer segment the program is not expected to fully meet cost-effectiveness targets.
2. The natural gas food service equipment program falls very slightly short of being fully gross UCT cost-effective. The small difference is driven by infrastructure allocations not likely to be incremental to the program.

DSM Labor Requirements

The anticipated labor complement for performing Avista's DSM tasks has fallen to 25.5 full-time equivalent individuals spread across 34 employees expected to charge to DSM during 2014. The allocation of those FTE by labor classification is as indicated in the table below.

Table 9: Budgeted 2014 Labor FTE

	FTE
Program Coordinator	5.00
Engineer	5.00
Program Manager	3.49
Analyst	3.20
Manager	2.25
Account Executive	2.25
Technician	2.00
Director	1.25
Marketing	0.80
Intern	0.25
Total 2014 budgeted	25.49

This projection represents a 10% reduction in FTE, 19% fewer individuals charging to DSM and a 9% reduction in loaded labor cost in comparison to the 2013 DSM Business Plan. Despite these reductions labor has become a larger portion of the overall DSM budget due to the decreasing size of the portfolio and lower incentive expenditures.

Labor is the largest component of non-incentive utility costs, which has been identified as an area in need of close scrutiny given the decreasing size of the system combined fuel DSM portfolio and declining acquisition targets.

The Company has and will continue to make use of attrition and reassignments to size the DSM staffing to appropriate levels commensurate with a smaller portfolio operating in a lower avoided cost environment.

DSM Budget Projections

One of the required functions of the DSM business planning process is the development of an annual budget for the following year. The budget is used for corporate financial planning as well as the management of the DSM operations and the future projection of tariff rider revenue requirements.

Avista categorizes utility expenditures into three categories:

1. Incentives: The direct financial incentives or rebates on energy efficiency equipment/measures and the utility cost of physical product provided to customers.
2. Labor: The fully loaded labor of all individuals charging to the DSM task.
3. Non-incentive/Non-labor: All utility expenditures not otherwise captured above to include the non-labor cost of EM&V, program outreach expenses, industry association memberships, etc.

The expected budget including $3.2 million in supplementary expenditures is $18.7 million.

Table 10: Summarization of the 2014 DSM Budget by Jurisdiction and Fuel

	Washington electric portfolio	Idaho electric portfolio	Washington natural gas portfolio	System total	Supplementary obligations *
Residential portfolio	$ 1,237,241	$ 540,931	$ 328,726	$ 2,106,898	$ -
Low Income portfolio	$ 793,991	$ 699,983	$ 1,195,861	$ 2,689,835	$ -
Nonresidential portfolio	$ 2,440,681	$ 939,626	$ 598,845	$ 3,979,151	$ -
Total program portfolio	$ 4,471,913	$ 2,180,539	$ 2,123,431	$ 8,775,883	
Third party non-incentive program payments	$ 1,074,181	$ 494,745	$ 122	$ 1,569,049	$ -
EM&V	$ 425,700	$ 119,000	$ 150,300	$ 695,000	$ 75,000
Industry organization memberships	$ 138,982	$ 1,600	$ 59,564	$ 200,145	$ -
Outreach	$ 384,490	$ 137,318	$ 214,781	$ 736,589	$ 50,000
Training and travel	$ 42,000	$ 15,000	$ 18,000	$ 75,000	$ -
Stakeholder events	$ 14,000	$ 5,000	$ 6,000	$ 25,000	$ -
Resource payments	$ 589,000	$ -	$ 61,000	$ 650,000	$ 650,000
CPA	$ 80,000	$ -	$ 20,000	$ 100,000	$ -
R&D	$ -	$ -	$ 300,000	$ 300,000	$ 300,000
NEEA	$ 1,512,000	$ -	$ 648,000	$ 2,160,000	$ 2,160,000
TOTAL	$ 3,186,171	$ 277,918	$ 1,477,645	$ 4,941,734	$ 3,235,000
Labor	$ 1,833,715	$ 760,890	$ 775,298	$ 3,369,903	$ -
TOTAL	$ 10,565,980	$ 3,714,092	$ 4,376,497	$ 18,656,569	$ 3,235,000

* Supplementary obligations are those not supporting current DSM obligations subject to cost-effectiveness calculations. This includes the evaluation of distribution efficiencies, Idaho low income outreach, Idaho R&D funding, payment obligations for past resource acquisitions and NEEA.

The budget could also be summarized based upon the functional distribution of the dollars.

Table 11: Summarization of the 2014 DSM Budget by Category

Incentives	$	8,775,883
Labor	$	3,369,903
Non-incentive/non-labor	$	3,275,783
Supplemental expenses	$	3,235,000
Total 2014 DSM budget	$	18,656,569

In comparison to the 2013 DSM budget, which anticipated the suspension of the natural gas portfolios in both Idaho and Washington, this budget represents an 8% reduction from the previous $20.2 million expectation for 2013. The falling budget despite the unexpected retention of the Washington natural gas DSM portfolio is primarily attributed to the reduced size of the electric portfolio caused by the lower avoided cost impact on the quantity of cost-effective measures.

DSM Funding Projections

Avista funds DSM operations through a non-bypassable system benefits charge levied through electric Schedule 91 in both Washington and Idaho and natural gas Schedule 191 in Washington. On an annual basis the Washington tariff rider is adjusted to deliver adequate funds for DSM operations including the amortization of any tariff rider balance. The Idaho tariff rider adjustment is performed as necessary without a specific regulatory timeline.

The Idaho natural gas tariff rider balance is more than sufficient for the remainder of financial obligations from this now suspended portfolio. The remaining funds will be distributed back to customers upon the completion and payment of the last of these obligations.

The Washington natural gas tariff rider balance is modestly in a customer owes shareholder position. This will require, if the balance persists, a slight increase in the tariff rider to offset this negative balance with future collections.

The electric tariff riders, both Idaho and Washington, are more significantly in a customer owes shareholder position. However the reduced acquisition in the foreseeable future will partially mitigate the need for an increase in these DSM tariff riders. The tariff rider adjustment will be revisited using updated information and more than likely a multiple year projection to calculate a tariff rider that will move this towards a zero balance.

As of the end of September 2013 the electric tariff rider balances for the Washington and Idaho are as follows:

Table 12: September 30th, 2013 Electric and Natural Gas DSM Tariff Rider Balances

	Washington		Idaho		
	Electric	Natural Gas	Electric	Natural Gas	Aggregate
Tariff Rider Balances as of 12/31/12	$ 1,593,629	$ 462,272	$ 522,697	$ (819,324)	$ 1,759,274
YTD Tariff Rider Collections through 9/30/13	$ (7,433,504)	$ (2,530,180)	$ (3,043,116)	$ -	$(13,006,800)
YTD Expenditures through 9/30/13	$ 11,185,591	$ 2,538,569	$ 6,075,974	$ 100,887	$ 19,901,021
Net Activity	$ 3,752,087	$ 8,389	$ 3,032,858	$ 100,887	$ 6,894,221
Tariff Rider Balances as of 9/30/13	$ 5,345,716	$ 470,661	$ 3,555,555	$ (718,437)	$ 8,653,495
Average Monthly Revenue	$ 802,423	$ 276,270	$ 348,813	$ 11,345	$ (4,353,305)
Balance expressed in months of average revenue	6.7	1.7	10.2	(63.3)	(2.0)

Positive balance values indicate that the customers owe shareholders

Avista incurs a 10% and 8.5% interest on all over-collections of Washington and Idaho electric revenue ("shareholder owes customer" balances) respectively, but does not receive any interest on under-collections.

There is no indication that there will be any difficulty obtaining sufficient funding to support the delivery of cost-effective DSM programs in 2014 or beyond.

Projections of future tariff rider surcharges will be performed as part of the periodic Schedule 91 (Washington and Idaho) and Schedule 191 (Washington only) filings based upon the information available at the time.

VII. Issues for 2014 Management Focus

Each year management issues emerge from the business planning process that clearly require special attention and focus in the upcoming year. Some of these issues were well-recognized prior to the business plan process while some of the issues rise to significance only after the comprehensive analytical review and planning process. The Company has identified two issues that are worthy of special focus and action in the following year. Those issues are outlined below.

Re-Positioning the DSM Portfolio for Success in a Lower Avoided Cost Environment

The Company's DSM portfolio is in the midst of a substantial transition precipitated by a dramatic decline in both the natural gas and electric avoided costs. The reduced avoided cost has led to the suspension of Idaho natural gas DSM and the substantial reduction in the quantity of cost-effective electric DSM opportunities. Even the Washington natural gas portfolio, now operating under a gross UCT metric, has proven to be marginally cost-effective when allocated infrastructure costs are included at the current level.

Reduced avoided costs creates multiple challenges for providing robust energy efficiency programs that meet required cost-effectiveness tests and, in turn, places pressure on defining the value to customers energy efficiency services and right-sizing administrative functions. For this reason, several changes to Avista's programs and tariffs have been made in the past year. This Plan outlines further programmatic and evaluation modifications on both a planning and real-time (i.e., adaptive management) basis.

Requiring ongoing analysis in the coming year is the value proposition of customer-facing programs and delivery mechanism. Historically, DSM programs have been incentive-based; more recently energy efficiency efforts have expanded the educational focus on benefits to participating customer. Energy savings have traditionally been tied to rebates and financial incentives. As dollar contributions decrease (in part due to lowered avoided costs) while technical and information assistance increase, the standard metric for administrative costs continues in a downward trend. Yet this technical and information assistance provides for reduced energy usage at the customer premise. Avista's typical metrics will show a higher percentage of administrative costs to incentives, but doesn't provide corresponding claimed savings.

Moreover, the unit cost of acquisition of energy efficiency is increasing for mature programs. When customers have been offered rebates for, say high-efficiency furnaces and water heaters

over a long period of time, the early adopters and those most attentive to these programs have already elected to participate. Newer technology, such as LEDs may provide for the next large "batch" of energy savings, but at higher cost.

In light of this, there is a risk, lacking management action or recognition of a changed approach to customer benefits, that the overall DSM portfolio could trend towards a “death spiral” where progressively slim cost-effective efficiency margins are unable to bear the burden of fixed infrastructure costs that are not proportionately decreasing or other benefits increasing. Avoidance of this potential future requires the increase in cost-effective acquisition or other benefits to dilute fixed infrastructure cost (relevant to the issue raised immediately below) and/or the reduction in fixed infrastructure cost. The projected percentage of utility funds expended for non-incentive purposes has increased to a historical high of 43% of the total funding for current DSM operations (which excludes many non-incentive supplemental expenditures).

The most productive approaches identified for addressing the issue of the growth of non-incentive expenditures relative to total utility cost include:

- Take steps to reduce labor cost by
    - making maximum use of attrition opportunities,
    - avoidance of new hires to the extent feasible, and,
    - seek opportunities for existing DSM personnel to be productive outside of the DSM area with commensurate allocation of labor costs to those areas

  Labor composes 51% of the projected 2014 non-supplemental non-incentive expenses. Although the loaded labor cost has decreased by 9% from the previous year budget that does not match the decrease in the overall portfolio. Given the contribution of labor cost to the non-incentive budget steps to control that expense must necessarily include reductions in labor cost.
- Comprehensively review EM&V expenditures as part of the anticipated issuance of an RFP for consultant services. As explained earlier in this document, many measures will be subject to fixed unit energy savings, usually derived from the RTF. This has the potential to considerably reduce the 2014 EM&V cost. The anticipated 2014 budget does project a 19% reduction in cost relative to 2013 despite this being the higher cost year in the biennium cycle. Nevertheless there may be opportunities for further reductions. Additional reductions may be possible by collapsing the number of presentations to Avista DSM staff into fewer but more cost-effective events.

- Comprehensively review of all other non-incentive expenditures with the goal of delivering an actual 2014 budget that is under the projected 49% of total (non-supplemental) utility expenditures. Further commit to placing the Company in a position where the projected 2015 budget will have a non-incentive component that is 40% (or less) of the non-supplemental total.
- Given the slim portfolio cost-effectiveness margins it would be worthwhile to review the potential for additional intra-year analysis into projected cost-effectiveness, net-to-gross management and increased detail and reporting of budget variances.

Overlaid on the above is an interest in revisiting the customer value proposition of energy efficiency services. Energy efficiency occurs through "higher" codes and standards; education and compliance are necessary components of fully realizing contemplated savings. Regional efforts through NEEA result in lower-cost measures in stores; further education of customer benefits would enhance market penetration. Mature energy efficiency measures still have a market; but reaching this market is more costly, while still under the bounds of cost-effectiveness requirements. The above have in-common genuine energy savings but not all savings are recognized within Avista's EM&V Framework. Thus the costs to promote these savings are not offset through the higher-incentive methodology.

This issue of the customer value proposition will likely not be fully analyzed by one company in one year. Rather this is an issue for focus, in partnership with stakeholders.

Make Use of RTF Unit Energy Savings

As a consequence of agreements to utilize RTF unit energy savings where those values exist, it is of increased importance to ensure that program managers offer programs in a manner that is consistent with RTF assumptions, barring substantial reason to the contrary.

By delivering RTF-compliant programs the Company is able to minimize the EM&V cost burden on the portfolio and to reduce the risk of uncertainty in claimed savings. The measures evaluated within this plan used RTF values when they were available for measures and it may be necessary to reposition the implementation of these programs to make use of this opportunity.

Retrospective on Past Issues for Management Focus

The 2013 DSM Business Plan identified four issues that were expected to require particular management action during that year to deliver a successful portfolio. It is a useful exercise to revisit those issues as part of the successive business planning effort to determine if further action is required. These four issues and their status are summarized below.

Incorporating the suspension of the natural gas DSM portfolio into the DSM strategy:

> At the time that the 2013 DSM Business Plan was completed Avista had filed for the suspension of both the Washington and Idaho natural gas DSM due to our projected inability to deliver a TRC cost-effective product. There were significant issues regarding how to adapt to the smaller portfolio and how to accommodate the transition from a dual-fuel to a single-fuel approach to DSM.
>
> Subsequently the WUTC directed Avista to continue to deliver natural gas DSM using a different cost-effectiveness metric. The IPUC suspended natural gas DSM as requested by Avista. Thus the natural gas issue did not have the fully anticipated impact on reducing the size as was expected. Depending on the metric, the Idaho natural gas portfolio was approximately 4% to 6% of the overall system combined fuel portfolio. However, a larger than anticipated reduction in electric avoided cost led to a decrease in the size of the electric portfolio for 2014. Thus, for different reasons, the Company has again identified the need to address the issue of a loss in the economy of scale in the portfolio.

The low income portfolio:

> The Company was concerned that we would be unable to achieve the degree of cost-effectiveness within the Idaho low income portfolio that would be necessary to ensure the long-term health and viability of that portfolio. The suspension of the Idaho natural gas portfolio contributes to an improvement in the portfolio performance, but that alone was not a sufficient degree of improvement.
>
> Additionally there was concern that current approach to managing cost-effectiveness, restricting measures to those that are cost-effective, would limit the CAP agency to very few eligible measures under current avoided costs.

Consequently the Company has initiated a plan to revise Idaho funding contracts to broaden the array of measures that could be funded and target the funding (except for the allowable 15% of health and human safety funding) more tightly to energy efficiency value.

Based upon these revisions it is anticipated that the 2014 Idaho low income portfolio will be marginally TRC cost-effective. This projection is, however, based upon a rather speculative estimate of the array of measures that the CAP agency will pursue.

Initiating an evaluation of the distribution efficiency initiative:

Avista's 2012-2013 Washington I-937 target of 108 GWh included a 32 GWh target for efficiency achieved through improvements in distribution efficiency. The WUTC established expectations regarding how the measurement of those achievements would be achieved through WUTC Order No. 1 in Docket No. UE-111882.
During 2013 the Company has reached an agreement with NEEA for the third-party measurement of Avista's SmartCircuits projects. NEEA has retained Navigant to perform this evaluation. The evaluation will be completed in sufficient time to include the results in the reporting of the Company's 2012-2013 I-937 acquisition.

Tariff revisions:

As part of the 2013 DSM Business Plan the Company anticipated the need to address increasing levels of heat pump installations in circumstances where natural gas space heating would be a more cost-effective approach for the customer. It had been speculated that the increase in heat pump penetration is an unanticipated consequence of regional efforts to increase ductless heat pump installations outside of the natural gas service territory and the heavy leveraging that HVAC manufacturers and contractors have layered upon the regional program.

The Company was proposing a revision that would substantially increase the incentives for electric-to-natural gas conversions to counter the aforementioned unanticipated consequence of regional programs. Though the Company has modified the Schedule 90 tariff to increase the cap on incentives for non-lighting projects with energy simple paybacks less than five years, there has been no modification to the tiered incentive structure for electric-to-natural gas conversions. The Company will be reviewing this market based upon recently available Residential Building Stock Assessments as well as

a Cadmus study specific to Avista's service territory to determine if the issue identified in 2013 has persisted and is in need of management action.

Appendix A: 2014 Program Plans

Each year the designated coordinator for programs contributing towards the acquisition of energy savings develops a plan for that program. The program plans attached within this appendix are not necessarily how the programs are referred to in customer-facing materials or outreach efforts, which may be modified for marketability purposes, but they do represent how the program is planned and managed.

The low income program does not have an attached program plan given the extensive discussion of that program within the main body of the business plan document,

Contained below, and in the order specified below, are nine residential program plans (including the proposed behavioral program), a single program plan covering all low-income programs and eleven nonresidential program plans.

Residential programs:

- Appliance recycling
- Energy Star Homes
- Fuel Efficiency
- HVAC
- Lighting
- Shell
- Water heat
- Opower residential behavioral program

Nonresidential:

- Energy Smart Grocer
- Food service equipment
- Green Motors
- Motor controls HVAC
- HVAC
- Nonresidential appliances
- Nonresidential prescriptive lighting
- Power management for personal computers
- Prescriptive shell
- Standby generator engine block heater
- Site-specific
- Cascade Strategic Energy Management

All evaluation, measurement and verification needs, whether specifically identified within the program plans or to be determined at a later date, will be incorporated into the EM&V commitments and plans that the Company has proposed for the overall DSM portfolio.

2014 Residential Appliance Recycling
Residential Washington/Idaho Portfolio

Measures Incorporated within the Program:

Measure	# of Units	kWhs	Incentive
Recycled Freezer	400	191,200	$ 12,000
Recycled Freezer- 2nd unit	100	47,800	$ 3,000
Recycled Refrigerator	1800	763,200	$ 54,000
Recycled Refrigerator-2nd unit	200	84,800	$ 6,000

Key Avista Staff:

Camille Martin is designated as the current Program Manager. The program contractor is JACO Environmental, Inc. (JACO) who manages the turn-key program that includes marketing, customer call center (customer unit pick-up requests & scheduling and complaints) haul-away, unit dismantling & recycling, administration of program and rebate processing as well as serving as primary contact for internal and external inquiries.

Technical Support: Tom Lienhard
Marketing Support: Mary Tyrie
Primary Contractor Contact: Bob Nicholas (JACO- Second Refrigerator & Freezer Recycling Program)

Program Eligibility and Incentives:

Any residential (Schedule 1) Avista electric customer is eligible for this program-up to two units.

Measure incentives are as follows:

Recycled Refrigerator- $30 Incentive
Recycled Freezer- $30 Incentive

Program Overview:

This program is intended to prompt the customer to decrease their energy used on inefficient second refrigerators or freezers by recycling and receive financial incentives. JACO Environmental Inc. (JACO) picks up to two Refrigerators and/or Freezers (units) from a customer's home when they request a pick-up. The pick-up service is free to the customer. A $30 rebate is provided for each operational refrigerator and/or freezer, up to two per household. The pre-1995 refrigerator(s) or freezer(s) are picked up and delivered to a recycling facility operated by JACO. JACO recycles nearly 95 percent of each refrigerator, and safely

dispose of the toxins and ozone-destroying chlorofluorocarbon gases from foam insulation. JACO works with local businesses to recycle glass, plastic and metal.
This program is applicable to residential electric or electric/gas combo customers seeking to recycle energy inefficient refrigerators or freezers, in Washington and Idaho. Key external stakeholders include JACO, homeowners, renters and landlords. Key internal stakeholders include contact center, accounts payable, marketing and corporate communications.

Implementation Plan:

The key drivers to delivering on the objectives of this program are the direct-incentives to fuel customer interest, and marketing efforts to drive customers to using the program.
The Second Refrigerator Recycling Program is an integral consideration in the ongoing every little bit campaign. The campaign builds broad awareness for energy efficiency as well as specific programmatic highlights.

Key to success is clear communication to customers on unit pick-up services, recycling and rebate requirements. Utility websites are also channels to communicate program requirements and highlight opportunities for customers.

2014 Residential Energy Star Homes
Residential Portfolio: Washington/Idaho

Measures Incorporated within the Program:

Definitions:

A certified Energy Star Home with Avista electric or both Avista electric and natural gas service provides energy savings beyond code requirements for space heating, water heating, shell, lighting and appliances. Space heating equipment can be either electric forced air or electric heat pump in Washington and Idaho; or a natural gas furnace in Washington. This rebate may not be combined with other Avista individual measure rebate offers (e.g.: high efficiency water heaters).

