Avista Utilities

Washington / Idaho

“Revised” 2014 Demand-Side Management Business Plan

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5. **Overview**

Avista Utilities Demand-Side Management (DSM) Business Planning process guides the Company’s strategy for program implementation for the next year. The Company engages in the annual business planning process resulting in a plan that is reviewed by the Company’s Advisory Group and then subsequently filed with both the Washington and Idaho State Commissions. This is the process that led to the completion of Avista’s 2014 DSM Business Plan, or the “Plan,” filed on November 1st, 2013. The final document was based upon program planning and analysis that was completed in early October of that year.

Since the filing of the 2014 DSM Business Plan there has been considerable discussion regarding the Company’s current behavioral program[[1]](#footnote-1). The Conservation Potential Assessment (CPA) leading to the proposed 2014-2015 biennial target included consideration of this measure for the first time. Questions regarding the incorporation of behavioral measures into this process have led to an agreement amongst Avista’s stakeholders that savings derived from Avista’s behavioral program should not be within the scope of the 2014-2015 acquisition target for I-937 purposes.

At the time the behavioral program was initially reviewed the program design did not pass the cost-effectiveness screen within the 2014–2015 timeframe. Avista worked with Opower on program design and is now able to offer the program to a subset[[2]](#footnote-2) of customers in an incrementally cost-effective manner. The Company believes that since the behavioral program is found to be a cost-effective component of its portfolio, delivering value to customers, the program should continue to be offered despite being outside the scope of I-937 requirements.

For purposes of the 2014-2015 Washington I-937 process, there was a need to reconcile the continuation of the Opower behavioral program with the agreement that behavioral programs should not be incorporated within the I-937 target. The reconciliation that emerged was to add the estimated 6,900 MWh’s of acquisition that the Opower program was then expected to yield during 2014- 2015 (using a three-year measure life assumption) to the I-937 acquisition target and to permit verified Opower acquisition to be eligible towards satisfying that target. As a consequence, the DSM component of Avista’s I-937 target increased to 62,907 MWh’s.

Due to the revision of the target, Avista’s anticipated first-year acquisition of 31,194 MWh’s, previously equal to 56% of the biennial target and on track for achieving the two-year acquisition goal, shifted towards being slightly less than 50% of the biennial target. This was regarded as insufficient acquisition for planning purposes, particularly given that the Opower behavioral program acquisition is expected to significantly decline in 2015 as the program reaches maturity.

Consequently, the Company committed to revising the recently completed 2014 DSM Business Plan. The draft Revised Plan was reviewed via webinar with the DSM Advisory Group on March 4th, 2014. External stakeholder input and additional planning effort has been incorporated into this Revised DSM Business Plan.

The Company has also taken this opportunity to complete other material updates or corrections that have been recognized since the completion of the original business plan. Program planners and technical staff were solicited for any opportunities to add cost-effective programs to the portfolio, to enhance or to accelerate the acquisition of current cost-effective programs within the portfolio.

Throughout the process, it has been emphasized that cost-effectiveness remained a critical focus of the portfolio. The cost-effectiveness performance had been previously identified as a matter of concern within the 2014 DSM Business Plan.

There were no restrictions within the guidance to the Implementation staff regarding budget constraints. The tariff riders funding the DSM program can and are periodically adjusted to yield sufficient funding for cost-effective DSM programs.

This document summarizes the proposed revisions made to the 2014 DSM Business Plan without reiterating those components of the Plan or methodology that did not change. There are components of this Plan that remain insufficiently mature to represent anything beyond a conceptual stage at this point. As work on these programs continue, the DSM Advisory Group will be updated. Fortunately, the more firm projections that are able to be incorporated into this planning process, are sufficient to meet the immediate business need.

1. **Revised Plan Components**

As part of the process for revisiting the Business Plan, the Company solicited the DSM staff for any revisions or updates to programs that may have occurred in the five months that have transpired since the analysis for the last Business Plan was completed. Four notable revisions have occurred that are of sufficient significance to warrant an update. Some, but not all, of the revisions have led to an increase in acquisition. Most of the revisions have also had a favorable impact upon portfolio cost-effectiveness.

