

DAVID J. MEYER
VICE PRESIDENT AND CHIEF COUNSEL OF
REGULATORY & GOVERNMENTAL AFFAIRS
AVISTA CORPORATION
P.O. BOX 3727
1411 EAST MISSION AVENUE, MSC 27
SPOKANE, WASHINGTON 99220-3727
TELEPHONE: (509) 495-4316
EMAIL: david.meyer@avistacorp.com

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION)	CASE NO. AVU-E-16- 16 <i>06</i>
OF AVISTA CORPORATION FOR A)	CASE NO. AVU-C-16-
FINDING OF PRUDENCE FOR 2014-2015)	
EXPENDITURES ASSOCIATED WITH)	
PROVIDING ELECTRIC AND NATURAL GAS)	EXHIBIT NO. 1
ENERGY EFFICIENCY SERVICE IN THE)	
STATE OF IDAHO)	DAN JOHNSON
)	

FOR AVISTA CORPORATION

(ELECTRIC AND NATURAL GAS)

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IDAHO PUBLIC
UTILITIES COMMISSION



Idaho 2014 DSM
Annual Report &
Cost-Effectiveness
Analysis



June 2015

Table of Contents

1	Executive Summary	1
2	Cost-Effectiveness.....	3
2.1	Electric Cost Effectiveness Results.....	4
3	Programs	7
3.1	Residential	7
3.1.1	Program Changes.....	7
3.1.1.1	<i>Residential Program New Offerings.....</i>	8
3.1.1.2	<i>Residential Program Discontinuations</i>	8
3.1.1.3	<i>Residential Program Adjustments.....</i>	8
3.1.2	Residential Appliance Recycling.....	9
3.1.3	HVAC Program.....	9
3.1.4	Water Heat Program.....	9
3.1.5	ENERGY STAR HOMES.....	9
3.1.6	Fuel Efficiency	10
3.1.7	Residential Lighting	10
3.1.8	Shell 10	
3.1.9	Opower Home Energy Reports.....	10
3.1.10	Customer Outreach	11
3.2	Low Income.....	17
3.2.1	Program Changes.....	17
3.2.2	2014 Program Details.....	17
3.3	Nonresidential	22
3.3.1	Program Changes.....	22
3.3.1.1	<i>Nonresidential Program New Offerings.....</i>	22
3.3.1.2	<i>Nonresidential Program Discontinuations</i>	23
3.3.1.3	<i>Nonresidential Program Adjustments.....</i>	23

3.3.2	Prescriptive Path.....	29
3.3.3	Site Specific Path.....	29
4	Evaluation, Measurement, and Verification (EM&V).....	33
4.1	Process Evaluation Summary	33
4.1.1	Residential Sector.....	33
4.1.1.1	<i>Program Participation.....</i>	33
4.1.1.2	<i>Program Design</i>	34
4.1.1.3	<i>Program Implementation.....</i>	35
4.1.1.4	<i>Marketing and Outreach.....</i>	35
4.1.2	Nonresidential Sector	36
4.1.2.1	<i>Program Management and Implementation</i>	36
4.1.2.2	<i>Customer Feedback.....</i>	37
4.1.2.3	<i>Market Feedback</i>	37
4.1.2.4	<i>Marketing and Outreach.....</i>	37
4.1.2.5	<i>Quality Assurance and Verification</i>	37
4.2	Impact Evaluation Summary	39
4.2.1	Recommendations.....	39
4.2.1.1	<i>Residential Electric Programs</i>	39
4.2.1.2	<i>Low Income Programs</i>	40
4.2.1.3	<i>Nonresidential Electric Programs.....</i>	42
4.2.2	Impact Evaluation Measurement Designations.....	44
5	Distribution Efficiency	46
6	Regional Market Transformation	47
7	Energy Efficiency Expenditures.....	48
8	Tariff Rider Balances	50
9	Actual to Business Plan Comparison.....	51
10	Net Cost Effectiveness Results.....	53
10.1	Electric Cost Effectiveness Results.....	54
Appendix A	Idaho 2014 Impact Memorandum .. Error! Bookmark not defined.	

1 Executive Summary

The 2014 Demand-Side Management (DSM) Annual Report summarizes Avista Utility's (Avista) annual energy efficiency achievements for its Idaho electric customers. These programs are intended to deliver a cost-effective, "least-cost" resource with the funding provided through Avista's Schedules 91 and 191, also known as the "Tariff Rider" which is a non-bypassable system benefit charge applied to all electric retail sales.