Projected 2014 Measure Impacts

	units	kWhs	therms	$ incentives
Electric Program (WA/ID)				
Energy Star Homes – stick built	10	89,910	0	$10,000
Energy Star/ECORated – manufactured	10	62,250		$8,000
Natural Gas Program (WA)				
Energy Star Homes – stick built	5	4,975	1,015	$3,250
Energy Star Homes – manufactured	2	1,990	406	$1,300

Key Avista Staff:

Overall Program management responsibilities: Renee Coelho
Program delivery support: Roxanne Williams & Rachelle Humphrey
Technical support: Energy Solutions Engineering (Avista)
Outreach support: Services Development & Marketing (Avista)
Analytical support: Policy, Planning and Analysis (Avista)

Program Eligibility and Incentives

Washington and Idaho residential electric customer (Schedule 1) with a certified Energy Star Home or Energy Star/ECORated Manufactured Home that is all electric or is Avista electric for lights and appliances and natural gas for space and water heating is eligible. Washington residential natural gas customer (Schedule 101) who has natural gas space heat and water is also eligible.

Rebates:

WA/ID Electric	
Energy Star Homes – stick built	$1000
Energy Star/ECORated Homes – manufactured	$800
WA Natural Gas	
Energy Star Homes – stick built	$650
Energy Star/ECORated Homes – manufactured	$650

Program Overview:

The Energy Star Home program leverages the regional and national effort surrounding Department of Energy and Environmental Protection Agency's Energy Star label. Avista and partnering member utilities of the Northwest Energy Efficiency Alliance (NEEA) have committed significant resources to develop and implement a program that sets standards, trains contractors and provides 3rd party verification of qualifying homes. NEEA in effect administers the program and Avista pays the rebate for homes that successfully make it through the process and are labeled Energy Star. Additionally, after the launch of NEEA's regional effort, the manufactured homes industry established manufacturing standards and a labeling program to obtain Energy Star certified manufactured homes. While the two approaches are unique, they both offer 15-25% savings versus the baseline and offer comparable savings.

Implementation Plan:

Program revisions for participation in 2014 include distinguishing between an Energy Star stick built home and manufactured home. This distinction will result in a different rebate amount that is higher than in previous years. These changes will have advance notice to customers in the form of 90 days to submit paperwork under old requirements. This usually includes at a minimum a direct mail or email communication to trade allies and employees; updates to the rebate information on avistautilities.com and social media sites; notification on program application forms and other communication channels. Program updates may also be presented at a variety outreach events, vendor trainings and hosted webinars.

The Energy Star Home program promotes to builders and home owners a sustainable, low operating cost, environmentally friendly structure as an alternative to traditional home construction. As a duel fuel utility, Avista offers both electric and natural gas and as a result has structured the program to account for homes where either a single fuel or both fuels are utilized for space and water heating needs. IThe Company continues to support the regional program to encourage sustainable building practices.

2014 Fuel Efficiency Program

Residential Portfolio: Washington/Idaho

Measures Incorporated within the Program:

Definitions:

For Washington and Idaho – electric heated homes may qualify to convert their existing straight resistance electric space heat to a natural gas furnace; and/or their existing electric water heater to a natural gas water heater.

Projected 2014 Measure Impacts

Program	units	kWhs	therms	$ incentives
Electric to natural gas furnace	55	660,660	(27,373)	$49,500
Electric to natural gas water heat	40	161,240	(8,600)	$12,000

Key Avista Staff:

Overall Program management responsibilities: Renee Coelho
Program delivery support: Roxanne Williams and Rachelle Humphrey
Technical support: Energy Solutions Engineers (Avista)
Outreach support: Services Development & Marketing (Avista)
Analytical support: Policy, Planning and Analysis (Avista)

Program Eligibility and Incentives

Any residential electric (Schedule 1) Avista customer is eligible for this program regardless of what utility provides natural gas service. Customers with existing natural gas service are eligible if billing records indicate that they did not have natural gas service for that end-use prior to the date of installation. High-efficiency natural gas equipment is not required to be eligible for the program.

Measure incentives are as follows:

Electric to natural gas conversion – furnace	$900
Electric to natural gas conversion – water heat	$300

Program Overview:

The fuel efficiency rebate is to encourage customers to consider converting their electric space and water heat to natural gas. Avista has offered a natural gas fuel conversion program since the early 90's. While the majority of the service territory may have benefitted from this type of program and variations of it in recent years; there may be customers who have just received natural gas to their neighborhood or who may be a new resident in a home that was never converted to gas. The direct use of natural gas continues to be the most efficient fuel choice when available, and over time offers the most economic value in the operating costs of the equipment. While natural gas prices may be falling, the cost of infrastructure continues to rise, both for the utility and for the customer's installation cost.

Vendors generate most of the participants in the program as they use the rebate as a sales tool for their services. Utility website promotion, vendor training, retail location visits and presentations at various

customer events throughout the year are some of the communication methods that encourage program participation.

Implementation Plan:

Program revisions for participation in 2014 will be an increased rebate for both the furnace and water heater conversion. These changes will have advance notice to customers in the form of 90 days to submit paperwork under old requirements. This usually includes at a minimum a direct mail or email communication to trade allies and employees; updates to the rebate information on avistautilities.com and social media sites; notification on program application forms and other communication channels. Program updates may also be presented at a variety outreach events, vendor trainings and hosted webinars.

This is a prescriptive rebate that is paid upon installation and submittal of all relevant documentation. Any residential electric (Schedule 1) customers who heat their homes and water with Avista electric are eligible to apply. Avista will review energy usage as part of the program eligibility requirement for replacement of electric straight resistance heat with natural gas. The customer must demonstrate a winter heating season electricity usage of 4,000 kWh in order to be eligible.

2014 HVAC Program

Residential Portfolio: Washington/Idaho

Measures Incorporated within the Program:

Definitions:

For Washington and Idaho: electric customers may be eligible for a rebate for the installation of a variable speed motor on their forced air heating equipment or consider converting their electric straight resistance space heat to an air source heat pump .

For Washington: natural gas space heating customers may be eligible for a rebate for the installation of a high efficiency natural gas furnace or boiler

Projected 2014 Measure Impacts:

Electric Program (WA/ID)	**units**	**kWhs**	**therms**	**$ incentives**
Variable speed motor	540	236,817	0	$54,000
Electric to air source heat pump	130	595,010	0	$117,000

Natural Gas Program (WA only)	**units**	**kWhs**	**therms**	**$ incentives**
High efficiency natural gas furnace	1,125	185,625	115,875	$281,250
High efficiency natural gas boiler	15		1,395	$3,750

Key Avista Staff:

Overall Program management responsibilities: Renee Coelho
Program delivery support: Roxanne Williams & Rachelle Humphrey
Technical support: Energy Solutions Engineering (Avista)
Outreach support: Services Development & Marketing (Avista)
Analytical support: Policy, Planning and Analysis (Avista)

Program Eligibility and Incentives

Any Washington and Idaho residential electric customers (Schedule 1) who heat their homes with Avista electric are eligible to apply. Any Washington residential natural gas customers (Schedule 101) who heat their homes with natural gas are also eligible to apply. Avista will review energy usage as part of the program eligibility requirement ;customer must demonstrate a winter heating season electricity usage of 4,000 kWh for electric resistance to air source heat pump conversion.

Proposed Rebates for 2014:

Variable speed motor	$100
Electric to air source heat pump	$900
High efficiency natural gas furnace	$250
High efficiency natural gas boiler	$250

Program Overview:

The HVAC program encourages residential customers to select a high efficiency solution when making energy upgrades to their home. This prescriptive rebate approach issues payment to the customer after measure has been installed. Eligibility guidelines for participation include but may not be limited to: confirmation of electric or natural gas space heating usage, copies of project invoices and AHRI documentation. Vendors generate most of the participants in the program as they use the rebate as a sales tool for their services. Utility website promotion, vendor training, retail location visits and presentations at various customer events throughout the year are some of the communication methods that encourage program participation.

Implementation Plan:
Program revisions for 2014 include: removal of high efficiency air source heat pump rebate as it is no longer a cost effective measures to install. Natural gas programs continue to be available in Washington due to the re-evaluation of the programs cost-effectiveness test. The measures will now be reviewed under Utility Cost Test criteria instead of the Total Resource Cost test.

Any program changes for 2014 will have advance notice to customers in the form of 90 days to submit paperwork under old requirements. This usually includes at a minimum a direct mail or email communication to trade allies and employees; updates to the rebate information on avistautilities.com and social media sites; notification on program application forms and other communication channels. Program updates may also be presented at a variety outreach events, vendor trainings and hosted webinars

During this writing, the Company received results from an Avista sponsored General Population Survey that was fielded in mid-2013. Approximately 10% of customer's surveyed plan to replace either their heating and/or cooling equipment in the next couple of years. While high efficiency cooling equipment is not cost effective and the rebate amount for natural gas furnaces/boilers has been reduced, the Company will continue to promote the program availability at a minimum, through the channels listed above.

2014 Residential Lighting Program
Residential Washington/Idaho Portfolio

Measures Incorporated within the Program:

Simple Steps, Smart Savings:

Measures	Measures continued
Twists:	15W R30 Reflector
9W Spiral CFL	23W R38 Reflector
13W Spiral CFL	26W R38 Reflector
14W Spiral CFL	26W R40 Reflector
15W Spiral CFL	23W Outdoor Reflector
18W Spiral CFL	26W Outdoor Reflector
20W Spiral CFL	23W R38 High Heat Reflector
23W Spiral CFL	7W Candelabra
30W Spiral CFL	9W Candelabra
40W Spiral CFL	13W Candelabra
13W Daylight	12W Globe
23W Daylight	15W Globe
9W A-lamp	LEDs:
15 W A-lamp	8 W R20 Reflector
14W A19	12-15 W PAR30 Reflector
Specialty CFLs:	18-20 W PAR38 Reflector
14W Candle Base BW	13-15 W BR30 Reflector
16W R30 Flood	18-23 W BR38 Reflector
23W R40 Flood	14-17 W BR40 Reflector
12,20,26 watt 3-Way	19 W Omnidirectional
33W 3-Way	8-18 W A-19 or Globe
12,23,29 watt 3-Way	
12, 23, 34 watt 3-Way	
11W R20 Reflector	
14W Reflector	

Product Description	Projected Sales	kWh Savings	Incentive	Admin Fee	Total
General Purpose CFL	320,957	5,456,269	$160,478.50	$160,478.50	$320,957
Specialty CFL	94,317	1,980,657	$188,634	$23,579.25	$212,213.25
LED Bulb	35,590	711,800	$106,770	$17,795	$124,565
LED Fixture	8,927	214,248	$71,416	4,463.50	$75,879.50
GRAND TOTAL	***459,791***	***8,362,974***	***$527,298.50***	***$206,316.25***	***$733,614.75***

CFL Recycling Program:

CFL Recycling program has no energy efficiency measures. CFL recycling locations are being provided to customers as a convenience, throughout Avista's service territory, while Avista is promoting the use of CFLs.

Key Avista Staff:

Program Management: Camille Martin- Program management responsibilities include ongoing process evaluations, performing outreach to retailers, ensuring that the proper program tracking is in place and coordinating all implementation aspects of the program.

Technical Resource: Carlos Limon

Contracted Services: Fluid Market Strategies (Fluid)- Key contact is Ryan Crews. Fluid provides program management responsibilities include coordinating program marketing efforts, performing outreach to retailers, ensuring that the proper program tracking is in place and coordinating all implementation aspects of the program.

Analytical and evaluation support is coordinated through Avista Policy, Planning and Analysis Team.

Program Eligibility and incentives:

This is applicable to existing residential customers with electric service provided by Avista with rate schedule 1. This is applicable to residential electric customers, in Washington and Idaho. Key external stakeholders include homeowners, landlords (and renters), retailers and trade allies. Key internal stakeholders include contact center, accounts payable, marketing and corporate communications.

Manufacturer buy-down residential incentives-

Twists- $0.50 per CFL
Specialty CFL- $2.00 per CFL
LEDs- $3 per LED

Program Overview:

This program is intended to prompt the residential customer to increase the energy-efficiency of their lighting and showerhead products through direct financial incentives. It indirectly supports the infrastructure and inventory necessary to ensure that the installation of high-efficiency lamps and showerheads, are viable options for the customer.

There is significant opportunity for efficient lighting improvements in customer residences. Energy savings claimed are based on Regional Technical Forum (RTF) deemed savings. Incentives also encourage customers to increase efficiency before burn-out of the existing lighting.

If each of Avista's 352,000 electric customers changed out one CFL light bulb, it would save almost 12 megawatts of electricity and avoid 3.6 million tons of CO2 emissions based on Avista's renewable resource mix. That's the equivalent of removing the greenhouse gas emissions of 611 passenger vehicles.

In addition to using up to 75 percent less energy than incandescent light bulbs, CFLs also last up to seven times longer than standard lighting. Conservative estimates show a $30 savings over the life of a CFL.

The Simple Steps, Smart Savings program makes it easy for customers to participate in the program. The BPA "Simple Steps, Smart Savings" regional promotion has built on the success of the Change a Light CFL promotion by extending the current activities. "Simple Steps Smart Savings" provides Avista and its customers with a simple delivery mechanism of using CFL markdown promotions. This program is intended to prompt the customer to increase the energy-efficiency of their lighting through indirect financial incentives through retail buy-down at most big box in the region. It also indirectly supports the infrastructure and inventory necessary to ensure that the installation of high-efficiency lightings a viable option for the customer through local retailers.

Implementation Plan:

The key drivers to delivering on the objectives of this program are the direct-incentives to fuel customer interest, and marketing efforts to drive customers to using the program.

The BPA "Simple Steps, Smart Savings" team launched the promotion in 2010. "Simple Steps Smart Savings" provides Avista Utilities with a retail markdown program.

Products included for incentives in the Promotion:
Twist CFLs: Regular and Daylight Twists
Specialty CFLs: Reflectors, Globes, Candelabras, Torpedoes, Outdoor Lighting, and A-lamps
LEDs: Reflectors-PAR 30,38 &40 and BR 30, 38 &40; A-Lamp, Globe and Retrofit Downlights

The key to success of this program is clear communication to customers through Fluid website on the program and highlight opportunities for customers.

2014 Shell Program

Residential Portfolio: Washington/Idaho

Measures Incorporated within the Program:

Definitions:

For Washington and Idaho – electric heated homes: attic insulation (existing level of R19 or less with new insulation of R10 or greater); wall insulation (existing level of R5 or less); floor insulation (existing level of R5 or less); window replacement to u-value of .22; and Duct Sealing for manufactured and mobile homes.

For Washington only – natural gas heated homes: attic insulation (existing level of R19 or less with new insulation of R10 or greater); wall insulation (existing level of R5 or less); floor insulation (existing level of R5 or less); window replacement to u-value of .22; and Duct Sealing for manufactured and mobile homes.

Projected 2014 Measure Impacts:

Electric Program (WA/ID)	units/avg. sqft	kWhs	therms	$ incentives
Attic insulation	100/1,155	72,765	0	$17,325
Wall insulation	20/892	41,175	0	$18,910
Floor insulation	10/837	18,910	0	$2,093
Windows	800/100	2,044,800		$320,000

Electric Program (WA only)	units(homes)	kWhs	therms	$ incentives
Duct Sealing	900	2,494,320	27,465	$288,000

Natural Gas Program (WA only)	units/avg. sq ft	kWhs	therms	$ incentives
Attic insulation	100/1,070		7,490	$16,050
Wall insulation	50/764		2,674	$9,550
Floor insulation	10/562		393	$1,124
Windows	200/98	127,400	147,000	$78,400
Duct Sealing	600		27,465	$192,000

Key Avista Staff:

Overall Program management responsibilities: Renee Coelho & Greta Zink
Program delivery support: Roxanne Williams & Rachelle Humphrey
Technical support: Energy Solutions Engineering (Avista)
Outreach support: Services Development & Marketing (Avista)
Analytical support: Policy, Planning and Analysis (Avista)

Program Eligibility and Incentives

Washington and Idaho residential electric customers (Schedule 1) who heat their homes with Avista electric are eligible to apply. Washington residential natural gas customers (Schedule 101) who heat

their homes with natural gas are also eligible to apply. Avista will review energy usage as part of the program eligibility requirement for insulation measures. Customer must demonstrate a winter heating season electricity usage of 4,000 kWh or 160 therms.
The Duct Sealing program is designed to assist Avista residential customers living in manufactured and mobile homes (MH) who primarily heat their homes with Avista natural gas or electricity in testing and sealing the ductwork connected to the forced air heating and/or cooling systems in their residences.

Proposed Rebates for 2014:

Attic insulation	$0.15/ sq. ft
Wall insulation	$0.25/sq. ft
Floor insulation	$0.20/sq. ft
Windows	$4.00/sq. ft
Duct Sealing (total budget)	$480,000

Program Overview:
The shell program encourages residential customers to improve their home's envelope with upgrades to insulation and windows. This prescriptive rebate approach issues payment to the customer after measure has been installed. Eligibility guidelines for participation include but may not be limited to: confirmation of electric or natural gas heating usage, invoices, and insulation data. Pre and/or post-inspection of insulation may occur as necessary throughout the year.

Vendors generate most of the participants in the program as they use the rebate as a sales tool for their services. Utility website promotion, vendor training, retail location visits and presentations at various customer events throughout the year are some of the communication methods that encourage program participation.

The Duct Sealing program is primarily implemented by a third party contractor (WSU/UCONS). The services are offered to customers free of charge; with 60% of the funding coming from Avista and 40% being provide through WSU Community Energy Efficiency Program (CEEP). UCONS, with the assistance of Avista's program manager will identify, contact and recruit potential participants; market and promote the program to appropriate audiences. UCONS is responsible for all testing, duct sealing and the installation of any direct install measures that might be part of the agreement.

Implementation Plan:
Program revisions for participation in 2014 include: existing attic insulation levels will be increased; rebate amounts for attic, floor and wall insulation will be reduced and window rebates return to the portfolio with a u-value of .22.

The Duct Sealing program is currently under review for implementation in 2014. At the time of this writing, the contract is still under negotiation.

Any program changes for 2014 will have advance notice to customers in the form of 90 days to submit paperwork under old requirements. This usually includes at a minimum a direct mail or email communication to trade allies and employees; updates to the rebate information on avistautilities.com

and social media sites; notification on program application forms and other communication channels. Program updates may also be presented at a variety outreach events, vendor trainings and hosted webinars.

2014 Water Heat Program

Residential Portfolio: Washington/Idaho

Measures Incorporated within the Program:

Definitions:

For Washington and Idaho: high efficiency electric water heater (.93 Energy Factor) and Simple Steps, Smart Savings showerheads

For Washington: high efficiency natural gas water heater (.60 Energy Factor for 50 gallon; .62 Energy Factor for 40 gallon) and tankless water heater (.85 Energy Factor) and Simple Steps, Smart Savings showerheads

Projected 2014 Measure Impacts:

Electric Program (WA/ID)	units	kWhs	therms	$ incentives
High efficiency electric water heater	120	15,120	0	$2,400
Natural Gas Program (WA)				
High efficiency natural gas water heater	100		900	$2,000
Tankless water heater	60		3,471	$7,800
Simple Steps, Smart Savings (showerheads)	1,188	133,716	2,093	$8,316

Key Avista Staff:

Overall Program management responsibilities: Renee Coelho & Camille Martin
Program delivery support: Roxanne Williams & Rachelle Humphrey
Technical support: Energy Solutions Engineering (Avista)
Outreach support: Services Development & Marketing (Avista)
Analytical support: Policy, Planning and Analysis (Avista)

Program Eligibility and Incentives

Washington and Idaho residential electric customers (Schedule 1) who heat their hot water with Avista electric are eligible to apply. Washington residential customers (Schedule 101) who heat their hot water with natural gas are also eligible for participation.

Proposed Rebates for 2014:

High efficiency electric water heater	$20
High efficiency natural gas water heater	$20
Tankless water heater (natural gas)	$130
Simple Steps, Smart Savings (showerheads)	$7 buydown (*reflected in point of purchase price)*

Program Overview:

The water heat program encourages residential customers to select a high efficiency solution when making energy upgrades to their home. This prescriptive rebate approach issues payment to the customer after measure has been installed. Eligibility guidelines for participation include but may not be limited to: confirmation of electric or natural gas usage, invoices, and AHRI documentation.

Vendors generate most of the participants in the program as they use the rebate as a sales tool for their services. Utility website promotion, vendor training, retail location visits and presentations at various customer events throughout the year are some of the communication methods that encourage program participation.

Simple Steps, Smart Savings is a regional program with the intention of prompting the residential customer to purchase low-flow showerheads for their homes. The program is primarily implemented through a third party vendor (Fluid Market Strategies) to offer retail buy-down of the product at most big box locations. It indirectly supports the infrastructure and inventory to ensure the availability of a variety of low-flow showerheads. Avista's funding assists with the buy-down of the product and will include either a 2.0, 1.60 or 1.5 gallon per minute showerhead.

Implementation Plan:
Program revisions for 2014 include: a reduced electric water heater rebate and for Washington customers the inclusion of a tankless natural gas water heater rebate. The inclusion of tankless water heaters is a result of the re-evaluation of natural gas programs cost-effectiveness test under the Utility Cost Test parameters instead of the Total Resource Cost Test.

One key to success for implementation is clear communication to customers, vendors, property managers and retail locations about program and rebate requirements. Information about the program can be found on the application form, through the website and through other outreach events. Social media channels, partnerships with local media groups and various other print media opportunities provide many energy efficiency tips, opportunities for improvements and a call to action to participate in these programs.

Any program changes for 2014 will have advance notice to customers in the form of 90 days to submit paperwork under old requirements. This usually includes at a minimum a direct mail or email communication to trade allies and employees; updates to the rebate information on avistautilities.com and social media sites; notification on program application forms and other communication channels. Program updates may also be presented at a variety outreach events, vendor trainings and hosted webinars.