The four programs listed below had their performance expectations revised since the original 2014 DSM Business Plan inputs were locked:

Residential Manufactured Home Duct Sealing Program (UCONS)

During 2012, the Company contracted with UCONS to perform a duct sealing program on manufactured homes in Washington State with 40% of the total cost being co-funded by WSU Energy Extension. The contract with UCONS was renewed in 2013 to perform duct sealing on 1,500 manufactured homes in Avista’s Washington service territory prior to September 30th, 2014. The new contract is being co-funded by WSU Energy Extension at 50% of the total cost. It is anticipated that 900 of the homes will be electrically heated and the remaining 600 homes heated by natural gas.

The expected Avista cost of the treatment of the 1,500 homes will be $410,250. This will be matched by another $410,250 from the WSU Energy Extension. For purposes of calculating the Total Resource Cost (TRC) effectiveness of this program, the WSU funding is treated as an importation of funds from outside the Avista service territory and not incorporated as a cost in the TRC calculation.

As a result of the addition of this program, the Washington I-937 portfolio acquisition is expected to increase by 1,625 MWh’s. This measure is part of the residential shell program. The net TRC cost-effectiveness of that program will increase from 1.56 to 2.65 within the Washington jurisdiction due to the strong cost-effectiveness of this measure. Since this program is offered in Washington only, it will not impact the Idaho acquisition.

The estimated 600 natural gas homes treated as part of this program will increase natural gas acquisition by 43,498 therms.

Non-Residential Energy Smart Grocer Program (PECI)

The original 2014 DSM Business Plan contained an underestimate of the acquisition from this program. The Company has revised this estimate and made additional revisions based upon more detailed projections received from PECI. As a consequence the Washington I-937 acquisition will increase by 2,223 MWh’s and the overall system acquisition by 3,175 MWh’s. The net TRC cost-effectiveness of the Energy Smart Grocer program will increase from 0.68 to 1.04.

The Company has modified some of PECI’s proposed energy saving claims to be consistent with the locked unit energy savings declared by the Company as part of the Washington Biennial Conservation Plan filing. These revisions are small and only account for a 1.9% revision in the original PECI estimate.

Residential Simple Steps, Smart Savings

Avista’s participation in this regional upstream buy-down of compact fluorescent lamps, LED lamps and low-flow showerheads was included in the Company’s original 2014 DSM Business Plan. Since that time the Company has received an updated forecast of the sales anticipated to occur within the Company’s service territory. The revised forecast results in an increase in the residential lighting program of 2,025 MWh’s in the Washington jurisdiction and 2,893 MWh’s in system acquisition. Since this program also distributes low-flow showerheads an additional 108 I-937 MWh’s, 91 system MWh’s and 5,702 Washington natural gas therm savings will accrue to the residential water heat program.

The revised forecast also provided the opportunity to update incentives based upon the improved estimate of the mix of products and incentives per unit. This update led to a reduction in the incentive per average kWh generated through the program.

The Company also took the opportunity presented by this Revised Plan to update the cost of the LED lights within the Simple Steps, Smart Savings program. Based upon an April 2014 shelf survey completed by the Avista program manager coordinating the delivery of this program it was estimated that a prevailing customer incremental cost of $21.66 should displace the previous estimate of $34.84 in place as of October 2013.

The increased throughput and updated customer cost is projected to increase the net TRC cost-effectiveness of the residential lighting component of the Washington and Idaho electric portfolio from 0.59 to 0.82.

Low Income Portfolio

Avista’s low income programs are delivered through funding contracts with six community action program (CAP) agencies. The contracts allow up to $2.0 million in funding for Washington and $700,000 in Idaho (plus another $50,000 in funds for outreach efforts). These amounts have not changed and the Company continues to forecast that the CAP agencies will spend the full funding amount. The Company has revisited and revised the mix of measures that are expected to be funded through these programs. This projection is somewhat speculative due to the significant changes that have occurred in the funding contracts since last year. Nevertheless the revised measure mix is considered to be a more accurate representation of 2014 operations.