In 2014, Avista acquired 15,743,727 kWh (unverified gross savings) in Idaho, or 95 percent of the 2014 Business Plan target of 16,634,550 kWh.

A summary of acquired savings by sector is provided in Table ES-1 below.

Table ES-1: 2014 Idaho Electric Energy Savings (Unverified Gross)

Segment	kWh
Residential	8,896,105
Low Income	430,356
Nonresidential	6,417,265
Total	15,743,727

The above mentioned acquisition has been delivered through local energy efficiency programs managed by the utility or third-party contractors. Avista also funds a regional market transformation effort through the Northwest Energy Efficiency Alliance (NEEA), however, reported electric energy savings, cost-effectiveness and other related information is specific to local programs unless otherwise noted.

The savings indicated are unverified gross savings based on all program participants. Net-to-gross adjustments made to the unverified gross savings for the cost-effectiveness analysis are discussed in the Evaluation, Measurement, and Verification section of this report.

Avista judges the effectiveness of the energy efficiency portfolio based upon a number of metrics. Two of the most commonly applied metrics are the TRC test, a benefit-to-cost test encompassing the entire utility ratepayer population, and the PAC test, a benefit-to-cost test

from the perspective of achieving a minimization of the utility cost of delivering energy efficiency services. Benefit-to-cost ratios in excess of 1.00 indicate that the benefits exceed the costs. In 2014, the gross TRC benefit-to-cost ratio was 1.76 and the PAC test benefit-to-cost ratios was 3.22 for the electric programs.

Nexant, Inc., in partnership with Research Into Action, (the Nexant Team) was retained as the Company's external evaluator to independently measure and verify the portfolio energy savings for the 2014-2015 biennium period. The energy efficiency savings and associated cost-effectiveness results presented in this 2014 Annual Report are based on gross, unverified savings. The 2014 savings will be evaluated by the Nexant Team in 2015 and reported as the verified energy savings in the 2014-2015 biennium reporting.

Though the nature of this report is to look backwards on the performance of the previous year, successes and lessons from this process are applied during the forward-looking business planning process to inform and improve program design, including program modification and termination where necessary. Avista remains committed to continuing to deliver responsible and cost-effective energy efficiency programs to our customers.

2 Cost-Effectiveness

The 2014 Demand-Side Management (DSM) Annual Report summarizes the Company's annual energy efficiency achievements of its DSM programs.

Cost-effectiveness was reviewed using four of the five California Standard Practice Tests including the Total Resource Cost (TRC), Program Administrator Cost (PAC), Participant, and Rate Impact Measure (RIM) tests. For this annual report, cost-effectiveness of DSM programs is based on unverified gross savings and methods consistent with those laid out in the California Standard Practice Manual for Economic Analysis of Demand-Side Programs and Projects as modified by the Council. Shown below in Table 2-2 through Table 2-5 are results for these four California Standard Practice Tests - Total Resource Cost, Program Administrator Cost, Participant, and Rate Impact Measure for electric and natural gas. Table 2-1 summarizes the allocation of cost-effectiveness components as a cost or benefit to each cost-effectiveness test.

Table 2-1: Cost-Effectiveness Component Inputs

Component	Program Administrator Cost Test (PACT)	Total Resource Cost (TRC)	Participant Cost Test (PCT)	Rate Impact Measure (RIM)
Utility Energy & Capacity Avoided Costs	Benefit	Benefit		Benefit
Non-Utility Energy & Capacity Energy Costs		Benefit	Benefit	
Non-Energy Benefit Impacts		Benefit	Benefit	
Incremental Equipment and Installation Costs		Cost	Cost	
Program Non-incentive (admin) Costs	Cost	Cost		Cost
Incentive Payments	Cost		Benefit	Cost

The cost-effectiveness calculations only include non-energy benefits where the values are reasonably defensible and quantifiable for a limited number of measures, including water savings, equipment replacement and operation and maintenance benefits. The calculations also include health and human safety non-energy benefits (dollar for dollar) for the low-income programs. Non energy benefits not included, because they are not easily quantifiable, include benefits for arrearage, health/safety/comfort, system reliability, and site specific air emissions to name a few. The evaluation team will include survey and on-site questions of participating customers to determine specific and demonstrable non-energy benefits as found and as applicable.

Cost effectiveness results within this report are based on unverified savings. Energy savings reported by Avista's implementation team (both external and internal to Avista) were reviewed by the Company's external evaluator, but savings were not evaluated for the 2014 programs. The external evaluator will verify the 2014 and 2015 portfolio energy savings and verified savings will be reported for the biennial period. The savings estimates represent gross energy acquisition except as noted in section 4.2 of this report.