2014 Opower Behavioral Program
Residential Portfolio: Washington/Idaho
2013 – 2016 Peer Comparison Report Program

Measures Incorporated within the Program:
June of 2013, Avista launched a three year Residential Behavioral Program using the Opower platform for Home Energy Reports (HER). 73,500 electric customers in Washington and Idaho were targeted for these reports and will continue receiving reports throughout the duration of this three year program unless they opt-out or move. No one is allowed to opt-in.

Comparison to neighbors, yearly usage tracker, comparison to self and three no-cost, low-cost and higher-cost energy savings tips are included on each HERs. Once or twice a year, Avista promotions are included on the HERs. These insights and comparisons drive customers towards behavior changes that can positively impact their usage and lower their energy bill. The library of energy savings tips which the HERs draws from includes over 100 measures (no/low and higher cost ideas) which are dynamically added to the reports.

Key Avista Staff:

- Leona Doege is designated as the current Program Manager. Program management responsibilities include ongoing process evaluations, coordinating program marketing efforts, vendor management, coordinating program updates and support to Customer Service and coordinating all implementation aspects of the program.
- Sandra Hoye is designated to assist with Tier 2 level Customer Support for customer calls regarding the program.

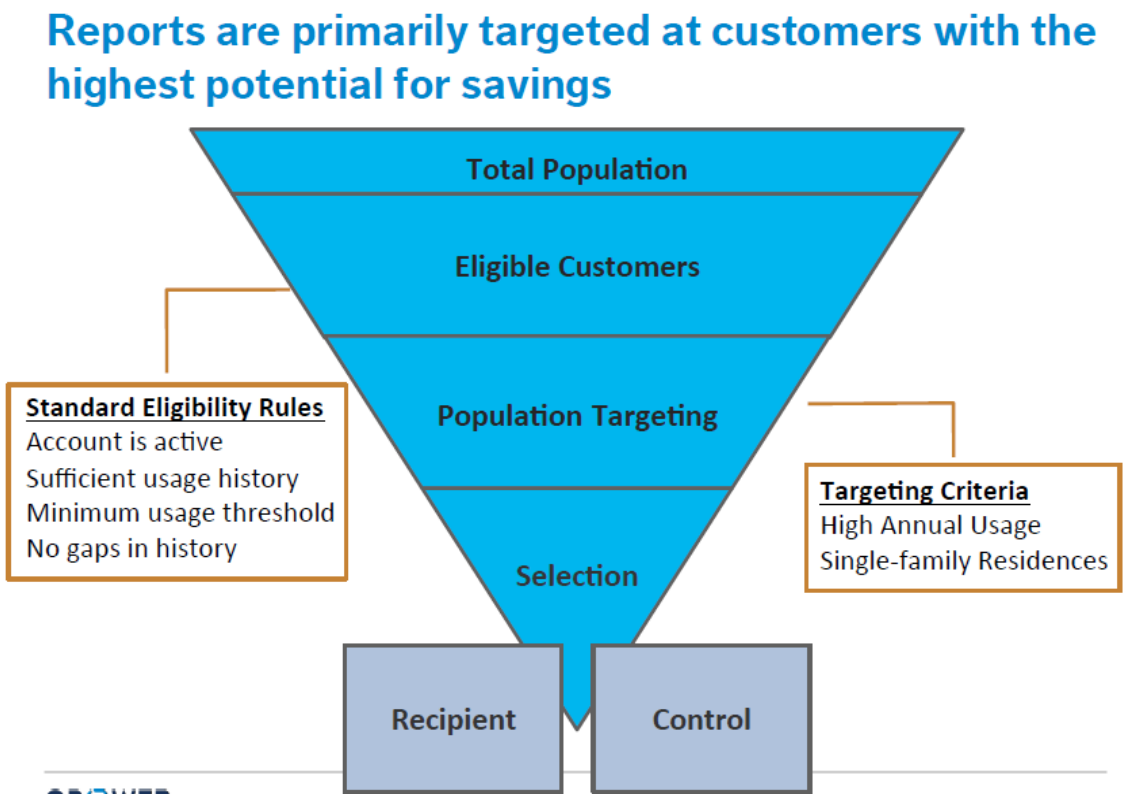
Technical support: Avista's Enterprise Technology team and Opower
Outreach support: Mary Tyrie
Analytical support: Avista Policy, Planning and Analysis team

Program Eligibility:
The HER Program is opt-out, which distinctly varies from Avista's normal opt-in programs historically offered.

To allow for normal attrition, a 5% increase was made to our original program size of 70,000, thus yielding the 73,500 initial HER mailings in June 2013. Initially, 48,300 HER were mailed to Washington customers and 25,200 HER were sent to Idaho customers. These customers have a load profile consistent with year round electric usage, not seasonal. Other factors are listed below.

- High electricity consumption customers which had 99 other homes with like usage in a 100 mile radius were targeted for the HER.
- All participants are an Avista electric customer.
- Some customers, approximately 42% also have a gas meter. Reports have no gas or dual fuel focus. This is an electric only program.
- A control group of similar characteristics was randomly selected by Cadmus. 13,000 in each state (Washington and Idaho) were selected.

A representation of the selection process is shown below.



Program Overview:
Avista has joined over 80 other utilities throughout the United States using the Opower platform to implement a behavioral program built on mailing peer comparison reports, also known as Home Energy Reports. These programs have proven success at saving customers energy and money, and thus providing energy acquisition for Avista. We also believe there is customer engagement value to this program as well.

We are expecting to continue providing the same set of customers these reports for a three year term. The cadence of the reports began with a "burst" method of sending out a report every month for the first three months followed by a bi-monthly mailing of the reports thereafter and continuing until June 2016.

Implementation Plan:
Avista will monitor savings provided from Opower as results are shared for cost effectiveness and follow-up on an annual basis with a third party evaluator such as Cadmus to verify those savings. As stated above, there is a treatment group and a control group. This method is called a randomize control trial and measures the aggregate energy performance of the treatment group to the control group.

2014 Non-Res EnergySmart Grocer Program

Non-Res Washington/Idaho Portfolio

Measures Incorporated within the Program:

There are approximately 70 measures for the EnergySmart program. The measure list is not part of the contract language and by mutual consent the measure list is a fluid document that is adjusted as needed. Projected 2014 Measure Impacts are 2,489 units and 3,500,000 kWh with incentives ranging from $1 to $250.

Key Avista Staff:

Overall Program management responsibilities: PECI/Greta Zink
Program delivery support: PECI/Greta Zink
Technical support: PECI/Energy Solutions Engineering (Avista)
Outreach support: PECI/Services Development & Marketing (Avista)
Analytical support: Policy, Planning and Analysis (Avista)

Program Eligibility and Incentives

Any commercial (Schedule 11, 21, 25) Avista electric customer installing qualified equipment is eligible for this program. Please see above for incentives.

Program Overview:

This program is intended to prompt the customer to increase the energy efficiency of their refrigerated cases and related grocery equipment through direct financial incentives. The EnergySmart Program was selected as the preferred bid through the 2006/2007 commercial refrigeration RFI/RFP process. The program was launched in late 2007 and is facilitated through PECI. A Field Energy Analyst with expertise in commercial refrigeration provides customers with a no cost audit of the refrigeration in their facility. The customer receives a detailed energy savings report regarding potential savings and is guided through the process from inception through the payment of incentives for qualifying equipment. PECI utilizes a modeling program called Grocer Smart to determine savings. In addition to the potential savings that will be achieved through the measures implemented, customers receive technical assistance and comprehensive audits at no charge. Refrigeration often represents the primary electricity expense in a grocery store or supermarket. Although the potential for savings is high, it is often overlooked because of the technical aspect of the equipment. This program provides a concentrated effort to assist customers through the technical aspects of their refrigeration systems while providing a clear view of what savings can be achieved. Measures are continually looked at to make sure they are cost effective and new measures are considered as they become available.

Implementation Plan:

PECI is handling the outreach effort through industry contacts, cold calling and contractor relationships. The account executives are also providing customer referrals with permission from the customers. This program is available to all nonresidential retail electric customers with refrigeration facilities. Incentives are offered as a result of the facility audit report for potential savings. PECI guides this process from inception through the payment of the incentives. The DSM Program Management team monitors the contract, program, evaluates new and existing measures, inputs the monthly results and runs analysis on program measures. Account executives drive customers to the program. The Avista Website is also used to communicate program requirements, incentives and forms. The Every Little Bit Campaign is focusing on commercial customers again this year and will bring a broader awareness for energy efficiency to the business segment.

2014 Non-Res Commercial Food Service Equipment Program

Non-Res Washington/Idaho Portfolio

Measures Incorporated within the Program:

Measure definitions:

The following Commercial Food Service Equipment is available for Avista Utilities nonresidential electric customers in Idaho and nonresidential electric/natural gas customers in Washington who are installing new or replacing the commercial food service equipment below:

Projected 2014 Measure, Incentives and Impacts

Energy Star Electric Fryer $300 24,490 kWh
Energy Star Natural Gas Fryer $1,000 1,263 Therms
Energy Star 3 Pan Electric Steam Cooker $70 888 kWh
Energy Star 4 Pan Electric Steam Cooker $100 888 kWh
Energy Star 5 Pan Electric Steam Cooker $135 1,671 kWh
Energy Star 6 Pan Electric Steam Cooker $160 2,020 kWh
Energy Star 10 Pan Electric Steam Cooker or Larger $180 284,532 kWh
Energy Star 3 Pan Natural Gas Steam Cooker $1,300 1,172 Therms
Energy Star 4 Pan Natural Gas Steam Cooker $1,700 1,560 Therms
Energy Star 5 Pan Natural Gas Steam Cooker $2,200 1,947 Therms
Energy Star 6 Pan Natural Gas Steam Cooker $2,600 2,335 Therms
Energy Star Hot Food Holding Cabinet, Half Size $250 1,265 kWh
Energy Star Hot Food Holding Cabinet, Full Size $750 4,100 kWh
Energy Star 10 Pan Natural Gas Steam Cooker or Larger $3,200 2,802 Therms
Energy Star Natural Gas Convection Oven $700 1,292 Therms
Energy Star Electric Convection Oven $225 16,720 kWh
Energy Star Electric Combination Oven $1,000 92,601 kWh
Energy Star Natural Gas Combination Oven $1,000 2,258 Therms
Energy Star Ice Machines $100-$380 750 kWh
Super Efficient Ice Machines $40-$200 31,581 kWh
Energy Star Natural Gas Rack Oven $235 4,136 Therms
Energy Star Dishwasher $300-$650 56,507 kWh and 1,215 Therms
Pre Rinse Sprayers .61 to .80 GPM Electric $25 26,730 kWh
Pre Rinse Sprayers .61 to .80 GPM Natural Gas $25 2,515 Therms

Key Avista Staff:

Overall Program management responsibilities: Greta Zink
Program delivery support: Greta Zink
Technical support: Energy Solutions Engineering (Avista)
Outreach support: Services Development & Marketing (Avista)
Analytical support: Policy, Planning and Analysis (Avista)

Program Eligibility and Incentives

Any non residential (Schedule 11, 21, 25) Avista electric customer in Washington or Idaho and any non residential (Schedule 101,111, 121) Avista natural gas customer in Washington installing qualifying equipment is eligible for this program.

Please see above for incentives.

Program Overview:

This program offers incentives for commercial customers who purchase or replace food service equipment with Energy Star or higher equipment. This equipment helps them save money on energy costs. This prescriptive rebate approach issues payments to the customer after the measure has been installed. Eligibility guidelines for participation include, but may not be limited to: confirmation of electric or natural gas usage, invoices and equipment data.

Implementation Plan:

All customer-facing aspects of this program are prescriptively based. Customers must return to Avista a completed rebate form within 90 days after the installation has been completed. Avista will send an incentive check to the customer (or their designee) generally within six to eight weeks. Rebates will not exceed the total amount on the customer invoice. Each rebate will be qualified and processed with the current Energy Star Commercial Kitchen calculator to determine the savings. The key drivers to delivering on the objectives of the program are the direct incentives to fuel customer interest, marketing efforts and account executives to drive customers to the program, and ongoing work with trade allies to ensure that customer demand can be met. The Avista Website is also used to communicate program requirements, incentives and forms. The Every Little Bit Campaign is focusing on commercial customers again this year and will bring a broader awareness for energy efficiency to the business segment.

2014 Non-Res Green Motors Program

Non Res Washington/Idaho Portfolio

Measures Incorporated within the Program and 2014 Projected Measure Impacts:

15 thru 5,000 HP Green Motor Rewinds for Industrial and Agricultural customers.

	Units	kWh
15 thru 5,000 HP Motor Rewinds	31	154,583

Key Avista Staff:

Overall Program management responsibilities: Green Motors Initiative/Greta Zink
Program delivery support: Green Motors Initiative/Greta Zink
Technical support: Energy Solutions Engineering (Avista)
Outreach support: Services Development & Marketing (Avista)
Analytical support: Policy, Planning and Analysis (Avista)

Program Eligibility and Incentives

Any commercial (Schedule 11, 21, 25, 31) Avista electric customer that does a qualified green motors rewind is eligible for this program. Incentives are paid as a credit off the invoice at the time of the rewind. A $1 per HP incentive goes to the customer and a $1 per HP incentive is paid to the service center.

Program Overview:

The Green Motors Initiative is to organize, identify, educate, and promote member motor service centers to commit to energy saving shop rewind practices, continuous energy improvement and motor driven system efficiency. Green Motors Program Group launched the Green Motors Initiative in 2009 to work with northwest regional utilities and other sponsoring organizations to provide incentives, through GMPG's member motor centers, for qualifying motors meeting the GMPG's standards. Avista joined this effort in 2008 offering the program to electric customers who participate in the green rewind program from 15 hp to 5,000 hp motors. This program provides an opportunity for Avista customers to participate in a regional effort. Without this program, this market is difficult for us to reach as a local utility.

Implementation Plan:

The Green Motors Initiative is a third party program that handles the measures from inception to rebate payment. There is an admin fee based on the kWh savings for Green Motors Partners. The incentive is split between the service center and the customer. The customer receives their incentive as an immediate discount off their bill. The DSM Program Management team oversees the contract, monitors the program and does input for savings and incentive information. The Avista Website is also used to communicate program requirements, incentives and forms. The Every Little Bit Campaign is focusing on commercial customers again this year and will bring a broader awareness for energy efficiency to the business segment.

2014 Non-Res Commercial Motor Controls HVAC Program

Non-Res Washington/Idaho Portfolio

Measures Incorporated within the Program and Projected 2014 Measure Impacts:

These measures are available for Avista Utilities electric customers who are doing a retrofit of their variable frequency drives.

Measure definitions	Units	kWh
VFD Fans	204	208,955
VFD Cooling Pump Only	102	111,531
VFD Heat Pump only or Combined Heating & Cooling Pump	102	179,513

Key Avista Staff:

Overall Program management responsibilities: Greta Zink
Program delivery support: Greta Zink
Technical support: Energy Solutions Engineering (Avista)
Outreach support: Services Development & Marketing (Avista)
Analytical support: Policy, Planning and Analysis (Avista)

Program Eligibility and Incentives

Any non residential (Schedule 11, 21, 25) Avista electric customer installing qualified equipment is eligible for this program.

VFD Fans	$80
VFD Cooling Pump Only	$85
VFD Heat Pump only or Combined Heating & Cooling Pump	$140

Program Overview:

This program is intended to prompt the customer to increase the energy efficiency of their fan or pump applications with variable frequency drives through direct financial incentives. This prescriptive rebate approach issues payments to the customer after the measure has been installed. Eligibility guidelines for participation include, but may not be limited to: confirmation of electric usage, invoices and verification of HP of motor.

Implementation Plan:

- All customer-facing aspects of this program are prescriptively based. Customers must return to Avista a completed rebate form within 90 days after the installation has been completed. Avista will send an incentive check to the customer (or their designee) generally within six to eight weeks. Rebates will not exceed the total amount on the customer invoice. Each rebate will be qualified and processed with the current commercial HVAC Variable Frequency Drive Retrofit calculator to determine the savings and incentive. The key drivers to delivering on the objectives of the program are the direct incentives to fuel customer interest, marketing efforts and account executives to drive customers to the program, and ongoing work with trade allies to ensure that customer demand can be met. The Avista Website is also used to communicate program requirements, incentives and forms. The Every Little Bit Campaign is focusing on commercial customers again this year and will bring a broader awareness for energy efficiency to the business segment.

2014 Prescriptive Commercial HVAC Program
Nonresidential Washington Portfolio

Measures Incorporated within the Program and Projected 2014 Impacts:

Projected 2014 Measure Impacts	Units	Therms
90%–94.9% AFUE NG Single Stage Furnace <225 kBtu/hr	700	4,200
95% AFUE or greater NG Single Stage Furnace <225 kBtu/hr	700	2,569
90%–94.9%AFUE or greater NG Multi Stage Furnace <225 kBtu/hr	1,050	3,854
95% AFUE or greater NG Multi Stage Furnace <225 kBtu/hr	1,050	4,431
85%–89.9% AFUE NG Boiler <300 kBtu/hr	350	620
90% AFUE or greater NG Boiler <300 kBtu/hr	700	2,009

Program Eligibility and Incentives:
This program is applicable to non residential customers with natural gas service providing the primary heat source by Avista in Washington who install qualified new natural gas equipment.

90%–94.9% AFUE NG Single Stage Furnace <225 kBtu/hr	$6.00 per input kBtu
95% AFUE or greater NG Single Stage Furnace <225 kBtu/hr	$7.00 per input kBtu
90%–94.9%AFUE or greater NG Multi Stage Furnace <225 kBtu/hr	$7.00 per input kBtu
95% AFUE or greater NG Multi Stage Furnace <225 kBtu/hr	$10.00 per input kBtu
85%–89.9% AFUE NG Boiler <300 kBtu/hr	$4.00 per input kBtu
90% AFUE or greater NG Boiler <300 kBtu/hr	$7.00 per input kBtu

Key Avista Staff:
Overall Program management responsibilities: Greta Zink
Program delivery support: Greta Zink
Technical support: Energy Solutions Engineering (Avista)
Outreach support: Services Development & Marketing (Avista)
Analytical support: Policy, Planning and Analysis (Avista)

Program Overview:
Installing energy efficient heating equipment will reduce a customer's operating costs and save energy. This program offers direct incentives for installing high efficient natural gas HVAC equipment. The HVAC program encourages customers to select a high efficiency solution when making energy upgrades to their businesses. This prescriptive rebate approach issues payment to the customer after measure has been installed. Eligibility guidelines for participation include but may not be limited to: confirmation of natural gas space heating usage, copies of project invoices and AHRI documentation.

Implementation Plan:
This is a prescriptive program with six measures being offered. Customers must return to Avista a completed rebate form, invoices and an AHRI certificate within 90 days after the installation has been completed. Avista will send an incentive check to the customer (or their designee) generally within six to eight weeks. Rebates will not exceed the total amount on the customer invoice. Each rebate will be qualified and processed with the current commercial natural gas HVAC calculator to determine the

savings and incentive. The key drivers to delivering on the objectives of the program are the direct incentives to fuel customer interest, marketing efforts and account executives to drive customers to the program, and ongoing work with trade allies to ensure that customer demand can be met. The Avista Website is also used to communicate program requirements, incentives and forms. The Every Little Bit Campaign is focusing on commercial customers again this year and will bring a broader awareness for energy efficiency to the business segment.

2014 Non-Res Appliance Program

Non-Res Washington/Idaho Portfolio

Measures Incorporated within the Program:

The non res appliance program offers incentives to non residential customers who install energy efficient water heaters or clothes washers in an existing building that has an electric water heating source provided by Avista Utilities in Idaho or electric/natural gas water heating source provided by Avista in Washington with the installation based on the criteria below.

	kWh	Therms
Energy Efficient Hot Water Heater	2,954	268

	kWh	Therms
Energy Star Commercial Clothes Washer	1,656	109

Key Avista Staff:

Overall Program management responsibilities: Greta Zink
Program delivery support: Rebate processing is performed by Greta Zink
Technical support: Energy Solutions Engineering (Avista)
Outreach support: Services Development & Marketing (Avista)
Analytical support: Policy, Planning and Analysis (Avista)

Program Eligibility and Incentives:

The program offers incentives to non residential (Schedule 11, 21, 25) customers who have an electric primary heat source provided by Avista Utilities in Idaho or Washington or non residential (Schedule 101, 111 121) natural gas primary heat source provided by Avista in Washington who install qualified hot water heater measures in their business are eligible to apply for this program. A $20 incentive per unit will be offered for water heaters and a $75 incentive will be offered for clothes washers.

Program Overview:

The non res appliance program encourages non residential customers to improve the efficiency of water heating of their building and efficiency of their clothes washing equipment. High efficiency commercial washers can save up to 50 percent of energy costs and use about 30 percent less water. They also extract more moisture from clothes during the spin cycle which reduces drying time and wear and tear on clothing. Efficient water heaters may make a business more energy efficient and comfortable. This prescriptive rebate approach issues payments to the customer after the measure has been installed. Eligibility guidelines for participation include, but may not be limited to: confirmation of electric or natural gas heating usage, invoices, appliance and equipment EF data. Pre and/or post inspection may occur as necessary throughout the year.