The revisions to the low income portfolio also included an updated estimate of the quantity of funding to be leveraged by the Avista program. Co-funding received for health & human safety investments in homes treated by Avista and at the same time as the Avista treatment are considered to be importations of funds from outside the service territory. These funds are treated as non-energy benefits (on a dollar-for-dollar basis) but the costs are not incorporated within the TRC analysis since they are importations from outside the Avista customer population.

A significant portion of the changes relate to the number of electric to natural gas conversions expected to be performed. Since this is not an I-937 measure, the impact upon that aspect of the acquisition is not greatly impacted (an increase of only 9 MWh’s). However, the total Washington electric acquisition shows an increase of 398 MWh’s and a decrease in natural gas acquisition of 1,058 therms. The net TRC benefit-to-cost ratio for the program is expected to decrease from 1.16 to 1.05 with the natural gas gross Utility Cost Test (UCT) decreasing from 0.20 to 0.19.

The Idaho low income program was revised as well. As a result, a decrease of 29 MWh’s is anticipated in the annual acquisition. The net TRC for the portfolio is anticipated to increase from 1.24 to 1.42 due to changes in the expected mix of measures.

In addition to soliciting updates and enhancements on existing programs, the Company also convened an internal brainstorming process to seek out cost-effective means of enhancing or accelerating acquisition to improve the 2014-2015 portfolio performance beyond those updates outlined above. This process led to several candidate measures that were ultimately screened to three programs that remain under consideration. None of these programs are sufficiently mature to numerically represent within this draft revised Plan. However, it is possible to conceptually describe the measure and program delivery methods under consideration. These concepts are under continuing investigation and can be expected to be more fully developed, with ample opportunity with input from the Advisory Group, before implementation (if any) is launched.

All three of the program concepts outlined below are non-residential applications. As such they are currently available to our customers under the site-specific program and the Company does have a degree of experience with these measures and applications. In all three cases, there have been developments since the original Plan that have changed our assessment of these measures and how they might be best incorporated into the DSM portfolio. These developments are primarily the result of changes in product cost (in the case of the two LED lighting measures) or the consequence of ongoing technology tests (in the case of vehicle block heating controls).

Below is a description of the measures and program designs under consideration. These descriptions lack firm estimates of cost and savings, though at this point it is expected that all will be cost-effective under the net Total Resource Cost test. The evaluation of the market potential for each of these programs remains in progress.

Non-Residential Prescriptive Exterior Signage Program

Continuing improvement in the quality and rapidly declining cost for LED lighting has brought this technology to the point where it can be a cost-effective replacement for many exterior signage applications. This program would seek to accelerate the replacement of existing fluorescent T12, halogen, incandescent, metal halide and neon end-uses. Though available on a site-specific basis, the Company is working towards defining these measures in sufficiently uniform categories so as to allow them to be offered on a prescriptive basis. It is the Company’s experience that programs offered prescriptively for a finite period of time can be very successful at breaking the procrastination cycle that often delays the adoption of new technologies. For many of these measures the most cost-effective approach for installation is the customer’s periodic group re-lamping of signage. These re-lampings typically occur in approximately 18 month cycles; and it is this cycle that will probably define the date of termination of the prescriptive approach to the program. Towards the end of this program period the Company will re-evaluate the program, but regardless of the future of the prescriptive program these measures will remain eligible for incentives through the site-specific program.

The program plan for this measure remains under development. The unit throughput forecast, expected energy savings, customer costs and other program characteristics will be subject to revision as the program development continues.

Prescriptive Gas Station Canopy Lighting Program

Continuing improvement in the quality and reduction in the cost of LED lighting has brought this technology to the point where it can be a cost-effective replacement for many gas station canopy applications. This would accelerate the replacement of existing high intensity discharge (HID) fixtures such as high pressure sodium, mercury vapor, and metal halide fixture end-uses. It is the Company’s experience that programs offered prescriptively for a finite period of time can be very successful at breaking the procrastination cycle that often delays the adoption of new technologies. The most cost-effective approach for completing these retrofits is in coordination with the customer’s periodic group re-lamping cycle. For this measure, these cycles typically occur once every 18 months; and this cycle that will probably define the date of termination of the prescriptive approach to the program. Towards the end of this program period the Company will re-evaluate the program, but regardless of the future of the prescriptive program these measures will remain eligible for incentives through the site-specific program.