Implementation Plan:

All customer-facing aspects of this program are prescriptively based. Customers must return to Avista a completed rebate form within 90 days after the installation has been completed. Avista will send an incentive check to the customer (or their designee) generally within six to eight weeks. Rebates will not exceed the total amount on the customer invoice. Each rebate will be qualified and processed with the current commercial windows and insulation calculator to determine the savings and incentive. The key drivers to delivering on the objectives of the program are the direct incentives to fuel customer interest, marketing efforts and account executives to drive customers to the program, and ongoing work with trade allies to ensure that customer demand can be met. The Avista Website is also used to

communicate program requirements, incentives and forms. The Every Little Bit Campaign is focusing on commercial customers again this year and will bring a broader awareness for energy efficiency to the business segment.

2014 Non-Residential Prescriptive Lighting Program

Commercial Washington/Idaho Portfolio

Measures Incorporated within the Program:

Measure	Units	kWhs	$ Incentives	$ Incentive/Unit
250 watt HID Fixture to 4-Lamp HP T8 Fixture HO or 2-Lamp T5HO 5-foot Fixture	150	48,975	$ 7500	$ 50
250 watt HID Fixture to 4-Lamp HP T8 Fixture HO or 2-Lamp T5HO 5-foot Fixture with occupancy sensor	100	52,056	$8000	$80
400 watt HID Fixture to 4-Lamp T5 High-Output Fixture	1500	1,011,852	$ 157,500	$ 105
400 watt HID Fixture to 4-Lamp T5 High-Output Fixture with oc sensor	150	139,349	$21,750	$145
400 watt HID Fixture to 8-Lamp HP T8 Fixture (4-Foot Lamps)	100	71,153	$ 11,500	$ 115
400 watt HID Fixture to 8-Lamp HP T8 Fixture (4-Foot Lamps) with oc sensor	25	23,826	$3625	$145
40 watt Incandescent to 6-10 watt LED*	1000	92,407	$ 6,000	$ 6
60 watt Incandescent to 9-13 watt LED*	1000	92,407	$ 8000	$ 8
75-100 watt Incandescent to 12-20 watt LED*	1000	129,369	$ 10,000	$ 10
Over 150 watt Incandescent to 2L HP F32T8 Fixture	100	26,798	$ 4000	$ 40
20 watt MR16 (GU10 Base) to MR16 LED* 2-4 watt	1000	61,604	$ 5000	$5
35 watt MR16 (GU10 Base) to MR16 LED* 4-6 watt	1000	46,203	$ 6000	$6
50 watt MR16 (GU10 Base) to MR16 LED* 6-9 watt	1000	154,011	$ 10,000	$ 10
Incandescent Exit Sign to New LED Exit Signs	200	52,833	$ 4000	$20
Fixture with no occupancy sensor to built in to with relays for room control (no switch sensors)	500	112,659	$10,000	$ 20
75-100 watt Incandescent can fixture to 12-20 watt LED*	1000	129,369	$30,000	$30
Exterior-400 watt HID to 250 watt DHD MH	500	641,168	$130,000	$260
Exterior-400 watt HID to 125-175 watt LED*	200	256,467	$51,000	$255
Exterior-320 watt to 125-160 watt LED*	200	179,270	$36,000	$180
Exterior- 250 watt HID to 85-140 watt LED*	200	142,387	$29,000	$145
Exterior-175 watt HID to 35-85 watt LED*	200	132,951	$27,000	$135
Exterior-150 watt HID to 35-50 watt LED*	200	128,663	$26,000	$130
Exterior-90-100 watt HID to 25-50 watt LED*	200	112,659	$15,000	$75
Exterior-70-90 watt HID to 15-35 watt LED	200	54,038	$11,000	$55

*= Approved LED listed lamps and fixtures from www.designlights.org

Key Avista Staff:

Camille Martin is designated as the current Program Manager. Program management responsibilities include ongoing process evaluations, coordinating program marketing efforts,

working with key trade allies, performing outreach to commercial and industrial customers, ensuring that the proper program tracking is in place and coordinating all implementation aspects of the program.

Technical support: Tom Lienhard is the primary technical resource for the program.
Outreach support: Mary Tyrie (Avista Marketing)
Analytical support: Avista Policy, Planning and Analysis team

Program Eligibility:

This program is applicable to existing commercial or industrial facilities with electric service provided by Avista with rate schedules 11 or above.

Program Overview:

There is significant opportunity for lighting improvements in commercial facilities. Avista has been offering site specific incentives for qualified lighting projects for many years. In an effort to streamline the process and make it easier for customers and vendors to participate in the program we developed a prescriptive approach, which began in 2004. This program provides for many common retrofits to receive a pre-determined incentive amount. Incentive amounts were calculated using a baseline average for existing wattages and replacement wattages. Energy savings claimed are calculated based on actual customer run times using the averages as calculated for incentive amounts.

The prescriptive lighting program makes it easier for customers, especially smaller customers and vendors to participate in the program. We have seen a substantial increase in the number of projects that have been completed since this approach was instituted. A total of 27 individual measures are included in the Prescriptive Lighting Program. These include HIDs and incandescent retrofits to more energy efficient light sources including, High Performance T8, T5 and approved LEDs.

Implementation Plan:

The key drivers to delivering on the objectives of this program are the direct-incentives to fuel customer interest, marketing efforts to drive customers to the program and ongoing work with trade allies to ensure that customer demand can be met.

The Prescriptive Lighting Program is an integral consideration in the ongoing marketing campaign. The campaign builds broad awareness for energy efficiency as well as specific programmatic highlights. Avista Utilities website directs commercial customers to find information on lighting retrofit incentives available to them.

Key to success is clear communication to lighting supply houses, distributors, electricians and customers on incentive requirements and forms. Utility websites are also channels to communicate program requirements and highlight opportunities for customers.

Avista's regional based Account Executives (AEs) are a key part of delivering the Prescriptive Lighting Program to commercial and industrial customers. Any changes should have advance notice for customers in the form of 90 days to submit under old requirements. This usually includes at a minimum direct mail communication to trade allies as well as internal, forms and website updates.

Changes to the Commercial Lighting Program:

Increased Incentive 1000 watt HID 400–575 watt Digital HID $150 $400 Exterior
Deletion 1000 watt HID 400-470 watt LED* N/A $475 Exterior
Deletion 750 watt HID 320-400 watt Digital HID $300 $0 Exterior
Deletion 750 watt HID 210-240 watt LED* $350 $0 Exterior
Increased Incentive
Level 400 watt HID 250 watt Digital HID $150 $260 Exterior
Modified Eligibility 400 watt HID 125-175 watt LED* $275 $255 Exterior
Addition 320 watt HID 125-160 watt $0 $180 Exterior
Modified Eligibility 250 watt HID 85-140 watt LED* $175-200 $145 Exterior
Deletion 175 watt HID 40 watt Induction Fluorescent
Fixture $150 $0 Exterior
Modified Eligibility 175 watt HID 35-85 watt $175 $135 Exterior
Modified Eligibility 150 watt HID 35-50 watt $175 $130 Exterior
Modified Eligibility 90-100 watt HID 25-50 watt LED* $100 $75 Exterior
Modified Eligibility 70-90 watt HID 15-35 watt LED* $75 $55 Exterior
Decreased Incentive 400 watt HID 4 lamp T5 $110 $105 Interior
Decreased Incentive 400 watt HID 6 lamp High Performance T8** $140 $130 Interior
Decreased Incentive 250 watt HID 4 lamp High Performance T8 or
2 lamp T5 $55 $50 Interior
Varied Incentive Level Interior HID T5 or High Performance** T8
with Occupancy Sensor $35-45 $30-40 Interior
Modified Eligibility Over: 150 watt
incandescent 2 Lamp High Performance T8 $40 $40 Interior
Modified Eligibility 40 watt
incandescent 6-10 watt LED* N/A $6 Interior
Modified Eligibility 60 watt
incandescent 9-13 watt LED* N/A $8 Interior
Modified Eligibility 75-100 watt
incandescent 12-20 watt LED* N/A $10 Interior
Addition 20 watt MR16 2-4 watt MR16 LED* N/A $5 Interior
Addition 35 watt MR16 4-6 watt MR16 LED* N/A $6 Interior
Addition 50 watt MR16 6-9 watt LED* N/A $10 Interior

* It is a requirement to use qualified LEDs. For more information and listing of qualified product go to: www.lightingdesignlab.com or www.designlights.org.
** High Performance T8s are now required. For more information on qualified product, go to: www.cee1.org.
*** In order to qualify for old incentive levels, please submit a Commercial Lighting Incentive - Interior and Exterior application by December 31, 2013.

2014 Non-Res Power Management for PC Networks Program

Non-Res Washington/Idaho Portfolio

Measures Incorporated within the Program:

Measure definitions and Projected 2014 Measure Impacts:

$5 incentive per controlled PC by Power Management Software

	units	kWhs
Power Management for PC Networks	1,500	147,400

Key Avista Staff:

Overall Program management responsibilities: Greta Zink
Program delivery support: Greta Zink
Technical support: Energy Solutions Engineering (Avista)
Outreach support: Services Development & Marketing (Avista)
Analytical support: Policy, Planning and Analysis (Avista)

Program Eligibility and Incentives

Any non residential (Schedule 11, 21, 25) Avista electric customer installing qualified software is eligible for this program.

Power Management for PC Networks $5 per controlled PC

Program Overview:

Despite the fact that most personal computers (PC's) have the capability to shift to a low-power operating state after a specified period of inactivity, only a small fraction of those PC's actually do. For companies that have numerous PC's, the wasted energy from computers that remain I the full-power on state even when they are idle can be significant. Software products that can simplify the process of implementing power management in large numbers of networked PC's are now available. This program is designed to encourage implementation of power management software to obtain energy efficiency. This prescriptive rebate approach issues payments to the customer after the measure has been installed. Eligibility guidelines for participation include, but may not be limited to: confirmation of electric usage, invoices and pre and post install data. Post reporting may be required for a period of three years.

Implementation Plan:

All customer-facing aspects of this program are prescriptively based. Customers must return to Avista a completed rebate form within 90 days after the installation has been completed. Avista will send an incentive check to the customer (or their designee) generally within six to eight weeks. Rebates will not exceed the total amount on the customer invoice. Each rebate will be qualified and processed with the current power management for PC Networks calculator to determine the savings and incentive. The key drivers to delivering on the objectives of the program are the direct incentives to fuel customer interest, marketing efforts and account executives to drive customers to the program, and ongoing work with trade allies to ensure that customer demand can be met. The Avista Website is also used to communicate program requirements, incentives and forms. The Every Little Bit Campaign is focusing on commercial customers again this year and will bring a broader awareness for energy efficiency to the business segment.

2014 Non-Res Shell Program

Non-Res Washington/Idaho Portfolio

Measures Incorporated within the Program:

The Commercial Windows and Insulation program offers incentives to non residential customers who install additional insulation to an existing building that has an electric primary heat source provided by Avista Utilities in Idaho or electric/natural gas primary heat source provided by Avista in Washington with the installation based on the criteria below. The program also offers incentives to non residential customers who have an electric primary heat source provided by Avista Utilities in Idaho or electric/natural gas primary heat source provided by Avista in Washington who install windows in a newly constructed building or replace windows in an existing building based on the criteria below.

Measure definitions and projected 2014 Impacts system wide	Units	kWh	Therms
Less than R4 Wall Insulation to R-11-R18 Retrofit	50,000	70,500	5,250
Less than R4 Wall Insulation to R19 or above Retrofit	50,000	102,750	35,000
Less than R11 Attic Insulation to R30-R44 Retrofit	50,000	25,500	1,750
Less than R11 Attic Insulation to R45 or above Retrofit	50,000	34,750	1,750
Less than R11 Roof Insulation to R30 or above Retrofit	50,000	34,000	1,750
Windows U-Factor of .35 or less and SHGC .35 or Less NC	30,000	45,000	3,780
Windows U-Factor of .35 or less and SHGC .35 or Less Retrofit	120,000	108,000	15,120

Key Avista Staff:

Overall Program management responsibilities: Greta Zink

Program delivery support: Rebate processing is performed by Greta Zink

Technical support: Energy Solutions Engineering (Avista)

Outreach support: Services Development & Marketing (Avista)

Analytical support: Policy, Planning and Analysis (Avista)

Program Eligibility and Incentives:

The program offers incentives to non residential (Schedule 11, 21, 25) customers who have an electric primary heat source provided by Avista Utilities in Idaho or non residential (Schedule 101, 111 121) electric/natural gas primary heat source provided by Avista in Washington who install qualified insulation or window measures in their business are eligible to apply for this program.

Measure and Incentives are as follows:

Less than R4 Wall Insulation to R-11-R18 Retrofit	.30 per square foot
Less than R4 Wall Insulation to R19 or above Retrofit	.35 per square foot
Less than R11 Attic Insulation to R30-R44 Retrofit	.20 per square foot
Less than R11 Attic Insulation to R45 or above Retrofit	.25 per square foot
Less than R11 Roof Insulation to R30 or above Retrofit	.25 per square foot
Windows U-Factor of .35 or less and SHGC .35 or Less New Construction	.50 per square foot
Windows U-Factor of .35 or less and SHGC .35 or Less Retrofit	.50 per square foot

Program Overview:

The Commercial Windows and Insulation program encourages non residential customers to improve the envelope of their building by upgrading windows and adding insulation. This may make a business more energy efficient and comfortable. This prescriptive rebate approach issues payments to the customer

after the measure has been installed. Eligibility guidelines for participation include, but may not be limited to: confirmation of electric or natural gas heating usage, invoices and insulation and/or window data. Pre and/or post inspection for insulation and/or windows may occur as necessary throughout the year.

Implementation Plan:
All customer-facing aspects of this program are prescriptively based. Customers must return to Avista a completed rebate form within 90 days after the installation has been completed. Avista will send an incentive check to the customer (or their designee) generally within six to eight weeks. Rebates will not exceed the total amount on the customer invoice. Each rebate will be qualified and processed with the current commercial windows and insulation calculator to determine the savings and incentive. The key drivers to delivering on the objectives of the program are the direct incentives to fuel customer interest, marketing efforts and account executives to drive customers to the program, and ongoing work with trade allies to ensure that customer demand can be met. The Avista Website is also used to communicate program requirements, incentives and forms. The Every Little Bit Campaign is focusing on commercial customers again this year and will bring a broader awareness for energy efficiency to the business segment.

2014 Prescriptive Standby Generator Block Heater Program

Non-Res Washington/Idaho Portfolio

Measures Incorporated within the Program:

Measure definitions and Projected 2014 Measure Impacts:

The Standby Generator Block Heater Program offers an incentive for a retrofit from a thermosiphon circulating block heater to a pump driven circulating block heater that operates continuously.

	Units	kWh
Standby Generator Block Heater	16.88	29,393

Key Avista Staff:

Overall Program management responsibilities: Greta Zink
Program delivery support: Greta Zink
Technical support: Energy Solutions Engineering (Avista)
Outreach support: Services Development & Marketing (Avista)
Analytical support: Policy, Planning and Analysis (Avista)

Program Eligibility and Incentives

Any commercial (Schedule 11, 21, 25) Avista electric customer installing qualifying equipment is eligible for this program.

Standby Generator Block Heater	$400 Incentive

Program Overview:

Most block heating technology employs natural convection within the engines block's system to drive circulation, more commonly known as thermosiphon. This program promotes the replacement of thermosiphon style engine block heaters with pump driven circulation units which reduce overall block temperature. Because it also decreases the heat transfer rate from the block to the environment, it can reduce overall block heater energy consumption. This prescriptive rebate approach issues payments to the customer after the measure has been installed. Eligibility guidelines for participation include, but may not be limited to: confirmation of electric usage, invoices and possible pre and post logging.

Implementation Plan:

All customer-facing aspects of this program are prescriptively based. Customers must return to Avista a completed rebate form within 90 days after the installation has been completed. Avista will send an incentive check to the customer (or their designee) generally within six to eight weeks. Rebates will not exceed the total amount on the customer invoice. Each rebate will be qualified and processed with the current standby generator block heater calculator as well as the current DFIC to determine the savings and incentive. The key drivers to delivering on the objectives of the program are the direct incentives to fuel customer interest, marketing efforts and account executives to drive customers to the program, and ongoing work with trade allies to ensure that customer demand can be met. The Avista Website is also used to communicate program requirements, incentives and forms. The Every Little Bit Campaign is focusing on commercial customers again this year and will bring a broader awareness for energy efficiency to the business segment.

2014 Non-Res Site Specific Program

Non-Res Washington/Idaho Portfolio

Measures Incorporated within the Program:

Electric measures in Washington and Idaho and natural gas measures in Washington, not covered by prescriptive offerings, will be evaluated under the site specific program. Electric measures in Washington and Idaho are eligible for incentives in accordance with Schedule 90 such as measures that show an energy efficiency savings of over a one year payback and under an eight year payback for lighting and over a one year payback and under a thirteen year payback for other measures. Natural gas measures in Washington are eligible for incentives in accordance with Schedule 190 such as measures that show an energy efficiency savings of over a one year payback.

	kWhs	Therms
Site Specific Projects	21,652,488	218,215

Key Avista Staff:

Overall Program management responsibilities: Tom Lienhard, Greta Zink
Program delivery support: Contract administration is performed by Lorri Kirstein
Technical support: Energy Efficiency Engineering Group
Account (efficiency project) Management: Account Executives
Outreach support: Mary Tyrie, Account Executives and Trade Allies
Analytical support: Avista Policy, Planning and Analysis team

Program Eligibility

Nonresidential Avista retail electric customers are eligible in Idaho and Washington and non- residential Avista natural gas customers are eligible in Washington for this program.

Program Overview:

The site specific program is a major component in our commercial/industrial portfolio. Customers receive technical assistance and incentives in accordance with Schedule 90 in Washington and Idaho and Schedule 190 in Washington. Our program approach allows us to have a flexible response to any energy efficiency project that has demonstrable kWh/Therm savings. The majority of site specific kWh/Therm savings are comprised of appliances, compressed air, HVAC, industrial process, motors, shell measures, some custom lighting projects that don't fit the prescriptive path and natural gas multifamily market transformation*. This program is available to all nonresidential retail electric and natural gas customers where eligible. The site specific program brings in the largest portion of savings to the overall energy efficiency portfolio.

Implementation Plan:

This program will offer an incentive for any qualifying electric energy saving measure that has over a one year and under an eight year payback for lighting and over a one year and under a thirteen year payback for other measures in Washington and Idaho. This program will offer an incentive for any qualifying natural gas saving measure in Washington that has a simple payback of over one year. The incentive is capped from fifty to seventy percent for the most cost-effective projects in order to increase the likelihood of acquisition of those projects. This applies to non-lighting projects with energy simple

paybacks of less than five years and lighting technologies with a greater than 40,000 hour life with energy simple paybacks of less than five years and lighting projects of less than three years. The key drivers to delivering on the objectives of the program are the direct incentives to fuel customer interest, marketing efforts and account executives to drive customers to the program, and ongoing work with trade allies to ensure that customer demand can be met. The Avista Website is also used to communicate program requirements, incentives and forms. The Every Little Bit Campaign will continue to be broad-based to include commercial customers in order to build and sustain awareness for energy efficiency in the business segment.

*Multi-family Electric-to-Natural Gas Market Transformation Program

In 2008 the Company initiated a market transformation program intended to increase the availability of natural gas space and water heating in multi-family residential developments. The focus was on new construction buildings that are a 5-plex or larger. The phases of program implementation include:

1. Increase the availability of natural gas heated multi-family units by offering builders/developers an enhanced incentive to cover up to 100% of their incremental cost or $2,000, whichever is less;
2. Present a marketing strategy that involves communications to building associations, developers, architects, engineers and media outlets explaining the program's availability and highlighting projects;
3. On-going awareness and marketing to tenants as well as realtors and property managers about multi-family buildings with natural gas availability;
4. Establish a target for transformation; thus ultimately reducing the amount of incentive available or perhaps remove the offer all together.

The launch of this program coincided with a substantial reduction in multi-family new construction starts due to a lackluster economy. The incremental costs continue to remain high as well as the $2,000 offer has had limited success. As a consequence, the period of time necessary to secure satisfactory natural gas penetration to support a tenant marketing campaign became much more prolonged than was originally anticipated. This has prevented the program from proceeding to marketing the availability of natural gas heated multi-family units in the Avista service territory.

Building products, materials, fuel, equipment and other construction fees have builders and developers looking for every way to cut costs to retain an already slim profit margin. Installation of natural gas as the energy source in multi-family housing is often a casualty of the cost cutting process because of the additional expense it brings, the complex mechanical systems and the inexperienced HVAC workforce with this type of application. Electric space and water heat are cheaper to install than their natural gas counter parts. The extensive piping and venting required for natural gas installations make electricity a far simpler choice, especially for the small footprint that characterizes a multifamily unit. With so few of these types of structures in Avista's service territory, local HVAC contractors do not typically work with natural gas mechanical systems in this type of building, which requires extensive education and training to convince the trade professional and developer that natural gas is worthy to consider as a preferred energy source.

At the time of this writing, the Company received results from an Avista sponsored General Population Survey that was fielded in mid-2013. The survey participants declared that 8.2% of customers in multi-family buildings (larger than a 5-plex) had a natural gas furnace. Compared with 44.8% of survey

participants in multi-family buildings (smaller than a 4-plex) it would be fair to reason that there is still work to do in transforming this market. Since 2008 the Company has converted ~800 multi-family units to natural gas. Evaluation of continuing this enhanced incentive or returning to the standard site specific incentive structure is part of an on-going discussion in 2014 which includes revising implementation efforts, setting milestones to determine when "transformation" has occurred (e.g. percentage of new multi-family starts with natural gas.)