The program plan for this measure remains under development. The unit throughput forecast, expected energy savings, customer costs and other program characteristics will be subject to revision as the program development continues.

Non-Residential Prescriptive “Fleet Heat” Program

During periods of cold weather typically lasting five months in Avista’s Washington and Idaho service territory it is common practice for commercial internal combustion engine vehicles, especially diesel and natural gas vehicles not currently in use, to maintain an engine block temperature above the ambient air temperature by use of electric resistance heat installed within the vehicle and powered from the utility electric grid. Maintaining an adequate block temperature reduces wear on the engine, reduces the time and fuel necessary to bring the vehicle up to temperature and improves vehicle reliability. Since these heating elements are not thermostatically controlled they create a constant load of approximately 750-1,500 watts per vehicle during all non-operational hours.

Technologies now exist to allow these heating elements to be controlled to (a) maintain an established block temperature of approximately 150 degrees and (b) to disable all heating if the ambient temperature is above an established point of approximately 40 degrees. With these controls in place the block heaters are not used beyond what is needed to maintain an adequate block temperature when the ambient temperature is low. When the ambient temperature is high and it is unnecessary to operate the heaters the units are disabled.

Avista has conducted technology tests on one known manufacturer of this measure and, to date, have found them to function as claimed. The initial technology test has also contributed to improved labor efficiencies in retrofitting these controls to existing vehicle block heating equipment.

The placement of the thermostats (both ambient and block heat) within the vehicle is different for each vehicle the connecting control communication must be customized to some degree for each vehicle type (though not to each individual vehicle). As production of these products increase there is the potential for economies of scale to develop as well as the possibility of modular approaches that will reduce costs. At present the cost may range from under $100 to over $200 depending on the circumstances.

Avista is considering several approaches to promoting this efficiency technology. At the time of the presentation of the draft Revised Plan to the DSM Advisory Group and up to the date of this report, the Company has considered written disclosure of some elements of the potential program design to be inadvisable given the status of the Company’s negotiations. The Company has discussed the applicability of the current Schedule 90 tariff to this specific prospective program as well as the general need for a degree of flexibility within these tariffs with the DSM Advisory Group.

1. **Impact of Revisions on Key Metrics**

Electric DSM Resource Acquisition

The Company’s business planning process is ongoing and revisions frequently occur without the reissuance of a business plan document. The compelling reason for formalizing the revisions outlined within this document is the recognition that the projected acquisition was no longer sufficient to put the Company on track towards meeting I-937 obligations. The four revisions that have been made to the expected acquisition within this revised Plan have collectively increased the projected savings from 31,194 MWh’s to 37,184 MWh’s. The revised acquisition projection is 18% above the 2014 share of the biennial I-937 target of 31,454 MWh’s. This projection does not include acquisition that may occur from those programs conceptually outlined within this document but which are not sufficiently mature to develop numeric estimates.

Avista does not produce a biennial planning document, but given the nature of the I-937 target and recognizing that this is the first year of that biennium it is worthwhile to perform some extension of this acquisition planning analysis.

It should be recognized that the Opower behavioral program contributes 5,163 MWh’s towards the 2014 I-937 acquisition indicated above. The Opower acquisition anticipated over the 2014-2015 biennium that was added to the I-937 target was calculated using an assumption of a three-year measure life (coinciding with the three year contracted program and representative of the persistence that Avista believed would ultimately be demonstrated through future evaluation). Given that the measure life and the contract life are of the same duration, there would be no re-adoption of acquisition over the contractual life of the Avista behavioral program. Consequently, the behavioral savings claimed in 2015 will be limited to only that which was over and above that recognized in 2013 and 2014. Given the anticipated ramping of the program this is likely to be substantially less than the 5,163 MWh’s that is expected to occur in 2014.

The tentative Opower projection is based upon the assumption of achieving savings equal to 0.97% of customer load for eight months of operation in 2013, 1.60% for 2014 (0.63% of additional acquisition) and 1.80% for 2015 (0.20% of additional acquisition). The program currently consists of 46,000 Washington customers with an average usage of 18,415 kWh’s. Additionally, the Company is assuming that 2% of the measured savings will coincide with incrementally higher participation in other Avista incentive-granting programs and will therefore be excluded to avoid double-counting. These calculations for 2014 and the similar projected acquisition for 2015 are represented below.

**Table 1: Projection of Behavioral Program Washington Acquisition, CY 2013 through 2015**

|  |  |  |  |
| --- | --- | --- | --- |
| Calendar year | 2013 | 2014 | 2015 |
| Participating customers | 46,000 | 46,000 | 46,000 |
| Average usage (kWh's) | 18,415 | 18,415 | 18,415 |
| Savings as % of usage | 0.97% | 1.60% | 1.80% |
| Gross behavioral savings (kWh's) | 8,242,186 | 13,511,086 | 15,247,620 |
| Less previously claimed (kWh's) | - | 8,242,186 | 13,511,086 |
| Adjusted gross behavioral savings (kWh's) | 8,242,186 | 5,268,900 | 1,736,535 |
| % adjustment for double-counting | 2.0% | 2.0% | 2.0% |
| Adjustment for double-counting (kWh's) | 164,844 | 105,378 | 34,731 |
| Claimable savings for year | 8,242,186 | 5,163,522 | 1,701,804 |

Thus, it is anticipated that the Opower program will yield 3,462 MWh’s less in 2015 in comparison to 2014. If all other program acquisition remains the same for 2015, the projected 37,184 MWh’s of 2014 I-937 acquisition (in the absence of this adjustment) would be reduced to 33,722 MWh’s in 2015 for a total biennial acquisition level of 70,907 MWh’s. This is 13% above the biennial target. A biennial realization rate of 89% or higher on claimed acquisition would be sufficient to meet the I-937 target.

The increase in Idaho electric acquisition is less significant than that of Washington due to the limitation of the Residential Manufactured Home Duct Sealing Program to the Washington jurisdiction only. The overall Idaho acquisition will increase from 14,859 MWh’s to 16,635 MWh’s.

Natural Gas DSM Resource Acquisition

Though natural gas acquisition was not targeted as part of this planning process the revisions and updates have favorably impacted these projections. The primary acquisition impact has come from the 600 anticipated participants in the UCONS Manufactured Home Duct Sealing program. Small additional acquisition from additional low-flow showerheads distributed through Simple Steps, Smart Savings has also been included.

In aggregate the Washington natural gas DSM acquisition is expected to increase from 588,900 therms to 637,042 therms.

Acquisition Summary

The table below is an update of Table 5 of the original 2014 DSM Annual Plan representing the detail of acquisition across program category and by jurisdiction. Both electric and natural gas acquisition is represented below:

**Table 2 (Replacing Table 5 of the 2014 DSM Business Plan): Summarization of Resource Acquisition**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | WA I-937 kWh savings | WA kWh savings | ID kWh savings | System kWhs | WA therm savings |
| Prescriptive residential portfolio (below) | 11,145,120 | 11,952,445 | 4,336,616 | 16,289,061 | 212,936 |
| 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 | 200,342 | 821,930 | - |
| HVAC | 545,859 | 731,597 | 300,542 | 1,032,139 | 117,270 |
| Lighting | 7,433,810 | 7,433,810 | 3,189,026 | 10,622,836 | - |
| Shell | 2,113,581 | 2,113,581 | 178,778 | 2,292,359 | 83,251 |
| Water heat | 169,475 | 169,475 | 72,859 | 242,334 | 12,212 |
| Opower residential behavioral program | 5,163,522 | 5,163,522 | 2,470,620 | 7,634,142 | 84,704 |
| Low income portfolio | 196,512 | 1,197,291 | 816,781 | 2,014,072 | 18,426 |
| Non-Residential portfolio (below) | 6,315,713 | 6,315,713 | 2,706,734 | 9,022,448 | 102,760 |
| EnergySmart Grocer | 2,467,781 | 2,467,781 | 1,057,620 | 3,525,401 | - |
| 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 |
| Non-residential appliances | 3,227 | 3,227 | 1,383 | 4,610 | 376 |
| Non-residential 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 | 37,184,156 | 40,377,660 | 16,634,550 | 57,012,210 | 637,042 |