2014 Cascade Energy Pilot Program

Nonresidential Washington/Idaho Portfolio

Measures Incorporated within the Program:
For the purpose of the 2014 business plan the measures will all be low cost/no cost and will vary by customer. During this first year this program will identify the site specific projects that may be possible at each facility.

Key Avista Staff:
Overall Program management responsibilities: Cascade Energy/Tom Lienhard/Greta Zink
Program delivery support: Cascade Energy/Tom Lienhard/Greta Zink
Technical support: Tom Lienhard, Levi Westra
Outreach support: Mary Tyrie (Avista Marketing)
Analytical support: Avista Policy, Planning and Analysis (PPA) team

Program Eligibility and Incentives
The qualifications for an Industrial System Tune-up Program Candidate:
Must be an Avista electrical customer at a single site with a retail rate schedule 21 or larger.
Must be an industrial facility with energy intensive processes including but not limited to: dairy, food processing, wood products, waste water treatment, mining, cold storage, etc…
Must have a minimum annual energy use 5 million kWh / year
Must have a total of over 500 horsepower of motors on site.
Must have some type of large system moving fluid; water, air, refrigerant, etc. Typical systems include:

a. Refrigeration
b. Waste water treatment
c. Compressed air
d. Large fan systems, dust collectors

Candidates need to return a request to participate by October 31, 2013 and not have an immediately pending major shutdown, process change or other energy project that might interfere with this program.
They must be ready to start the audit and monitoring process after they are selected in early November 2013, but no later than March 30th, 2014.
Candidates must have a willingness to work with Avista and Avista's contactor to grant access to facilities, and identify and implement energy saving projects.
Candidates must allow Avista access to all gathered data by the contractor for a period of 4 years from the time the project is started.
Candidate's facility must in Avista's opinion, have an opportunity to save energy, ie:

a. Energy use has increased at the same production level
b. Production, not energy efficiency has been the major area of concern

Program Overview:
Cascade's Industrial System Tune-up (IST) program is designed to support and incent industrial energy efficiency improvements through low-/no-cost operations and maintenance (O&M) optimization. The goal is to provide financial and technical assistance to industrial customers to "do the little things well," while putting systems in place that allow Avista and its customers to track energy performance and savings over a multi-year horizon. Tune-up projects can occur on a facility-wide basis or on specific sub-systems for large customers. Industrial sector energy efficiency has traditionally been acquired through capital-intensive custom projects. In this regard, tune-ups are a compelling approach for

customers that have limited capital budgets but still want to reduce their energy intensity by leveraging other utility program resources. Also, an increasing number of customers wish to pursue a more comprehensive approach to efficiency improvement, and tune-ups help these organizations address new cost-effective channels of opportunity in their existing systems. For both categories of customers, the tune-up process provides insight into O&M improvements that can be addressed in a short time horizon, while concurrently identifying options for future capital upgrades. To ensure that energy savings from IST can be verified, captured, and reported as an acquired resource, an Energy Information System (EIS) is employed. The tracking system establishes the baseline energy profile, shows the impact of the tune-up effort, and enables performance tracking over time to promote continuous improvement and to guard against backsliding. This methodology ensures a reliable, long-term source of savings.

The program goal is to cost effectively reduce the facilities electrical energy usage by 10% – 15%. Avista provides 50% of the study and monitoring equipment cost up front and will provide 100% of the cost if/when projected savings goals are met. Incentives are paid for first year electrical savings and new and persistent savings for 3 subsequent years. The tune-up program is designed to capture energy savings for industrial facilities without a significant cash investment. By concentrating on operations and maintenance items significant energy savings can be realized with simple paybacks typically less than 1 year. A leading industrial energy efficiency firm chosen by Avista for their experience will work with plant personnel to identify energy efficiency opportunities and help site personnel to recognize additional opportunities. A very in-depth and complete list of energy efficiency ideas is generated for the facilities consideration. The program provides funding to install or supplement an existing energy information system. This system will put interval energy data in context by normalizing for production and weather, measure and report savings and manage action items. The energy information system will measure the facility's energy efficiency on a continual basis and ensures that energy savings persist over time. The customer will have the opportunity to continue this monitoring at its expense after the program is complete.

Implementation Plan:
This pilot will allow Avista to evaluate the effectiveness of an industrial tune up program. We will be randomly selecting a few customers to participate in this pilot. At the writing of this plan the selection has not been made. After customer selection is made, customers will be audited and from that point a determination will be made to see who can continue.

Avista Utilities

2014 Energy Efficiency Evaluation, Measurement and Verification Annual Plan

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2014 Energy Efficiency Evaluation, Measurement and Verification Annual Plan

Background

This 2014 Energy Efficiency Evaluation Measurement and Verification (EM&V) Annual Plan, in combination with the Avista EM&V Framework, is intended to identify the evaluation, measurement and verification activities that are planned to be performed in 2014 in order to adequately inform, operate, and assess energy efficiency programs at Avista. This evaluation effort is not only retrospective in order to verify savings estimates of the 2013 program year, but also prospective to be used for enhanced program design and improved marketing and delivery of programs. This document also provides the 2014 EM&V budget allocations by fuel, sector, program, jurisdiction, and review type.

Overview

Avista's 2014 EM&V Annual Plan identifies evaluation activities intended to be performed during 2014 on the 2013 energy efficiency portfolio, along with consolidating these findings with results from 2012 for reporting requirements associated with the Washington I-937 biennium. Much of the scope of this Plan was presented to Avista's Advisory Group in preparation for the 2012-2013 biennium. A comprehensive EM&V overview and definitions are included in Avista's EM&V Framework, a companion document to this Plan.

Key aspects of this Plan include:

- The Company continues to pursue a portfolio approach for Impact Analysis, insuring a comprehensive annual review of all programs, to the degree necessary, based on the magnitude of savings and uncertainty of the related unit energy savings (UES) values and magnitude of claimed energy efficiency acquisition relative to the portfolio.
- Portfolio impact evaluations will be conducted for all electric programs in Washington and Idaho and the natural gas program in Washington. For programs with a majority of savings or particular aspects of interest, such as a high level of uncertainty, impact evaluations will consist of detailed impact evaluations using protocols from the Uniform Methods Project, International Performance Measurement and Verification Protocol (IPMVP) and other industry-standard techniques for determining program-level impacts. Billing analyses will be incorporated as appropriate.

- Due to the suspension of Demand Side Management (DSM) natural gas programs in Idaho, the planned natural gas evaluation will consist of a desk review of the program savings for the 2013 program year. This option is considered to be the most efficient use of evaluation resources in consideration of the natural gas DSM program plans.
- Electric energy efficiency acquisition achieved during 2013 will contribute to the biennial savings acquisition for I-937 compliance, which will complete its second biennium at the end of 2013.[1]
- A final evaluation of the electric programs deployed during 2012 and 2013 will be initiated prior to the end of 2013 in order to meet the June 1, 2014, filing deadline.
- This planning document will not be construed as pre-approval by the Washington or Idaho Commissions.
- Evaluation resources will be focused on these primary segment activities:
    - Residential
        - Impact verification will be conducted through phone surveys, benefitting from the high verification results obtained in the 2010-2011 evaluations of the residential programs. These surveys will be supplemented with a review of a sample of incentive documentation. In addition, billing analysis will be performed on fuel efficiency conversions with the pre- and post-installation data informing both the UES values and interactive impacts of natural gas from conversions.
        - Interviews of Avista staff and third-party implementers will be completed, along with a review of customer surveys, tracking databases, marketing materials and quality assurance documents.
        - A second round of a general population survey will be conducted in order to enhance the understanding of saturation, key demographics, housing characteristics, energy use awareness, attitudes and behaviors.
        - Net-to-gross (NTG) will only be evaluated on residential programs due to the significant increase experienced between 2010 and 2011. This is a follow-up to past NTG studies to identify the saturation trend of the residential programs.
        - In support of market research, a panel study with residential and nonresidential trade allies representing of some of Avista's most significant measures, including residential lighting and heating, ventilation and air conditioning (HVAC), will inform saturation and penetration levels with attribution from Avista's programs. Depending on the findings, additional research may be supplemented with focus groups.
    - Low Income

[1] Washington Initiative 937 was approved by voters on November 7, 2006. Codified as RCW 19.285 and WAC 480-109, the energy efficiency aspects of this law became effective on January 1, 2010.

        - For the impact analysis, billing analysis on the census of measures, including conversions, will be conducted. In addition, a comparison group, possibly consisting of Low Income Home Energy Assistance Program (LIHEAP) or Low Income Rate Assistance Program (LIRAP) participants, will be incorporated into the analysis if possible.
    - Nonresidential
        - Interviews of Avista staff and third-party implementers will be conducted, along with customer surveys, tracking databases, marketing materials and quality assurance documents.
        - In support of market research, a panel study with residential and nonresidential trade allies representing of some of Avista's most significant measures, including residential lighting and heating, ventilation and air conditioning (HVAC), will inform saturation and penetration levels with attribution from Avista's programs. Depending on the findings, additional research may be supplemented with focus groups.
- Most of Avista's current portfolio of electric energy efficiency offerings has been in place since 1995. For the natural gas portfolio, most programs have been available since 2001.
- A Process Evaluation report will be delivered as part of the 2013 Energy Efficiency Annual Report which reports on program results for that program year.

External EM&V Budget for Evaluations

For 2014, the total budget for external evaluation is estimated to be $700,000. The following table identifies individual evaluation activities that are anticipated to occur in 2013 including an approximate allocation of the total incremental budget of each effort.

Individual Evaluations	Evaluation Type	Contractor	Budget (System)	WA expense	ID expense
2013 Electric and Natural Gas Portfolio	Impact	Cadmus	$475,000	$361,000	$114,000
Electric and Natural Gas DSM Operations (or components of)[2]	Process	Cadmus	50,000	38,000	12,000
Trade Ally Panel Study	Market	Cadmus	50,000	35,000	15,000
Opower Evaluation	Impact	Cadmus	25,000	17,500	7,500
Electric Conservation Potential Assessment[3]	Market	RFP	100,000	80,000	20,000
Total Budget for Individual Evaluations			**$700,000**	**$531,500**	**$168,500**

The budget above does not include the costs associated with individual internal evaluation-related activities, as these costs are captured in the overall EM&V budget found in the table below. This includes both internal labor and physical equipment shared in common with other evaluations or Avista's DSM operations.

[2] Process evaluation efforts may be directed to a further investigate past process evaluation findings rather than perform a new portfolio evaluation.
[3] This study, to inform the 2015 Electric IRP, is projected to begin in late 2014 in order to report final results at March 2015 Technical Advisory Committee meeting.

Overall 2014 EM&V Budget

The table below captures the individual evaluations specifically identified in the previous table in aggregate and augments them with the associated expenses necessary to manage EM&V activities, perform internal EM&V evaluations, acquire physical EM&V equipment and actively participate in and fund the activities of the Regional Technical Forum (RTF).

Activity	Budget (WA/ID system)	Internal budget	External budget	WA expense	ID expense
Individual evaluations previously specified	$700,000		$700,000	$531,500	$168,500
1.0 FTE (loaded) EM&V engineer	138,000	$138,000		96,600	41,400
EM&V Consulting	20,000		20,000	15,200	4,800
Regional Technical Forum dues	85,000		85,000	59,500	25,500
Total	**$943,000**	**$138,000**	**$805,000**	**$702,800**	**$240,200**
Expected total DSM budget	**$13,924,041**			**$10,587,683**	**$3,336,358**
EM&V as a % of total DSM budget[4]	**6.77%**			**6.64%**	**7.19%**

EM&V External Evaluation Contract

In preparation for the independent evaluation on the 2010-2011 Biennium, the Company issued a "mega" Request for Proposal (RFP) for EM&V on 2010-2011 electric and natural gas DSM programs in November 2010. Cadmus was selected and retained to complete this body of work. Since Cadmus completed the 2010-2011 evaluation, they were uniquely familiar with Avista's DSM programs, systems, and tracking databases as well as individual areas where additional research and study was necessary to provide maximum benefit to ongoing program implementation. Therefore, the decision was made to engage Cadmus for the 2012-2013 biennium in order to provide continuity, leverage existing evaluation and analysis tools, and take advantage of previously collected data, saving considerable time, effort and money when compared to other resources.

[4] While EM&V expenditures will be directly assigned where appropriate, this illustrates the anticipated allocation of estimated EM&V expenditures

To support evaluation efforts for the 2014-2015 biennium, Avista intends to develop and release an RFP in November, 2013, soliciting EM&V services to evaluate it electric and natural gas DSM programs and portfolio. Selection of the third-party evaluator will occur early in 2104.

Internal EM&V Activities

Within its DSM portfolio, Avista incorporates Evaluation, Measurement and Verification (EM&V) activities to validate and report verified energy savings related to its energy efficiency measures and programs. EM&V protocols serve to represent comprehensive analyses and assessments necessary to supply useful information to management and stakeholders that adequately identifies the acquisition of energy efficiency attributable to Avista's DSM Programs as well as potential process improvements necessary to improve operations both internally and for customers. EM&V includes Impact, Process, and Market analyses, and taken as a whole are analogous with other industry standard terms such as Portfolio Evaluation or Program Evaluation.

A primary responsibility of Avista's EM&V resources within its Policy, Planning, and Analysis team is to support the ongoing activities of the third-party EM&V consultants and evaluators performing the various analyses required to substantiate the conservation acquisition, determine market saturation and penetration, and process evaluations. The 2014 EM&V budget provides for third-party EM&V services that provide an evaluation of 2013 program year portfolio, along with consolidating these findings with results from 2012 for reporting requirements associated with the Washington I-937 biennium. For Idaho, 2013 savings will be measured, verified, and reported during 2014. These findings are reported in the Conservation Acquisition Annual Report and include analysis of both program and process impacts for the specific programs reviewed.

In addition to the external evaluations, Avista EM&V resources support internal evaluations of specific measures and programs, including pilots and other supplemental program activities. The results of these activities are used to inform program management decisions, evaluate program effectiveness, and establish program metrics. These activities serve to enhance the Company's knowledge base relating to its programs and energy efficiency offerings throughout its service territory.

To support planning and reporting requirements, several guiding EM&V documents are maintained and published. This includes the Avista EM&V Framework, an annual EM&V Plan, and EM&V contributions within other DSM and Avista corporate publications. Program-specific EM&V plans are created as required to inform and benefit the DSM activities. These documents are reviewed and updated as necessary, serving to improve the processes and protocols for energy efficiency measurement, evaluation, and verification.

The Technical Reference Manual (TRM) will be managed as a principal planning and reporting document relative to individual prescriptive measures, their respective UES values and accompanying assumptions and sources. The TRM will serve as the compilation of UES values linking the planning and reporting phases of DSM activities and will be updated annually as informed by evaluation findings. Initial TRM versions included both prescriptive nonresidential and residential but the most recent draft includes mostly residential UES. Subsequent to the 2010-2011 biennium, the Avista was ordered to use RTF UES when available. However, in consultation with the Technical Committee, it has been demonstrated that Avista has few measures that completely align with the RTF criteria and delivery methods as defined by the RTF analysis. Therefore, if an RTF UES doesn't exist or when a delivery mechanism differs, Avista's program participation is subject to varying levels of EM&V. Avista continues to work with its Technical Committee in the development and best application of its TRM.

EM&V efforts will also be applied to evaluating emerging technologies and applications in consideration of potential inclusion in the Company's energy efficiency portfolio. Avista may spend up to 10 percent of its conservation budget on programs whose savings impact have not yet been measured, if the overall portfolio of conservation passes the Total Resource Cost test as modified by the Northwest Power and Conservation Council (NPCC). These programs may include educational, behavior change, and other types of investigatory projects. Specific activities can include product and application document reviews, development of formal evaluation plans, field studies, data collection, statistical analysis, and solicitation of user feedback.

Avista and its customers benefit from regional activities and resources in the energy efficiency domain. To engage with and contribute to the regional efforts, Avista EM&V staff has membership on the Regional Technical Forum that serves as an advisory committee to the

Northwest Power and Conservation Council. The RTF is a primary source of information relating to the standardization of energy savings estimates, delivery methods, and measurement processes for many electric applications in the northwest. This knowledge base provides valuation of energy efficiency metrics and references that are suitable for consideration in Avista's acquisition planning and reporting or can be modified with Avista's specific data as available to refine regional assumptions. Other data and informational sources that are deemed pertinent to Avista's programs as delivered in addition to the RTF include Northwest Energy Efficiency Alliance (NEEA), consultant libraries, ENERGY STAR, Sixth Power Plan, California's Database for Energy Efficient Resources (DEER), Avista-specific impact analyses and other public sources. The UES values contained in Avista's TRM will be subject to rigorous impact evaluations to be performed by a third-party evaluator, updated annually as appropriate and available to the Advisory Group for review.

Additional regional activities include engagement with other northwest utilities and NEEA in various pilot projects or subcommittee evaluations. Portions of the energy efficiency savings acquired through NEEA's programs within the region are attributable to Avista's portfolio. Plans for 2014 include continued participation in NEEA's Industrial Facilities Site Assessment with coordinated data collection and interview activities.

Avista's commitment to the critical role of EM&V is supported by the Company's continued focus on the development of best practices for its processes and reporting. Application of the principles of the International Performance Measurement and Verification Protocol serves as the guidelines for measurement and verification plans applied to Avista programs. Additionally, the recent compilation of EM&V protocols released under the U.S. Department of Energy's Uniform Methods Project will be considered and applied where possible to support consistency and credibility of the reported results. The verification of a statistically significant number of projects is often extrapolated to verify and perform impact analysis on complete programs within reasonable standards of rigor and degree of conservatism. This process serves to insure Avista will manage its DSM portfolio in a manner consistent with utility and public interests.

Within Avista's DSM Advisory Group, a Technical Committee subgroup serves primarily within the scope of EM&V applications and currently assists Avista with the development of EM&V protocols and other technically-related conservation program considerations. These activities

include providing recommendations and guidance on functional aspects of program implementation along with fundamental evaluation policies and methods. Principal interaction with Avista includes meetings, webinars, and direct interchanges. In addition, Avista provides opportunities for the Technical Committee to review the evaluation, measurement and verification protocols and results.

Summary of Individual Evaluations

Provided below is a summary of each of the external evaluation activities anticipated to occur in 2014. All savings estimates, calculations, assumptions and recommendations will be the work product of the independent evaluator in conjunction with the respective portfolio impact, process, or market evaluation component.

2013 Electric and Natural Gas Portfolio Impact Evaluation

The electric and natural gas portfolio impact evaluation will be based on data collected primarily through the use of phone surveys for residential, billing analysis for low income and site visits and metering for nonresidential.

During the 2010 and 2011 evaluation cycles, residential measures demonstrated high verification rates based on a combination of phone surveys and site visits. Consequently, 2012-13 residential verification will be based entirely on phone survey and a sample review of documentation. Verification of natural gas estimated savings from 2012 and 2013 will be performed through a document review of the participant project files.

The surveys will be designed to provide Avista with specific information on key measure parameters. Participants will be asked for responses to a few questions specific to the installed measures, with their responses used to determine measure qualification and to calculate evaluated deemed savings values. To supplement the phone survey verification process, a review of a sample of incentive documentation will also be completed.

During the evaluation cycle of the previous biennium, billing analysis of high efficiency natural gas furnace participants from 2010 program year was used to determine the deemed savings associated with this conversion measure. During 2014, a billing analysis considering both pre- and post-consumption data for electric and natural gas systems of fuel conversion participants will be completed to quantify the achieved reduction in electric consumption and the corresponding increase in natural gas consumption. The analysis will begin with a census of the 2012 program year participant population and will use 2011 consumption as the pre-installation

data and 2013 consumption as the post-installation data. Furnace-only conversions, water heater-only conversions, and dual-measure groups will be analyzed as separate populations.

Recent evaluation work identified several unexpected results regarding the installation of heat pumps and natural gas furnaces. To further characterize current equipment configurations, heat pump installation practices will be explored during the Trade Ally Panel Study discussed more fully below. Contractor sales, installation practices, actual equipment settings and types will also be explored during the panel study. These findings are intended to inform future program design of heat pump measure offerings.

Similar to the evaluation for 2010-2011, billing analyses will be conducted to identify the electric and natural gas impacts of the Low Income Program. The analyses will be performed on the census of program participants and will estimate savings by state, fuel type, and overall program levels. For this evaluation cycle, savings estimates will be evaluated through a combined approach of billing and engineering analysis, as well as developing net savings estimates by measuring the effects of a comparison group. The primary electric billing analysis will take place in 2014, to ensure a full year of pre and post data for the 2012 program year and possibly participants in 2011 as well.

If possible, a Low Income comparison group study may be used to evaluate this specific program activity. There are two feasible approaches for selecting this comparison group. One method would be to identify nonparticipants from data on Avista customers that receive energy assistance payments such as LIHEAP or LIRPA, who have not participated in the Low Income Program. A second method would be to consider using future program participants. The best approach will be identified as the timeline and available data are considered.

Additional participant phone surveys may be conducted to provide a better understanding of certain topics, such as primary and secondary heating sources, equipment functionality prior to replacement, customer behaviors and take-back effects, participant non-energy benefits and other building or equipment characteristics.