Cost-effectiveness

Portfolio cost-effectiveness was identified as a concern in the original 2014 DSM Business Plan. The 2014 DSM Business Plan incorporated the impact of substantially lower electric and natural gas avoided costs. This created a more challenging economic environment for utility-sponsored energy-efficiency programs. Avoiding any adverse impact upon the portfolio cost-effectiveness was of great importance, and any opportunity to improve performance would be aggressively pursued.

With some exceptions within the low income program, the revisions to the Plan have improved the expected cost-effectiveness portfolio performance. This is a consequence of the revisions either increasing the throughput of cost-effective programs, improving the cost-effectiveness of programs or bringing into the portfolio new cost-effective programs. The table below highlights the direct impacts the program revisions. The cost-effectiveness of other programs are favorably impacted as a result of the decrease in the per kWh and per therm infrastructure cost allocated to programs.

These cost-effectiveness projections do not include the impact of previously outlined programs that are insufficiently developed to be incorporated into these projections.

**Table 3: Direct Impacts of Revisions to Programs upon Cost-Effectiveness**

Original 2014 DSM Business Plan Revised 2014 DSM Business Plan

Electric Electric Nat Gas Electric Electric Nat Gas

WA ID WA WA ID WA

Program Net TRC Net TRC Gross UCT Net TRC Net TRC Gross UCT

Residential lighting 0.59 0.59 NA 0.82 0.82 NA

Residential shell 1.56 1.61 1.04 2.65 1.62 1.39

Residential water heat 2.75 1.55 1.19 1.84 1.89 0.92

Low Income 1.16 1.24 0.20 1.05 1.42 0.19

Non-Res En. Smart Grocer 0.68 0.68 NA 1.04 1.04 NA

The full revised cost-effectiveness by program is listed below as a replacement for the Table 7 included in the original Plan.

**Table 4 (Replacing Table 7 of the 2014 DSM Business Plan): Summary of TRC & 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) | 1.14 | 0.93 | 1.72 | 2.58 | 2.24 | 1.66 |
| Appliance recycling | 0.65 | 0.65 |  | 0.53 | 0.53 |  |
| Appliances |  |  |  |  |  |  |
| Energy Star Homes | 2.55 | 2.21 | - | 5.22 | 5.17 | - |
| Fuel Efficiency | 2.17 | 2.31 |  | 3.30 | 3.52 |  |
| HVAC | 0.92 | 0.98 | 1.85 | 2.58 | 2.81 | 1.85 |
| Lighting | 0.82 | 0.82 |  | 2.19 | 2.19 |  |
| Shell | 2.65 | 1.62 | 1.39 | 5.48 | 5.24 | 1.39 |
| Water heat | 1.84 | 1.89 | 2.59 | 0.67 | 0.69 | 0.92 |
| Opower residential behavioral program | 0.64 | 0.62 |  | 0.64 | 0.62 |  |
| Low income portfolio | 1.05 | 1.42 | 0.37 | 0.86 | 1.04 | 0.19 |
| Non-Residential portfolio (below) | 1.29 | 1.52 | 0.40 | 3.02 | 3.04 | 1.80 |
| EnergySmart Grocer | 1.04 | 1.04 |  | 1.75 | 1.75 |  |
| Food Service Equipment | 1.99 | 1.99 | 0.44 | 3.87 | 3.86 | 1.01 |
| Green Motors | 1.40 | 1.39 |  | 1.69 | 1.69 |  |
| Motor controls HVAC | 1.04 | 1.04 |  | 1.67 | 1.67 |  |
| HVAC |  |  | 0.99 |  |  | 1.40 |
| Non-residential appliances | 1.20 | 1.20 | 0.53 | 2.36 | 2.36 | 1.06 |
| Non-residential Prescriptive lighting | 1.97 | 1.97 |  | 2.56 | 2.56 |  |
| Power Mgmt for Personal Computers | 1.00 | 1.00 |  | 1.73 | 1.73 |  |
| Prescriptive Shell | 1.49 | 1.49 | - | 4.31 | 4.31 | - |
| Standby Generator Engine Block Heater | 0.48 | 0.48 |  | 1.38 | 1.37 |  |
| Site-Specific | 1.25 | 1.63 | 0.40 | 3.57 | 3.79 | 2.08 |
| Cascade Strategic Energy Management | 0.07 | 0.06 |  | 0.13 | 0.11 |  |
| **Total** | **1.20** | **1.28** | 0.57 | 2.40 | 2.20 | **1.13** |

As illustrated in the table above, the cost-effectiveness performance against the metric applied to each of the three DSM portfolios improved as a result of the programmatic revisions. The net TRC benefit-to-cost metric for the Washington electric portfolio increased from 1.09 to 1.20. The Idaho net TRC cost-effectiveness benefit-to-cost ratio improved from 1.20 to 1.28. The Washington gross Utility Cost Test metric benefit-to-cost ratio improved from 1.00 to 1.13.

Budget

Aside from the four program revisions and the three prospective programs currently under review, the Company also solicited the DSM staff for any material revisions to non-incentive budgets (both labor and non-labor). Though there have been some previously unanticipated adjustments to labor, primarily temporary assignments leading to lower DSM labor charges, there is the likelihood that this void will be filled through cross-training opportunities. Since the net impact of these labor changes is uncertain, no adjustments to the labor budget were included in the revised Plan.

The known and planned program revisions have led to an increase in the overall budget, but an increase that is much more modest than the increase in savings. The decrease in the average cost per kWh for the Simple Steps, Smart Savings program as a result of the updated forecast unit throughput and program incentives mitigated a significant portion of the increases in incentive cost from other portions of the program. The cost that may be associated with the three program concepts defined but not fully evaluated are not included in these budget revisions.

The tables below represent the update in the total budget by program category and portfolio:

**Table 5 (replacing Table 10 of the 2014 DSM Business Plan):**

**Summarization of the Revised 2014 DSM Budget by Jurisdiction and Fuel**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Washington electric portfolio | Idaho electric portfolio | Washington natural gas portfolio | System total | Supplementary obligations \* |
| Residential portfolio | $ 1,005,578 | $ 334,579 | $ 498,382 | $ 1,838,538 | $ - |
| Low Income portfolio | $ 1,043,901 | $ 700,000 | $ 956,099 | $ 2,700,000 | $ - |
| Non-residential portfolio | $ 2,710,181 | $ 1,055,126 | $ 598,845 | $ 4,364,151 | $ - |
| Total program portfolio | $ 4,759,659 | $ 2,089,705 | $ 2,053,325 | $ 8,902,689 |  |
|  |  |  |  |  |  |
| Third party non-incentive program payments | $ 1,022,256 | $ 472,260 | $ 242 | $ 1,494,758 | $ - |
|  |  |  |  |  |  |
| 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 | $ 1,306,918 | $ 448,645 | $ 4,941,734 | $ 3,235,000 |
|  |  |  |  |  |  |
| Labor | $ 1,875,761 | $ 759,102 | $ 735,040 | $ 3,369,903 | $ - |
|  |  |  |  |  |  |
| TOTAL | $ 10,843,848 | $ 4,627,984 | $ 3,237,252 | $ 18,709,084 | $ 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. | | | | | |
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**Table 6 (replacing Table 11 of the 2014 DSM Business Plan):**

**Summarization of the Non-Supplemental 2014 DSM Budget by Category**

|  |  |
| --- | --- |
| Incentives | $ 8,902,689 |
| Labor | $ 3,369,903 |
| Non-incentive/non-labor | $ 3,201,492 |
| Supplemental expenses | $ 3,235,000 |
| Total 2014 DSM budget | $ 18,709,084 |

1. **Impact on Issues for Management Focus**

The 2014 DSM Business Plan identified two issues for management focus during calendar year 2014:

1. Re-position the DSM Portfolio for success in a lower avoided cost environment
2. Make use of Regional Technical Forum (RTF) unit energy savings

Having been identified as key issues, it is appropriate to specifically assess the impact of the proposed program revisions upon these issues.