For nonresidential, site and metering visits on prescriptive and site specific projects will support project verification and gather necessary data to validate energy savings and engineering calculations. Sample sizes for each type of fuel will be based on the combined two-year (2012-

13) projected project count. Coefficients of variation from the 2010-2011 evaluation were used in the new sampling, effectively reducing the sample size in measure categories with less uncertainty, and increasing the sampling for those measures with greater variation. Natural gas projects 2013 program years will undergo a document review, and will only receive site visits if discrepancies are identified.

2013 Portfolio Process Evaluation

To identify program changes and areas of interest, brief interviews will be employed to gather relevant information. Key participants in the interview process will include Avista Implementation staff, Policy, Planning, and Analysis staff, and as appropriate, third-party implementation staff and trade allies.

To inform the residential process evaluation, telephone surveys will be conducted with 2013 program participants and nonparticipants. A review of communication and participant materials will be employed on critical program documents with new or updated materials, including program tracking databases, marketing materials and trade ally materials. The program materials will be evaluated against industry best practices for their adequacy, clarity, and effectiveness. Where appropriate, feedback will be provided to support the development of new or enhancement of existing program materials.

A market characterization study will be conducted in 2014 to expand on previous evaluation findings in order to establish a stronger understanding as to the saturation of core energy efficiency measures, key demographic and housing characteristics, and energy efficiency awareness in conjunction with attitudes and behaviors. This survey will incorporate a multi-channel approach, utilizing mail, telephone, and web, in an effort to limit bias. The goal of this general population survey is to characterize residential customers and provide the ability to identify demographic and geographic areas with particularly accessible energy saving potential. This research will supplement the Company's ongoing geographic information system analysis, with assistance provided as needed to enhance the research efforts in this area.

In an effort to validate an anomaly in Avista's recent residential net-to-gross results, related parameters will be collected at the program and sector levels in 2012 and 2013 using a

participant self-report method. The collected data will be used to calculate NTG and validate trends based on a series of NTG questions included in the participant surveys.

Participant and nonparticipant surveys will be conducted in 2014 for both residential and nonresidential and used to assess the differences in customer experiences, effectiveness of programs and materials available for customers and trade allies. Participant and nonparticipant surveys will focus on the decisions, attitudes, barriers, and behaviors regarding Avista's programs and efficient equipment/measure installations as well as supplement past spillover research.

To address communication materials and the associated participant databases, a materials review will be employed on critical program documents with new or updated material, including program tracking databases, marketing materials and nonresidential quality assurance methodologies and procedures. Program materials will be evaluated against industry best practices for their adequacy, clarity, and effectiveness. Where appropriate, feedback will be provided to support the development of new or enhancement of existing program materials and processes.

Trade Ally Panel Study

The Trade Ally Panel Study will consist of up to 120 residential and nonresidential trade allies who are familiar with Avista programs and have sales data beneficial to the study. For this study, it is proposed to have an annual panel whereby businesses would be offered an incentive of $450 in exchange for two rounds of data collection. The key data set would be comprehensive sales information on their last 50 unit sales of key measures. Requested details would include manufacturer data, efficiency levels, size, price, installation date, installation location, program incentive eligibility, and an assessment of the programs' impacts on incented and non-incented measures.

The objective of this study is to obtain reliable, reproducible data, with a confidence of 90 percent and a precision of ±10 percent, to document the saturation of high priority measures, the penetration of efficient versions of those high priority measures, the penetration of those efficient

measures attributable to Avista's programs, the market share of efficient measures, and the share of high priority measures receiving rebates.

This effort is expected to yield the most reliable information on standard market practices, and through an ongoing annual update, to provide context for tracking ongoing program impacts and market effects specific to Avista's service territory.

This study will provide market insights and the context for tracking ongoing program impacts or market effects. The panel study offers the advantage of gathering a large set of data that would aid in determining differences in sales between trade allies engaged with Avista's programs and less-engaged trade allies, changes in sales patterns of key measures over time, the effect of Avista's DSM programs on the sales and saturation of efficient equipment, and trade ally perceptions of the programs' influences. These insights will allow Avista to make decisions regarding program design, measure offerings, and incentive levels. This effort may be supplemented with focus groups as appropriate.

Electric Conservation Potential Assessment

Pursuant to Washington's I-937 ten conditions, an electric Conservation Potential Assessment (CPA) is required every two years.[5] This study will begin late 2014 and will complete in early 2015. This CPA will be used to inform the Company's Conservation section of its 2015 Electric Integrated Resource Plan (IRP) that will be filed August 2015. Prior to I-937, Avista had regularly performed an internal potential assessment leading to the development of a conservation supply curve.

Avista's two most recent CPAs were conducted by Global Energy Partners, now EnerNOC. An RFP will be done in 3rd quarter 2014 in order to select a consultant to conduct Avista's next potential study. Based on the past potential studies and timing, Avista is estimating that approximately $100,000 will occur in 2014.

The CPA is an evaluation of a wide variety of efficiency measures and equipment including cost characteristics, energy savings and market potentials for each measure. From this analysis, a

[5] See Washington Utilities and Transportation Commission Docket No. UE-111882, Order No. 1.

conservation supply curve is constructed, cost-effective measures are identified, and an estimate of the aggregate portfolio of acquisition by end use and segment is established. This information is subsequently evaluated in great detail and incorporated into a bottom-up operational analysis of the DSM business plan. The objective is to identify cost-effective resources at a program delivery level within Avista's service territory.

The upcoming potential study will be consistent with Northwest Power and Conservation Council methodology and will incorporate UES from the Regional Technical Forum as possible, supplementing with the Avista's Technical Reference Manual and other industry sources.

Appendix C: Summarization of Cost-Effectiveness Methodology

The following matrix summarizes Avista's approach to calculating the four basic cost-effectiveness tests. The categorization and nomenclature have been worded so as to provide the clarity regarding each cost and benefit component.

Each of the four different tests summarized below represent cost-effectiveness from different perspective. Those perspectives are as follows:

- Total Resource Cost (TRC) Test: Based upon the perspective of all ratepayers of a specific utility and seeking to minimize the cost to the customer (including both customer and non-incentive utility costs) of delivering end-use services.
- Program Administrator Cost Test (PACT), also known as the Utility Cost Test (UCT): Based on the perspective of the utility and seeking to minimize the utility-only cost of serving customers.
- Participant Test: Based upon the perspective of an individual participant in the utility program and seeking to maximize all values accruing to the participant.
- Non-Participant Test, also known as the Rate Impact Measure (RIM): Based on the perspective of the non-participant transmitted through changes in the retail rate to the non-participating customer as a result of the adoption of a measure or the utility offering a program. The Non-Participant or RIM Test is also termed the "No Losers Test".
-

The Company does not perform a Societal Test. This test includes the valuation of all externalities, including those that have not been otherwise monetized and for which there is no definable market price. Due to the difficulties associated with the valuation of these externalities the Company does not perform this test.

Following the matrix is a description of how Avista approaches each of these components.

	TRC	PACT/UCT	Participant	Non-Part./RIM
Benefit components				
Avoided cost of utility energy	$	$		$
Value of non-utility energy	$		$	
Non-energy impacts	$		$	
Reduced retail cost of energy			$	
Cost components				
Customer incremental cost	$		$	
Utility incentive cost		$	-$	$
Utility non-incentive cost	$	$		$
Imported funds (tax credits etc)	-$		-$	
Reduced retail revenues				$

Customer incremental cost: This represents the additional cost of an efficient measure or behavior above the baseline alternative. To the maximum extent possible the determination of customer incremental cost is based upon alternatives that are identical in all aspects other than efficiency. When a clear apples-to-apples comparisons isn't possible an individualized adjustment is made to the extent possible. Applicable sales tax and permitting fees are included in the incremental cost.

Utility incentive cost: This represents the cost of direct financial payments to customers for the adoption of a measure or the utility cost of physical products disseminated to customers. Avista does not consider utility-provided services (e.g. audits or technical reports) to be an incentive.

Utility non-incentive cost: These costs consist of all utility costs that are outside of the definition of the incentive cost above. It typically consists of labor, EM&V, training, memberships and so on.

Imported funds: Avista includes the value of imported funds (generally tax credits or governmental co-funding of programs) to be a reduction in the customer incremental cost of the measure for purposes of calculating the TRC Test and the Participant Test. These funds are derived from customers outside the ratepayer population or the individual participant.

The alternative approach to treating imported funds as an offset to the customer incremental cost is to consider these funds to be a benefit. For purposes of Avista's cost-effectiveness objective (maximize residual net TRC benefit) there would be no mathematical difference between these two approaches.

Reduced retail revenues: For purposes of the Participant and Non-Participant Test the change in retail revenues is relevant to the cost and benefit perspective. The retail revenue impact takes the place of the avoided cost calculations in the TRC Test and the PACT.

Avoided cost of utility energy: The avoided cost of those forms of energy provided by the utility (electric and natural gas) based upon the results of the most recent Integrated Resource Plan and augmented for avoided costs that are unique to energy-efficiency (e.g. distribution and transmission capacity, distribution losses, the monetary cost of carbon etc.). Externality values that are not expected to be monetized and payable by the utility are not included in this test. To provide consistency with the accepted Council methodology, the Company increases the avoided cost calculation by 10% to incorporate an explicit preference for DSM resources.

The avoided cost of energy includes any increase in energy usage due to fuel conversions.

Value of non-utility energy: For forms of energy not provided by the utility, such as wood fuel, and for which there is no Integrated Resource Plan valuation of the avoided cost, all savings are valued based upon the customers retail cost of energy.

Non-energy impacts: Benefits or costs that are not related to energy itself are incorporated into the appropriate standard practice tests to the extent that they can be reasonably quantified and externally represented to a rational but critical audience. Savings most typically quantified are related to reductions in lighting maintenance and water and sewer cost savings. Additionally when the Company pays the full cost of a measure within the low-income portfolio, and includes that full cost as a customer incremental cost, the value of the baseline measure are included as a non-energy benefit as these represent the value of the end-use service absent any energy-efficiency.

There are a number of non-energy impacts that are persistently difficult to quantify, and are thus not included within the cost-effectiveness calculations. These include improvements in comfort, security, productivity, safety and similar values. Though the Company is occasionally able to determine a floor value to these impacts based upon a revealed preference methodology, generally these impacts cannot be valued.

The Company applies the same policies to both non-energy benefits and non-energy costs.

Reduced retail cost of energy: From the participant perspective the value of the savings derived from an energy-efficiency measure isn't the reduction in the utility avoided cost of energy, it's the reduced retail cost of energy.

The Company applies the weighted average cost of capital as the discount rate for all future costs and benefits. For purposes of the 2014 DSM business planning process the discount rate was 7.01%. The Company has committed to being prepared to perform sensitivity analysis on alternative discount rates upon request, and in particular in regards to the Idaho low-income portfolio.

Appendix D: Quick Reference Guide to Commonly Used Terms

The following common terms are used frequently throughout the business planning and external advisory oversight processes. Though not all terms are applied within the 2012 Business Plan, this guide is intended to provide the reader and the members of Avista's oversight groups with efficiently referencing definitions.

Quick Reference Guide to Commonly Used Terms

The following common terms are used frequently within Avista's business planning and portfolio management process. The definitions are presented here to provide greater clarity and more constructive discussion throughout the review of the business plan and for the external oversight of Avista's DSM portfolio in general.

8760
Total number of hours in a year.

Adjusted Market Baseline
Based on the RTF Guidelines, represents a measurement between the energy efficient measure and the standard efficiency case that is characterized by current market practice or the minimum requirements of applicable codes or standards, whichever is more efficient. When applying an Adjust Market Baseline, no net-to-gross factor would be applied since the resultant unit energy savings amount would represent the applicable savings to the grid.

Advisory Group (formerly known as the Triple E Board)
Avista's group of external stakeholders who comment about the Company's DSM activities.

Avoided Cost
Theoretical costs that the Company would not incur by selecting an alternative path or option. Avoided costs, as defined by the Public Utility Regulatory Policies Act (PURPA), are incremental energy or capacity or both which but for the purchase from qualifying facilities the utility would either generate itself or purchase from another source.

AFUE (Annual Fuel Utilization Efficiency)
The measure of seasonal or annual efficiency of a furnace or boiler. It takes into account the cyclic on/off operation and associated energy losses of the heating unit as it responds to changes in the load, which in turn is affected by changes in weather and occupant controls.

AMI (Advanced Metering Infrastructure)
Systems that measure, collect and analyze energy usage, from advanced devices such as electricity meters, gas meters and/or water meters through various communication media on request or on a pre-determined schedule.

AMR (Automated Meter Reading)
The technology of automatically collecting data from energy metering devices and transferring that data to a central database for billing and/or analyzing.

aMW
The amount of energy that would be generated by one megawatt of capacity operating continuously for one full year. Equals 8,760 MWh of energy.

ANSI (American National Standards Institute)
A source for information on national, regional, international standards and conformity assessment issues.

ASHRAE (American Society of Heating, Refrigeration and Air-Conditioning Engineers)
To advance "technology to serve humanity and promote a sustainable world. Membership is open to any person associated with the field."

Base Load Generation
Electric generating facilities that are operated to the greatest extent possible to maximize system mechanical and thermal efficiency and minimize system operating costs.

BCP – Biennial Conservation Plan
Referring only to state of Washington; a result of RCW 19.285, Energy Independence Act (also known as Initiative Measure No. 937 or "I-937") mandate that utility companies obtain fifteen percent of their electricity from new renewable resources such as solar or wind by 2020 and to undertake all cost-effective energy conservation. The Washington State Utilities and Transportation Commission adopted WAC 480-109, Acquisition of Minimum Quantities of Conservation and Renewable Energy to effectuate RCW 19.285. The BCP is responsive to the energy efficiency requirements of WAC 480-109 and describes the savings targets, the programs that will achieve the targets and how those energy savings targets will be measured and presented.

Black Scholes Model
An option-pricing model derived in 1973 for securities options. It was later refined in 1976 for options on futures (commonly referred to as the Black 76 or simply "Black model"). The Black model is widely used in the commodity arena to value commodity options. The model can also be used to distinguish between underlying certain equivalent value of an asset and the risk premium associated with price volatility.

Btu (British Thermal Unit)
The amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit. It is used to compare the heat producing value of different fuels. Natural gas futures and forward contracts typically are traded in MMBTU (million of Btus).

CAP (Community Action Partnership)
General term for Community Action Programs, Community Action Agencies, and Community Action Centers that through federal and state and other funding sources (e.g. utility constitutions) provide services such as low-income weatherization.

Capacity
Electricity: The rated load-carrying capability of a power generating unit or transmission line, typically expressed in megawatts. Some forward power contracts will specify the amount of capacity available that the purchaser pays a demand charge on the right to call on this amount of energy when needed. Many capacity contracts are analogous to a call option. Also, the maximum generation capability of an electric generating plant in any given hour.
Natural Gas: The rated transportation volume of natural gas pipelines, typically expressed in MMBTU. Also, the maximum amount of Dth that can pass through a pipeline in any given day.

Capacity Charge
In natural gas or electricity markets, a price set based on reserved capacity or measured demand and irrespective of energy delivered. Also know as a demand charge.

CEE (Consortium for Energy Efficiency)
Consortium of efficiency program administrators from across the U.S. and Canada who work together on common approaches to advancing efficiency. Through joining forces, the individual efficiency programs of CEE are able to partner not only with each other, but with other industries, trade associations, and government agencies. By working together at CEE, administrators leverage the effect of their funding dollars, exchange information on effective practices and by doing so achieve greater energy efficiency for the public good.

CFL (Compact Fluorescent Lamps)
CFLs use between one fifth and one third of the power of equivalent incandescent lamps. While the purchase price of an integrated CFL is typically 3 to 10 times greater than that of an equivalent incandescent lamp, the extended lifetime and lower energy use will compensate for the higher initial cost.

CNG (Compressed Natural Gas)
The compression of natural gas in storage vessels to pressures of 2,400 to 3,600 pounds per square inch, generally for use as a vehicle fuel.

COB (California Oregon Border)
Area where utilities in the Northwest connect to those in California and a very common trading hub or pricing point for forward electricity contracts.

Coincidence Factor
The ratio of the maximum simultaneous total demand of a group of customers to the sum of the maximum power demands of the individual customers comprising the group (in percent).

CPA (Conservation Potential Assessment)
An analysis of the amount of conservation available in a defined area. Provides savings amounts associated with energy efficiency measures to input into the Company's Integrated Resource Planning (IRP) process.

COP (Coefficient of Performance)
The coefficient of performance of a heat pump is the ratio of the output of heat to the supplied work or COP = Q/W ; where Q is the useful heat supplied by the condenser and W is the work consumed by the compressor.

Cost of Service
The actual costs of providing service to individual customers, groups of customers, or an entire customer base. In the energy industry, cost-of-service analyses are performed at all stages of the supply chain from generation through billing. Utilities use these studies to determine how to spread the rate increase to customer classes such as residential, commercial, industrial, and irrigation end-users.

Council
See the NPCC (Northwest Power and Conservation Council).

Critical Energy
The average energy produced under coordinated operation during the critical or highest-use period.

Customer/Customer Classes
A category(ies) of customer(s) defined by provisions found in tariff(s) published by the entity providing service, approved by the PUC. Examples of customer classes are residential, commercial, industrial, agricultural, local distribution company, core and non-core.

DCU (Digital Control Unit)
Load control switch usually associated near end-use equipment (e.g. on an exterior wall of a home to control a hot water tank).

Decoupling
In conventional utility regulation, utilities make money based on how much energy they sell. A utility's rates are set based largely on an estimation of costs of providing service over a certain set time period, with an allowed profit margin, divided by a forecasted amount of unit sales over the same time period. If the actual sales turn out to be as forecasted, the utility will recover all of its fixed costs and its set profit margin. If the actual sales exceed the forecast, the utility will earn extra profit.

DEER (Database for Energy Efficient Resources)
A California Energy Commission and California Public Utilities Commission (CPUC) sponsored database designed to provide well-documented estimates of energy and peak demand savings values, measure costs, and effective useful life (EUL) all with one data source. The Company and its third –party evaluators may reference this resource as they compile Technical Resource Manuals or Conservation Potential Assestments.

Degree-Day
A measure of the variation of one day's temperature against a standard reference temperature. There are both cooling degree-days (CDDs) and heating degree-days (HDDs). Utilities typically use degree days as a common measure of the trend amount of electric power to be consumed based on the heating or cooling demand. The difference between the mean daily temperature and 65 degrees Fahrenheit. A general measure of the need for heating (negative) or cooling (positive).

Demand
The load that is drawn from the source of supply over a specified interval of time (in kilowatts, kilovolt-amperes, or amperes). Also, the rate at which natural gas is delivered to or by a system, part of a system or piece of equipment, expressed in cubic feet, therms, BTUs or multiples thereof, for a designated period of time such as during a 24-hour day.

Demand Factor
The ratio of the maximum demand to the total connected load for a defined part of the electric system (in percent).

DG (Distributed Generation)
Electricity that is generated from many small energy sources usually at the end-use or customer site.

Distribution
The portion of the utility system from the transformer in the substation to the Point of Delivery for the customer. The Distribution System is the "last stage" in providing service to the customer. It is typically the (lower voltage) circuits that are rated for 13.8 kV in Avista's system. These are the "lines behind your house" and can be underground as well as overhead.

DR (Demand Response)
Mechanisms to manage the demand from customers in response to supply condition; for example, having electricity customers reduce their consumption at critical times or in response to market prices. Passive DR is employed to customers via pricing signals, such as inverted tier rates, time of use (TOU) or critical peak pricing (CPP).

DSM (Demand Side Management)
The process of helping customers use energy more efficiently. Used interchangeably with Energy Efficiency and Conservation although conservation technically means using less while DSM and energy efficiency means using less while still having the same useful output of function.

Dth (Decatherm)
A measure of gas volume equal to one million BTU.

EF (Energy Factor)
The measure of overall efficiency for a variety of appliances. For water heaters, the energy factor is based on three items: 1) the recovery efficiency, or how efficiently the heat from the

energy source is transferred to the water; 2) stand-by losses, or the percentage of heat lost per hour from the stored water compared to the content of the water: and 3) cycling losses.

Electric PCA, ERM

The Purchase Cost Adjustment (PCA) and Energy Recovery Mechanism (ERM) are regulatory accounting mechanisms designed to recover/rebate deferred power supply costs associated with such things as abnormal stream flow conditions and changes in the wholesale market prices.

Electric Trading Time Frames

1) Heavy Load or Peak: Standard time frame for purchase/sale of electricity, 16 hours per day, Monday through Saturday, hours 0700 through 2200.
2) Light load or Off-Peak: Standard time frame for purchase/sale or electricity, Monday through Saturday, hours 0100 through 0600, 2300 and 2400, and all 24 hours on Sunday.
All Hours of Flat - 24 hours, every day of the time period. Forward electric transactions – Trade in standard time frames of balance of the month, forward individual months, calendar quarters – January- March, April - June, July - August and October – November, and calendar years. All forward transactions can be peak, off-peak or flat.
3) Real -Time or Hourly: Electricity is purchased and sold every hour.
4) Pre-Schedule - Electricity Heat Rate Swap: Selling gas and purchasing electricity or purchasing gas and selling electricity in proportions to roughly equate if generating at a specific plant with an estimated heat rate. Transaction is made to take economic advantage of changing relationship between electric and gas prices.

EM&V (Evaluation Measurement & Verification)

This is composes of impact analysis (the measurement of the impact of the installation of an efficiency measure), process analysis (the evaluation of a process with the intent of developing superior approaches through obtaining a better understanding of the process itself), market analysis (evaluating the interaction between the market and measure to include the estimation of net-to-gross ratios, technical, economic and acquirable potentials) and cost analysis (the estimation of the cost characteristics of a measure with particular attention to incremental cost and the influence that a program may have upon those cost characteristics).