The addition and enhancement of cost-effective programs or any actions taken to improve the cost-effectiveness of existing programs have a clear and favorable impact on the ability to field a cost-effective portfolio in any avoided cost environment. As avoided costs decline a higher priority must be placed upon these actions to meet cost-effectiveness expectations.

In addition to improving the cost-effectiveness of the measures themselves, the intention of this revised plan is to proceed with an increased acquisition of resources without the addition of infrastructure. By diluting the infrastructure burden of the portfolio an additional improvement to cost-effectiveness can be achieved.

These revisions can be viewed as successfully pursuing the Company’s intention to use existing infrastructure more efficiently and effectively to produce energy savings.

The 2014 DSM Business Plan also sought to take actions to maximize the use of RTF unit energy savings to reduce the risk associated with projecting energy savings and to reduce the measurement and verification costs associated with substantiating the resource acquisition claim.

Most of the revisions that the Company expects to pursue either have no impact upon this strategy or do not leverage the RTF unit energy savings values. Specifically:

* UCONS Manufactured Home Duct Sealing: The UCONS program does not seem to be delivered in the manner prescribed by the RTF for purposes of using the deemed value that was ‘locked’ when the Company performed the 2013 Conservation Potential Assessment. There is activity that may move towards the creation of an RTF deemed value for the approach that UCONS has taken, but it is considered unlikely to generate a unit energy savings in time for use in the 2014-2015 acquisition claim. There is a cost reduction achieved by offering this program in an RTF non-compliant manner that will offset, fully or partially, the costs associated with the impact evaluation that may be necessary to support this program.
* PECI Energy Smart Grocer: This program was originally expected to be composed exclusively of measures for which RTF unit energy savings existed at the time Avista ‘locked’ those values within the Conservation Potential Assessment. The list of measures incorporated into this revised Plan contains measures for which there are no such RTF values, to include the potential for custom projects. These revisions have improved both the acquisition and cost-effectiveness of this program by an amount that is believed to be sufficient to offset any incremental measurement and verification costs associated with pursuing measures not recognized by the RTF.
* Simple Steps, Smart Savings: The measures within this program have not changed and no additional measurement and verification costs are anticipated.
* Low Income: Though the mix of measures expected to occur within this program has changed, it is recognized that this entire program will require impact evaluation. The revision in the measure mix is not expected to impact the cost of that measurement and verification.
* Prospective programs under review:
  + Prescriptive Signage Program: Though this program remains in development, it is almost certain that the measures developed will not fit within any RTF-defined unit energy savings category. Nor is it likely that any such unit energy savings will be approved within the timeframe that would be required for Avista’s submittal of claimed energy savings. The measurement and verification costs associated with an impact evaluation on this product will be part of the program design and approval decision.
  + Prescriptive Gas Station Canopy Lighting Program: The status of this program in regards to the RTF unit energy savings and the plans for further program development are identical to the Prescriptive Signage Program outlined above.
  + Prescriptive Vehicle Block Heater Control Program: This measure has been the subject of technical review by Avista for several years. Currently there is not an RTF approved unit energy savings value in place for this measure. It is Avista’s intent to perform an impact evaluation on this program and provide the results for regional consideration in the potential development of a future unit energy savings value.

1. In June 2013, Avista launched a three year Residential Behavioral Program using the Opower platform for Home Energy Reports (HER). [↑](#footnote-ref-1)
2. High electric consumption customers which had 99other homes with like usage in a 100 mile radius. [↑](#footnote-ref-2)