EPA (United States Environmental Protection Agency)

EPA leads the nation's environmental science, research, education and assessment efforts. The mission of the Environmental Protection Agency is to protect human health and the environment.

ERM
See Electric PCA, ERM

ERV (Energy Recovery Ventilator)
An energy recovery ventilator saves energy and helps to keep indoor humidity within a healthy range. It transfers heat and moisture between the incoming and outgoing air.

everylittlebit
Avista's Energy Efficiency Campaign. "When it comes to energy efficiency, every little bit adds up."

FERC
Federal Energy Regulatory Commission

Firm Power
Power or power-producing capacity intended to be available at all times during the period covered by a commitment, even under adverse conditions.

Firm Service
Natural gas or electricity service offered to customers that anticipates no planned interruption.

Firm Transportation
Natural gas transportation services for which facilities have been designed, installed and dedicated to a certified volume. Firm transportation services takes priority over interruptible service.

Fixed Costs
Costs that the Company/customers will incur over various levels of activities.

GAMA (Gas Appliance Manufacturer's Association)
Represents manufacturers of appliances, components and products used in connection with space heating, water heating and commercial food service.

Heat Rate
The quantity (expressed as a ratio) of fuel necessary to generate one kWh of electricity, stated in British thermal units (Btu). A measure of how efficiently an electric generator converts thermal energy into electricity (i.e. the lower the heat rate, the higher the conversion efficiency).

HRV (Heat Recovery Ventilator)
A ventilation system that recovers the heat energy in the exhaust air, and transfers it to fresh air as it enters the building. HRV provides fresh air and improved climate control, while also saving energy by reducing the heating (or cooling) requirements.

HSPF (Heating Seasonal Performance Factor)
The measure of the heating efficiency of a heat pump. The HSPF is a heat pump's estimated seasonal heating output in Btu's divided by the amount of energy that it consumers in watt-hours.

HVAC (Heating, Ventilation, and Air Conditioning)
Sometimes referred to as climate control, the HVAC is particularly important in the design of medium to large industrial and office buildings where humidity and temperature must all be closely regulated whilst maintaining safe and healthy conditions within.

I-937
Initiative Measure No. 937 in state of Washington mandate that utility companies obtain fifteen percent of their electricity from new renewable resources such as solar or wind by 2020 and to undertake all cost-effective energy conservation.

IAQ (Indoor Air Quality)
IAQ is a measure of the content of interior air that could affect health and comfort of building occupants.

IHD (In Home Display)
A device used to provide energy usage feedback to a customer on a real or near-real time basis.

IOU (Investor-Owned Utility)
A utility whose stock is publically traded and owned by private shareholders.

IPUC (Idaho Public Utilities Commission)
The IPUC regulates investor-owned utilities within the state of Idaho.

IRP (Integrated Resource Plan)
An IRP is a comprehensive evaluation of future electric or natural gas resource plans. The IRP must evaluate the full range of resource alternatives to provide adequate and reliable service to

a customer's needs at the lowest possible risk-adjusted system cost. These plans are filed with the state public utility commissions on a periodic basis.

IRP TAC (Technical Advisory Committee)
Internal and external advisory committee for the IRP process.

Interruptible Service
Natural gas or electricity sales that are subject to interruption for a specified number of days or hours during times of peak demand or in the event of system emergencies. In exchange for interruptibility, buyers pay lower prices. Also for natural gas transportation or sales service which is subject to interruption at the option of any of the involved parties (seller, pipeline, LDC, buyer) because of energy shortages, capacity constraints, or economic considerations.

Kilowatt (kW)
One thousand watts. A watt is 1/746 horsepower (kW = 1.34 horsepower) or the power produced by a current of one ampere across a potential difference of one volt.

Kilowatt-Hour (kWh)
One thousand watts operating for one hour. Energy over time becomes work or 1.34 horsepower operating for one hour.

LDC (Local Distribution Company)
A natural gas utility providing service to customers.

LED (Light Emitting Diode)
Electronic semiconductor device that produces light, commonly used as an efficient lamp or disply.

Line Losses
The amount of electricity lost or assumed lost when transmitting over transmission or distribution lines. This is the difference between the quantity of electricity generated and the quantity delivered at some point in the electric system.

LIHEAP (Low Income Home Energy Assistance Program)
Federal energy assistance program, available to qualifying households based on income, usually distributed by community action agencies or partnerships.

LIRAP (Low Income Rate Assistance Program)
LIRAP provides funding (collected from Avista's tariff rider) to CAP agencies for distribution to Avista customers who are least able to afford their utility bill.

LMS (Load Management System)
LMS is used by Avista to send load control signals to Demand Response equipment to cycle and/or curtail customer appliances.

LNG (Liquefied Natural Gas)
Natural gas that has been liquefied by reducing its temperature to minus 260 degrees Fahrenheit at atmospheric pressure. It remains a liquid at minus 116 degrees Fahrenheit and 673 psig. In volume, it occupies 1/600 of that of the vapor.

Load
The amount of power carried by a utility system at a specified time. Load is also referred to as demand.

Load Factor
The ratio between average and peak usage for electricity and gas customers. The higher the load factor, the smaller the difference between average and peak demand. The average load of a customer, group of customers, or entire system, divided by the maximum load can be calculated over any time period. For example, assuming 3650 therms of natural gas usage over a year, the average daily load is 3650/365 or 10 therms. If the peak day load or maximum load was 20 therms, the load factor was 50 percent.

Load Growth
This is the change, +/-, in the total therms (natural gas) and kWh (electric) that is consumed by retail customers from year to year. The amount the peak load or average load in an area increases over time (usually reported as an annual load growth in some percentage).

MAP (Maximum Acquisition Potential)
The maximum amount of energy savings the Company could achieve under the Biennial Conservation Plan.

MDM/MDMS (Meter Data Management System)
Used to organize meter interval data from an automated meter reading system.

Measure
A measure is a energy-efficiency product or service that can be offered relatively independently of other similar products or services.

MEF (Modified Energy Factor)
A new equation that replaced Energy Factor as a way to compare the relative efficiency of different units of clothes washers. The higher the Modified Energy Factor, the more efficient the clothes washer.

Megawatt (MW)
One million Watts, or one thousand kilowatts. Forward power contracts are normally traded in megawatts.

Megawatt-hour (MWh)
One million watts operating for one hour, energy over time becomes work or 1,340 horsepower operating for one hour. An MWh is an average megawatt produced or consumed for one hour.

MERV (Minimum Efficiency Reporting Value)
MERV ratings are used to rate the ability of an air conditioning filter to remove dust fro, the air as it passes through the filter. MERV is a standard used to measure the overall efficiency of a filter.

Mid-Columbia (Mid-C)
Electricity transacting hub or point, and point-of-connection to the transmission lines of the Columbia River hydro-generation facilities. The most common and liquid electricity trading point in the Northwest.

MMBTU
A unit of heat equal to one million British thermal units. Natural Gas contracts are typically traded in MMBTU. One futures contract is 10,000 MMBTU/day.

NARUC
National Association of Regulatory Utility Commissioners is an association representing the State public service commissioners who regulate essential utility services, such as electricity, gas, telecommunications, water, and transportation, throughout the country. As regulators, their members are charged with protecting the public and ensuring that rates charged by regulated utilities are fair, just, and reasonable.

Native Load
The retail customer load in which Avista has responsibility to plan and provide electric supply (includes scheduled losses incurred by Avista's systems; and does not include scheduled losses incurred by other parties wheeling of power on Avista's system).

Natural Gas
A naturally occurring mixture of hydrocarbon and non-hydro carbon gases found in porous geologic formations beneath the earth's surface, often in association with petroleum. The principal constituent is methane.

NEB (Non-Energy Benefits)
Benefits (or costs) resulting from the installation of an efficiency measure that are unrelated to the energy resource. This may any value or cost but is most commonly the impact of changes in water usage, sewage cost, reduced maintenance cost, etc. Values or costs which cannot be reasonably quantified (such as security, safety, productivity) are not included in Avista's measurement of non-energy benefits

NEEA
The Northwest Energy Efficiency Alliance is a non-profit organization working to encourage the development and adoption of energy-efficient products and services. NEEA is supported by the region's electric utilities, public benefits administrators, state governments, public interest groups and efficiency industry representatives. This unique partnership has helped make the Northwest region a national leader in energy efficiency. NEEA operates programs in Idaho, Montana, Oregon and Washington. It is funded by leading Northwest electric utilities as well as Energy Trust of Oregon and the Bonneville Power Administration, which pays on behalf of its electric utility customers. This money is pooled and used to fund projects approved by our Board of Directors.

NEET
Northwest Energy Efficiency Taskforce was formed to bring together a group of high-level leaders to focus and improve the efficiency of electricity use throughout the Pacific Northwest. The taskforce will work to pull together innovative ideas from successful energy efficiency programs and explore how, through regional collaboration, energy efficiency can be delivered more efficiently. Part of the Northwest Power and Conservation Council.

NERC
North American Electricity Reliability Council Their mission is to ensure the reliability of the bulk power system in North America by developing and enforcing reliability standards; assess

reliability annually via 10-year and seasonal forecasts; monitor the bulk power system; evaluate users, owners, and operators for preparedness; and educate, train, and certify industry personnel. NERC is a self-regulatory organization, subject to oversight by the U.S. Federal Energy Regulatory Commission and governmental authorities in Canada.

NPCC (Northwest Power and Conservation Council)
The Council was established by the Northwest Power Act in 1980 to provide the electric customers of Washington, Idaho, Oregon and Montana with regional electric power planning coordination.

Off Peak
Times of low energy demand, typically nights and weekends. Off-peak hours in the Western U.S. are typified as the time from 10 p.m. to 8 a.m. Monday through Saturday, and all day Sunday. Forward contracts typically trade as on-peak, off peak, or flat (24 hours).

On Peak
Times of high-energy demand when it is at its peak. On-peak varies by region. In the Western United States, it is typically 6 a.m. to 10 p.m. Monday through Saturday. 0600 - 2200 Monday through Saturday, excluding NERC holidays.

OPUC (Public Utility Commission of Oregon)
The agency that regulates investor-owned utilities in Oregon.

Participant Test
One of four standard practice tests developed in California as a means to evaluate the cost-effectiveness of demand side management programs from the perspectives of different participants. The Participant Test shows the cost-effectiveness for the "participating" customer. It includes the value of the energy savings among other things from the project vs. the customer project cost.

PCA
See Electric PCA, ERM

PCT (Programmable Communicating Thermostat)
A load controlling thermostat that can communicate with a utility's load management system by internet protocol or radio frequency (RF).

Peak Load
Maximum demand, Peak demand. The greatest of all demands that have occurred during a given period.

Peaking Capability
Generating capacity normally designed for use only during maximum load period of a designated interval.

PGA (Purchase Gas Adjustment)
The Purchase Gas Adjustment is a mechanism that is periodically filed with the Utility Commissions and designed to recover or rebate the deferred changes in the cost of natural gas purchased to service customer loads.

Photovoltaic (PV)
Technology and research related to the application of solar cells for energy by converting sunlight directly into electricity.

Power Plan
The Northwest Power and Conservation Council is required to complete a regional Power Plan every five years. The Plan includes both supply-side (generation) and conservation resources. (Per the definition of "conservation" in the Northwest Power Act, electric-to-natural gas conversions are not considered to be "conservation" within the Plan). The Sixth Power Plan is currently nearing approval by the Council.

PPA (Power Purchase Agreement)
A legal contract between an electricity generator and a purchaser of energy or capacity.

Prescriptive
A prescriptive program is a standard offer for incentives for the installation of an energy efficiency measure. Prescriptive programs are generally applied when the measures are relatively low cost and are employed in relatively similar applications.

Program
A program is an aggregation of one or more energy-efficiency measures into a package that can be marketed to customers.

PUC (Public Utility Commission)
State agencies that regulate the tariffs (pricing) of investor-owned utility companies.

PUD (Public Utility District)
A political subdivision with territorial boundaries greater than a municipality and sometimes larger than a county for the purpose of generating, transmitting and distributing electric energy and/or other utility commodities.

RAP (Realistic Acquisition Potential)
The amount of energy savings the Company could realistically achieve under the Biennial Conservation Plan.

Rate Base
The capital investment (plant assets on the balance sheet) that regulatory commissions deem to be prudent and, therefore, allow to be recovered from customers. Further, it is the only utility cost that is allowed to have a profit component (return on equity) imputed upon it. All other costs are only returned dollar for dollar at the time of a rate case.

Rate Design
The manner in which retail prices are structured to recover the cost of service from each customer class. Rate design includes pricing components such as basic charges, demand charges and energy charges.

Ratepayer Impact
This concept is applied to analyses of projects to determine if the project will increase, decrease or be neutral to existing rates that customers currently are charged. This impact can be interpreted in total over the life of the project or year-by-year during the project's duration.

RGI (Renewable Generation Incentive)
Avista's distributed renewable incentive in Washington.

RIM (Rate Impact Measure Test)
One of four standard practice tests developed in California as a means to evaluate the cost-effectiveness of demand side management programs from the perspectives of different participants. The RIM Test (aka the "non-Participant Test") indicates if the program will result in a rate increase or decrease. The non-participating customer bears the cost of the rate increase without obtaining any program benefits.

RTF (Regional Technical Forum)
An advisory committee established in 1999 to develop standards to verify and evaluate conservation savings. Members are appointed by the Council and include individuals experienced in conservation program planning, implementation and evaluation. The RTF is also responsible for developing a conservation and renewable rate discount (C&RD) for the Bonneville Power Administration. The C&RD program awards rate discounts to customers who have implemented effective energy conservation measures. The RTF serves as a subcommittee to the Northwest Power and Conservation Council.

R-Value
A measure of thermal resistance used in the building and construction industry. The bigger the number, the better the building insulation's effectiveness. R value is the reciprocal of U factor.

Schedules 90 and 190
These tariffs authorize Avista to operate electric-efficiency (Schedule 90) and natural gas efficiency (Schedule 190) programs within Washington and Idaho. Electric to natural gas conversions are considered electric-efficiency programs, subject to achieving a specified net BTU efficiency.

Schedules 91 and 191
These tariffs establish a surcharge levied upon retail electric (Schedule 91) and natural gas (Schedule 191) sales to fund electric and natural gas-efficiency portfolios respectively.

Seasonality
The seasonal cycle or pattern refers to the tendency of market prices to move in a given direction at certain times of the year. Generally, seasonality refers to the changing supply and demand over various times of the year.

SEER (Seasonal Energy Efficiency Factor)
Performance Rating of Air-Conditioning and Air-Source Heat Pump Equipment. The higher the SEER rating of a unit, the more energy efficient it is. The SEER rating is the Btu of cooling output during a typical cooling-season divided by the total electric energy input in watt-hours during the same period.

Site Specific
A nonresidential program offering individualized calculations for incentives upon any electric or natural gas-efficiency measure not incorporated into a prescriptive program.

SNAP (Spokane Neighborhood Action Program)
A Spokane organization that provides financial, housing, and human services assistance to low-income customers.

Societal Test
The Societal Test is one of four standard practice tests developed in California as a means to evaluate the cost-effectiveness of demand-side management programs from the perspectives of different participants. This is a true societal cost-benefit test in that all transfer payments are excluded and externalities are fully incorporated into the calculations.

T-5
Usually most efficient Tubular Type, 5/8 inch diameter fluorescent lighting.

T-8
More efficiency Tubular Type, 1 inch diameter fluorescent lighting.

T-12
Tubular Type, 12/8 inch diameter fluorescent lighting.

Tariff Rider
The surcharge on retail electric and natural gas sales that provides the funding for Avista's DSM programs. This surcharge is authorized under Schedule 91 (for electric programs) and Schedule 191 (for natural gas programs).

T&D (Transmission and Distribution)
Transmission is the portion of the utility plant used to transmit electric energy in bulk to other principal parts of the system. Distribution is the portion of the utility system from the transformer in the substation to the Point of Delivery for the customer. These are the "lines behind your house" and can be underground as well as overhead.

Technical Committee
Avista's group of external stakeholders who comment about the company's approach to the measures and measurements associated with DSM activities.

Therm
A measure of the heat content of gas equal to 100,000 Btu.

Throughput
Related to natural gas load change, but usually referenced to the energy use per customer/premises/meter from year to year.

TRC (Total Resource Cost)
One of the four standard practice tests commonly used to evaluate the cost-effectiveness of DSM programs. The TRC Test evaluates the cost-effectiveness from the viewpoint of all customers on the utility system. The primary benefits include the avoided cost of energy and non-energy benefits in comparison to the customer incremental cost and non-incentive utility expenditures. The California standard practice allows for tax credits to be considered offsets to the customer incremental cost (though Avista calculates the TRC Test with and without this offset).

TRM (Technical Resource Manual)
A central document that provides a list energy efficiency measures and their associated savings values. Useful with regards to program management and evaluation, measurement and verification activities.

Triple-E (External Energy Efficiency Board – see Advisory Group)
Avista's group of external stakeholders who comment about the company's DSM activities.

U-Factor
U-Factor measures the heat transfer through a window, door, or skylight and tells you how well the product insulates. The lower the U-Factor, the greater resistance to heat flow (in and out) and the better its insulation value.
(1/U = R-Value)

UCT (Utility Cost Test)
One of the four standard practice tests commonly used to evaluate the cost-effectiveness of DSM programs. The UCT evaluates the cost-effectiveness based upon a programs ability to minimize overall utility costs. The primary benefits are the avoided cost of energy in comparison to the incentive and non-incentive utility costs.

UES (Unit Energy Savings)
The amount of energy saved per unit of specific conservation measure; referenced in the Technical Resource Manual, Conservation Potential Assessment or Regional Technical Forum documentation

WACOG (Weighted Average Cost of Gas)
The price paid for natural gas delivered to an LDC's city gate, purchased from various entities, such as pipelines, producers or brokers, based on the individual volumes of gas that make up the total quantity of supplies to a certain region.

Weather Normalized
This is an adjustment that is made to actual energy usage, stream-flows, etc., which would have happened if "normal" weather conditions would have taken place.

WUTC (Washington Utilities and Transportation Commission)
The agency that regulates investor-owned utilities in Washington.

Appendix E: 2013 Interim Avista Natural Gas Demand-Side Management Portfolio Business Plan

The Company's original 2013 DSM Business Plan was restricted to the electric DSM portfolios in anticipation of the suspension of both the Washington and Idaho natural gas DSM portfolios. The Company had filed for this suspension as a result of the inability to field a net TRC cost-effective natural gas DSM portfolio under updated, and much lower, avoided costs.

The IPUC approved the requested suspension. The WUTC directed the Company to continue offering natural gas DSM using the gross UCT as the cost-effectiveness standard. A mid-year planning effort reviewing the existing portfolio and ultimately leading to the filing for revisions to the Washington Schedule 190 was completed. The attached interim business plan was filed in support of the request for those tariff revisions.

2013 Interim Avista Natural Gas Demand-Side Management Portfolio Business Plan

Avista Utilities
August 7th, 2013

Introduction

This Interim Business Plan document represents the commitment to documenting the outcome of an ongoing business planning effort that occurred between May 2012 and July 2013. The business planning effort was specifically designed to be responsive, in a timely manner, to a Washington Utilities and Transportation Commission directive to shift from the Company's optimization of the natural gas DSM portfolio around a net Total Resource Cost test to the use of the gross Utility Cost Test. (The details of these tests and the implications upon the management of the portfolio will be elaborated upon within this document).

The outcome of the planning process has led to a recommendation for a revision in the tariff governing the natural gas DSM portfolio (Schedule 190) and the need to do so prior to the completion of the full 2014 DSM Business Plan.

This Interim Business Plan will explain and document the planning effort that has been completed up to the initiation of the regularly scheduled comprehensive annual business planning process. The results of these planning efforts have moved seamlessly forward into the development of a 2014 DSM Business Plan. That planning effort is currently underway and scheduled for completion on November 1st, 2013.

Background

Natural gas DSM programs have been difficult to deliver in a total resource cost (TRC) effective manner. The elements of the total resource cost (summarized in the table below) are heavily reliant upon the customer incremental cost in comparison to the present value of the stream of avoided energy cost savings.

Table 1: Total Resource Cost (TRC) test benefits and costs

Benefits:

- Present value of the future stream of avoided cost of natural gas
- Present value of the future stream of avoided cost of electricity (positive or negative)
- Present value of the future stream of the benefits of non-utility energy

Costs:

- The customer incremental cost of the efficiency measure (using symmetric base case assumptions for the determination of both cost and savings)
- The non-incentive utility cost of the program

The TRC test defines the costs and benefits based upon the perspective of the customer population of a specific utility. Optimizing for the TRC test will minimize the customer populations total energy cost.

The relatively slowly improving natural gas efficiency technologies and avoided costs that are less than 30% of their electric counterpart (on an MMBTU basis) create inherent cost-effectiveness challenges for the delivery of natural gas DSM in comparison to electric DSM offerings.

Quantum leaps in the development of low cost natural gas gathering technologies have led to yet further reductions in the market price of natural gas. The Company has been observing these drastic cost reductions in market prices over the past few years. Though the avoided cost is based upon the incremental and not the average or market commodity cost, the two measures are tied closely enough that this market direction did indicate an impending decrease in avoided costs as well. Thus it was anticipated that the 2013 Natural Gas Integrated Resource Plan (IRP) would lead to much lower avoided cost. This future challenge has been a topic of discussion for the Company's external energy efficiency Technical Committee as early as May 2011.

In May 2012 the first calculations of the avoided cost stream for the 2013 natural gas IRP were completed. The avoided cost stream actually fell by more than was previously anticipated. A review of the existing natural gas portfolio indicated that the portfolio would no longer be TRC cost-effective under the updated avoided costs.

Various optimization scenarios were performed to determine if a cost-effective portfolio could be developed. Unfortunately there were very few programs that were individually incrementally cost-effective, even without consideration of relatively fixed infrastructure costs. Those few programs that were incrementally cost-effective were narrowly, so and had insufficient residual benefits to support any reasonable allocation of non-incentive utility costs. The most favorable scenarios yielded benefit-to-cost ratios of approximately 0.6 (a benefit-to-cost ratio below 1.0 indicates that the costs exceed the benefits and that the program is not cost-effective).

Given the Company's commitment to delivering a TRC cost-effective program and the clear inability to do so under expected circumstances the Company felt the obligation to file in a timely manner for the indefinite suspension of the natural gas DSM portfolio. The Company committed to evaluating the prospects for re-initiating the portfolio in the event that a cost-effective program could be delivered in the future. This commitment explicitly included frequent review of the impact of future natural gas avoided costs, the cost and efficacy of

efficiency technologies or improvements in delivery technologies (including regional market transformation opportunities).

The timing of Avista's natural gas IRP and the rapidity with which the Company responded to the changing market conditions placed Avista's natural gas DSM conundrum into the policy discussion earlier than most other utilities.

A comprehensive discussion of the viability of the natural gas DSM portfolio ensued, including a discussion of the appropriate performance metrics and policies that should be applied to the decision to continue or suspend such programs. The discussion included consideration of alternative discount rates, increased avoided cost preferences and the use of the utility cost test (UCT) in place of the TRC test as the key portfolio cost-effectiveness metric.

During the discussion there appeared to be a strong consensus that, regardless of the outcome of the discussion of natural gas DSM in general, the natural gas component of the low income program would not be impacted. The reasons cited for such a position was the heavier emphasis on nonresource acquisition attributes of this portfolio as well as the individual assessment of each measure application by the community action agencies delivering these programs under annual funding contracts from Avista. Thus the low income portion of the natural gas portfolio was excluded from those planning efforts on the presumption that the existing annual contracts would go forward without revision.

Ultimately the Washington Utilities and Transportation Commission provided the Company with the regulatory guidance to apply the UCT test in place of the TRC test for purposes of all facets of the natural gas DSM portfolio.

The UCT metric differs substantially from the TRC metric currently summarized. The benefits and costs of the UCT metric are as represented below:

Table 2: Utility Cost Test (UCT) benefits and costs

Benefits:

- Present value of the future stream of avoided cost of natural gas
- Present value of the future stream of avoided cost of electricity (positive or negative)

Costs:

- The incentive cost of the utility program
- The non-incentive utility cost of the program

The UCT test defines costs and benefits based upon the perspective of the utility and how the cost that the utility incurs will be passed on to their customers. Optimizing for the UCT test will minimize the customers utility bill.

The costs of the TRC and UCT metric differs in that the TRC test includes the customers full incremental cost of the measure prior to the receipt of any utility incentive. The UCT test replaces this incremental customer cost with the cost of the incentive only. Since the incentive cost is invariably well below the customers full incremental measure cost the UCT is nearly guaranteed to be easier to pass than the TRC test. The TRC test does include the value of non-energy benefits, but these benefits are almost never sufficient to offset the TRC's much higher cost definition.

The regulatory direction additionally indicated that the UCT test was to be defined based upon all program participants. Previously the Company adjusted the calculation of the TRC test to measure the incremental cost and benefits of only of those customers who were determined to have adopted the measure only as a consequence of the utility program. This adjustment, termed a "net-to-gross" adjustment, is based upon a periodic evaluation of the programs within the portfolio.

Avista expressed concern, and the Commission concurred, that a narrowly focused optimization upon the UCT test could lead the Company to promote measures that did not necessarily pass an assessment of participant cost-effectiveness. To the extent that utility incentives could be considered to be an endorsement the Company believed it to be necessary to exercise a degree of caution to ensure that the spirit of the Commissions guidance was fully considered within the planning process.

Developing a Revised Natural Gas DSM Portfolio

Upon the receipt of the above outlined regulatory guidance the Company immediately re-opened the planning process with the intent to determine what, if any, revisions were necessary to optimize the portfolio based upon a gross UCT test metric.

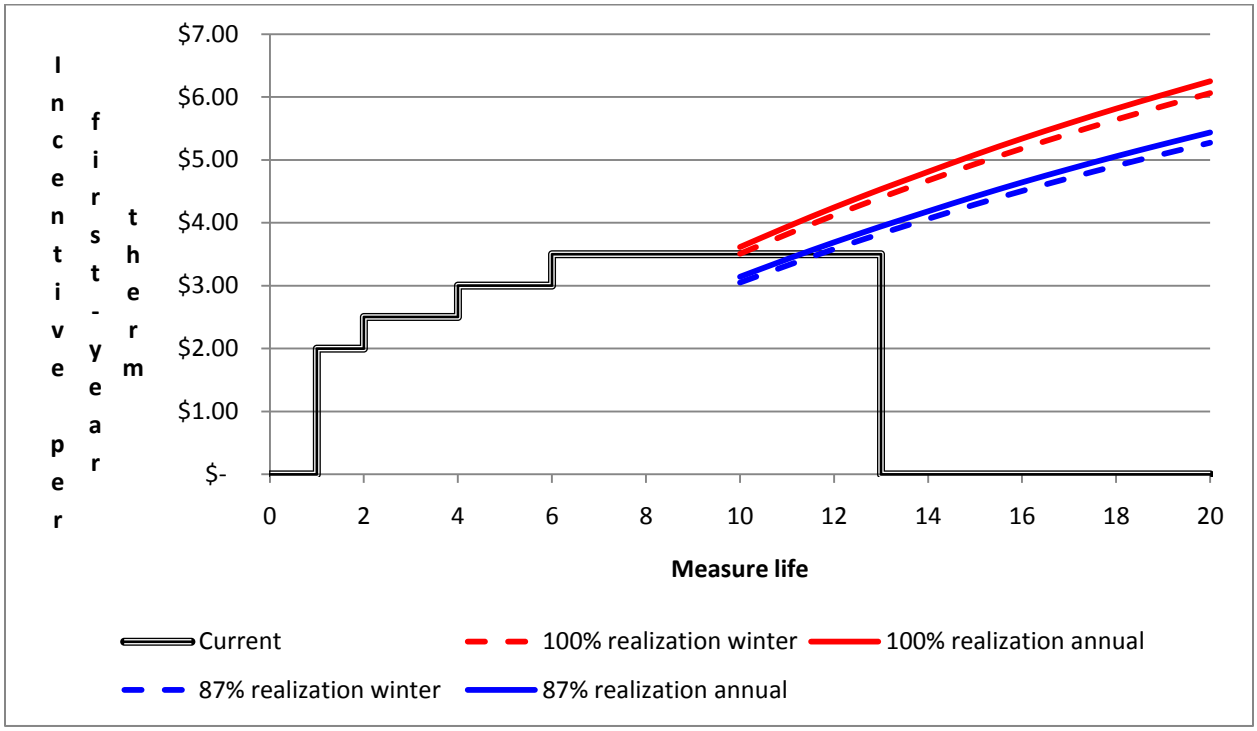
An updated estimate of the portfolio performance on a gross UCT basis was projected to yield a benefit-to-cost ratio of 0.88. This is a moderately significant failure to reach cost-effectiveness even based upon the UCT metric (with its lower hurdle for cost-effectiveness). All three of the major components of the natural gas DSM portfolio (excluding the low income portfolio) also individually failed to be cost-effective (residential prescriptive programs delivering a 0.85 benefit-to-cost ratio, nonresidential prescriptive programs a 0.89 and the nonresidential site-specific program being nearly cost-effective at a 0.96 benefit-to-cost ratio).

Direct financial utility incentives are by far the largest cost within the UCT test. Avista's Schedule 190 tariff (governing the implementation of the natural gas DSM programs) defines a tiered incentive level structure for all measures with a life of ten years or greater. The tiers are established based upon the energy simple payback of the measure. The incentive level provided (stated in terms of the incentive per first-year therm saved) increases as the simple payback increases until a simple payback of 13 years is reached. Measures with a simple payback of over 13 years are not eligible for an incentive under the current tariff.

The substantial majority of the long simple payback (over 13 year) projects are TRC cost-ineffective due to high customer incremental costs. In previous years, when these projects were eligible for incentives, these long-payback projects have detracted (sometimes substantially) from the TRC cost-effectiveness of the portfolio. The current exclusion of projects with simple paybacks in excess of 13 years was driven by the need to deliver a TRC cost-effective portfolio.

It was additionally noted that the incentive levels defined within Avista's current tariff came close to and under some unusual circumstances could exceed the comparable avoided cost, as illustrated below. The illustration also indicates the impact of a realization rate (the percentage of energy savings anticipated from the project at time the incentive was granted vs. the verified savings) upon the relationship between the incentive and the avoided cost value.

Figure 1: Comparison of incentive levels and avoided cost values for winter and annual load shapes and 100% and 87% realization rates



Since the avoided costs must not only be sufficient to allow for the recovery of the incentive costs but also the non-incentive cost related to the program, the above graphic indicates that projects with measures lives of between 10 and 13 years have insufficient residual value to allow for the recovery of the supporting utility infrastructure. Only when the incentive drops to zero (for projects with simple paybacks over 13 years) is there a substantial amount of residual benefit. Given that these over 13 year simple payback projects do not qualify for an incentive they are not materially present in the portfolio.

A review of the above portfolio diagnostics indicates three related issues in need of review as part of the gross UCT optimization of the natural gas portfolio:

1. The current incentive is too high to allow for sufficient residual benefits to cover non-incentive costs.
2. Projects with simple paybacks in excess of 13 years and possessing significant avoided cost value are being excluded from the portfolio based upon their generally unfavorable (but now less relevant) TRC cost-ineffectiveness.
3. The minimum measure life of 10 years may be too short for the current incentive tier structure.

A fourth factor was identified as being inevitably part of the optimization discussion; that of the level of non-incentive utility costs. Reductions in non-incentive utility cost would benefit the UCT cost-effectiveness if they could be achieved without reducing the throughput of otherwise UCT cost-effective projects. Reductions in non-incentive utility cost may also adversely impact relatively non-quantifiable portfolio values such as customer education and awareness that may not create an immediate measureable impact upon the portfolio but could have long-term consequences.

Based upon the determination that these four factors would likely be the most important tools for use in optimizing the portfolio for the gross UCT test, the Company developed a planning model allowing for the adjustment of these factors and their consequential impact upon cost-effectiveness and other characteristics.

To maximize the clarity of the customer-facing elements of the portfolio it was resolved that the tier structure itself (the simple payback range associated with each tier) would not change given that this same structure was also used in the electric DSM portfolio. Additionally it was believed that any revision in the incentive level should be first evaluated as a proportionate reduction across all tiers.

It was understood that one important characteristic of the portfolio, the projection of therm throughput, was likely to be impacted by any adjustment in the four previously mentioned portfolio management elements. The incentive level and the maximum permissible simple payback were likely to have a particular impact. The Company rarely has the opportunity to experiment with alternative incentive levels under circumstances when other factors are not also in flux. Previous very tentative evaluations indicated an incentive elasticity of 25% (a doubling of the incentive would lead to 25% greater therm throughput). This evaluation is many years old and based upon an increase in the electric incentives and not a decrease in the natural gas incentives. Additionally the impact of these revisions may be mitigated by the net-to-gross ratio of the portfolio.

It is recognized that some of the optimization scenarios may increase throughput (increasing the maximum energy simple payback) while others would reduce throughput (reducing incentives, reducing non-incentive utility cost or increasing the minimum measure life). Depending on the final adjustments made to the portfolio it is possible that even the direction of the impact upon energy acquisition could be indeterminant.

To further define the objective function of the planning process, it has long been Avista's intent to maximize the residual benefits of the portfolio (benefits less costs) rather than the benefit-to-cost ratio. A narrow focus on maximizing the benefit-to-cost ratio could lead to a very cost-effective but small portfolio that excludes marginally cost-effective resource opportunities.

Maximizing residual benefits encourages the adoption of any measure which is incrementally cost-effective and delivers higher net benefits to customers.

Applying all optimization factors with particular attention to the four identified above, the Company experimented with several scenarios with the objective to maximize the residual gross UCT benefits.

It was subjectively determined that reductions to the non-incentive utility cost would lead to an unacceptable compromise in the ability to recruit projects, inform customers of their alternatives and to efficiently implement and evaluate those projects. Based upon these conclusions no adjustments to the non-incentive utility costs were assumed in the plan. A comprehensive review of the Avista DSM portfolio (included the shared electric and natural gas infrastructure) will be reviewed as part of the 2014 DSM Business Plan to be filed on November 1, 2013.

A review of the related opportunities to adjust the ten-year minimum measure life applicable to the tiered incentive structure was found to be unnecessary if the level of the incentive itself was revised downward. As various scenarios rapidly demonstrated such a downward modification in the incentive was necessary to optimize the UCT performance of the portfolio. This incentive adjustment would remove the need to modify the minimum measure life necessary to be eligible for the tariffs tiered incentive structure.

A series of experiments and calculations of alternative incentive levels based upon various assumptions regarding incentive elasticity and the net-to-gross ratio ensued. These calculations were performed with ample input from not only the analytical and planning staff but also from program managers, field engineers and account executives. This process concluded with a consensus for a 33% reduction in the incentive level (across all tiers) as the best compromise between cost-effectiveness, acquisition objectives, returning a reasonable percentage of utility cost to customers in the form of incentives and responsibly managing the net-to-gross relationship.

Various scenarios establishing different (higher) maximum simple paybacks for incentive eligibility were also evaluated. These long simple payback projects that are very likely to be cost-ineffective from a TRC standpoint do nevertheless contain an avoided cost value. When one disregards the incremental cost that the customer invests in the project (as is the case when the UCT test is applied) and substitutes the cost of the utility incentive it is possible to redefine these projects in a UCT cost-effective manner. Applying a 33% reduction to all incentive levels created an environment where these projects favorably contributed to the portfolio UCT cost-effectiveness. Lifting the maximum current energy simple payback criteria for incentive eligibility led to increased portfolio UCT cost-effectiveness while increasing therm

acquisition and the number of customers served. It is likely that the favorable influence of eliminating the simple payback has been underestimated since these projects have not been marketed in the recent past and may therefore be underrepresented within the updated portfolio mix. ("Legacy" projects eligible prior to the imposition of the simple payback maximum were retained in the portfolio mix used for purposes of this planning exercise).

Applying the consensus 33% reduction in the incentive tiers and the elimination of any simple payback maximum from the tariff requirements leads to the program revisions represented in the table below:

Figure 2: Illustration of revisions to incentive levels and simple payback maximum tariff criteria

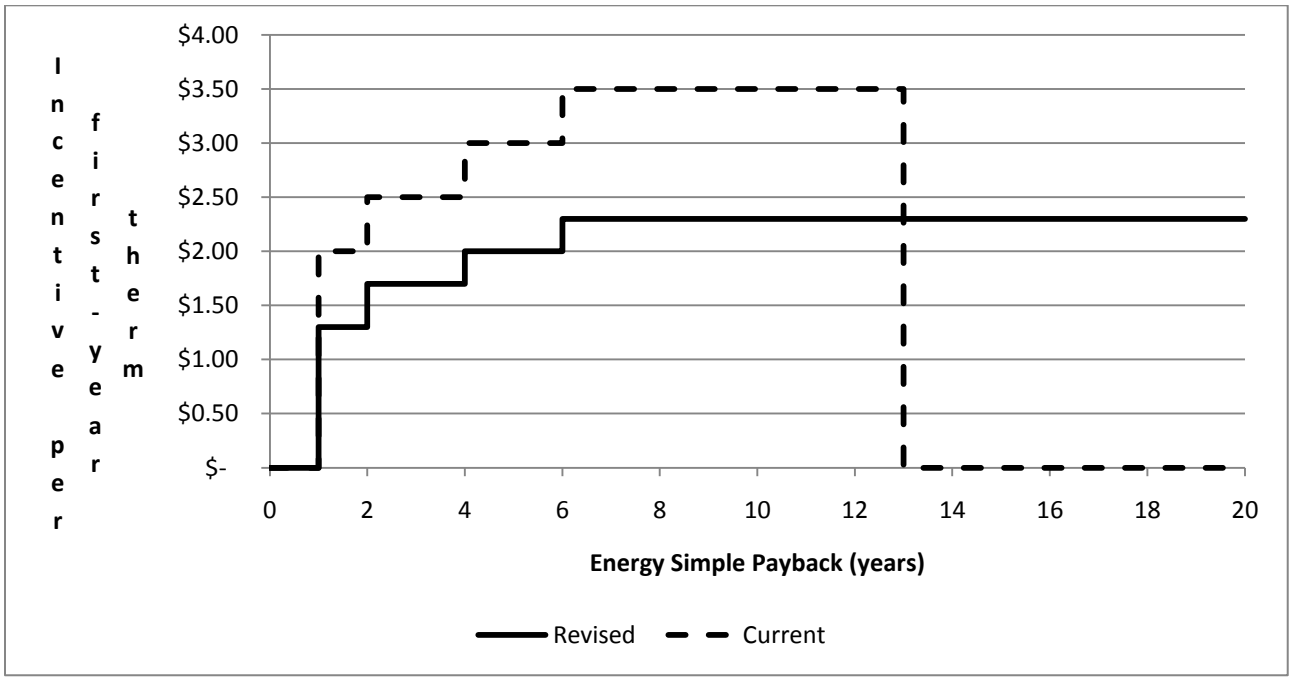


Table 3: Existing and proposed Schedule 190 incentive levels

Energy Simple Payback	Existing Sch 190	Proposed Sch 190	% change
Under 1 year	$0.00	$0.00	0%
1 to 2 years	$2.00	$1.30	-35%
2 to 4 years	$2.50	$1.70	-32%
4 to 6 years	$3.00	$2.00	-33%
6 to 13 years	$3.50	$2.30	-34%
Over 13 years	$0.00	$2.30	+ NA %

When translated to the actual tariffed incentives each individual tier is reduced by between 32% and 35% of the previous levels (consistent with a 33% numerical reduction developed within the planning process).

Before finalizing the scenario above the prescriptive programs within the portfolio were reviewed in greater detail. No prescriptive programs with significant customer participation were found to individually fail the UCT cost-effectiveness test by a significant degree (recognizing that fixed non-incentive utility costs were not allocated to the individual measure and program review). Furthermore it is not believed that continuation of any of these programs would misrepresent or mislead customer decisions when they are acting on their own best judgment as applied to their individual circumstances.

It is recognized that the 2014 DSM Business Plan will comprehensively review all electric and natural gas programs in less than three months after the requested effective date of the revision to the Schedule 190 tariff. It is also recognized that the adjustment, launch or termination of prescriptive programs must occur with a significant degree of notice given that the programs permit customers to apply for rebates up to 90 days after the purchase or installation of the measure. Typically a longer transition period is necessary to accommodate the need to communicate with both customers and trade allies. Consequently any change in the eligibility, the launch or termination or the incentive levels of these programs has been deemed to be best combined with adjustments that may occur as part of the 2014 DSM Business Plan. Customer-facing revisions to the program, including revisions to prescriptive incentive levels resulting from the adjustment to Schedule 190 incentive levels when and if proposed Schedule 190 tariff revisions are approved, are likely to take place in January of 2014.

The above process led to the change of only two tariff factors; a 33% reduction in incentives and lifting the simple payback maximum. These adjustments should not overshadow a general discussion of targeting and future program development. The extended discussion, both externally and internally within Avista, of the relative merits of the TRC and UCT test have increased the fundamental understanding of how the change in cost-effectiveness tests impact the targeting of both site-specific and prescriptive programs. The portfolio has not been adjusted for any improvement in targeting given that the impact upon near-term performance is speculative. It is also likely that the greatest impact, particularly on site-specific projects with long sales cycles, will be more of a long-term situation.

Anticipated Portfolio Performance

Based upon the adjustments previously cited the planning model predicts an improvement in the gross UCT of the existing portfolio from 0.88 (moderately cost-ineffective) to 1.20 (moderately cost-effective) based upon a portfolio operating under revised tariff guidelines.

The revisions to the portfolio have decreased the TRC performance, as might be expected given that the very long simple payback projects are being returned to the portfolio. The TRC benefit-to-cost ratio decreases from 0.56 to a less favorable 0.44.

The major revisions to the portfolio consist of adjustments that will both increase (lifting the simple payback maximum) and decrease (reducing incentive levels) resource acquisition. Thus, within the ability to estimate such acquisition, the net impact is upon acquisition is indeterminant.

It has been generally found that the actual portfolio performance can be improved when the degree of comprehensiveness of the portfolio is expanded. Thus it is quite possible that a comprehensive review of the full portfolio within the 2014 DSM Business Plan may identify additional opportunities to improve portfolio performance. However it was the consensus of all involved in the planning process that it was unnecessary and unwise to delay pursuing revisions to the tariff for the full comprehensive portfolio review. Revisions to Schedule 90 (governing the electric DSM portfolio) have been under discussion since early 2013 and the Company was similarly concerned that delaying the filing of these tariffs would deny the opportunity to reap the benefits as quickly as possible.