In summary, electric gross TRC is 1.76. Electric PAC test benefit-cost ratio is 3.22. Table 2-2 through Table 2-5 illustrates electric cost-effectiveness. Regular income includes all programs offered in the residential and non-residential sectors (not including NEEA) and low-income includes all programs offered in the low-income sector.

2.1 Electric Cost Effectiveness Results

Table 2-2: 2014 ID Electric Total Resource Cost (TRC) (Gross)

	Regular Income Portfolio	Low Income Portfolio	Overall Portfolio
Electric Avoided Costs	\$13,714,278	\$392,989	\$14,107,267
Natural Gas Avoided Costs	-\$830,920	-\$51,998	-\$882,918
Non-Energy Benefits	\$85,165	\$589,428	\$674,593
TRC Benefits	\$12,968,523	\$930,418	\$13,898,941
Non-Incentive Utility Costs	\$1,724,418	\$138,855	\$1,863,273
Customer Costs	\$5,426,436	\$627,690	\$6,054,126
TRC Costs	\$7,150,854	\$766,545	\$7,917,399
TRC Ratio	1.81	1.21	1.76
Residual* TRC Benefits	\$5,817,669	\$163,873	\$5,981,542

*The "Residual TRC" is used to denote the difference between TRC benefits and costs. The term "Residual" is used in lieu of the term "Net" as not to be confused with TRC benefits and costs where Net to Gross adjustments have been applied.

Table 2-3: 2014 ID Electric Program Administrator Cost (PAC) (Gross)

	Regular Income Portfolio	Low Income Portfolio	Overall Portfolio
Electric Avoided Costs	\$13,714,278	\$392,989	\$14,107,267
Natural Gas Avoided Costs	-\$830,920	-\$51,998	-\$882,918
PAC Benefits	\$12,883,358	\$340,991	\$13,224,349
Non-Incentive Utility Costs	\$1,724,418	\$138,855	\$1,863,273
Incentive Costs	\$1,542,618	\$700,170	\$2,242,788
PAC Costs	\$3,267,036	\$839,024	\$4,106,060
PAC Ratio	3.94	0.41	3.22
Net PAC Benefits	\$9,616,322	-\$498,034	\$9,118,288

Table 2-4: 2014 ID Electric Participant Cost (PCT) (Gross)

	Regular Income Portfolio	Low Income Portfolio	Overall Portfolio
Electric Bill Reduction	\$17,185,155	\$654,626	\$17,839,781
Gas Bill Reduction	-\$11,257	-\$2,680	-\$13,937
Non-Energy Benefits	\$85,165	\$589,428	\$674,593
Participant Benefits	\$17,259,063	\$1,241,373	\$18,500,437
Customer Costs	\$5,426,436	\$627,690	\$6,054,126
Incentive Received	-\$1,542,618	-\$700,170	-\$2,242,788
Participant Costs	\$3,883,818	-\$72,479	\$3,811,339
Participant Ratio	4.44	N/A	4.85
Net Participant Benefits	\$13,375,245	\$1,313,853	\$14,689,098

Table 2-5: 2014 ID Electric Rate Impact Measure (RIM) (Gross)

	Regular Income Portfolio	Low Income Portfolio	Overall Portfolio
Electric Avoided Cost Savings	\$13,714,278	\$392,989	\$14,107,267
Non-Participant Benefits	\$13,714,278	\$392,989	\$14,107,267
Electric Revenue Loss	\$17,185,155	\$654,626	\$17,839,781
Non-Incentive Utility Costs	\$1,724,418	\$138,855	\$1,863,273
Customer Incentives	\$1,542,618	\$700,170	\$2,242,788
Non-Participant Costs	\$20,452,191	\$1,493,650	\$21,945,841
RIM Ratio	0.67	0.26	0.64
Net RIM Benefits	-\$6,737,913	-\$1,100,661	-\$7,838,575

3 Programs

3.1 Residential

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.

Over \$575,000 in rebates were provided directly to Idaho residential customers to offset the cost of implementing these energy efficiency measures. All programs within the residential portfolio contributed over 8,896 MWh in annual first-year energy savings.

3.1.1 Program Changes

Program changes were made for the 2014-2015 Biennium, including the introduction of new programs, the discontinuation of programs and changes to eligibility or incentive levels of existing programs. Avista communicates the majority of program changes once the Business Plan is finalized and typically makes the changes effective at the beginning of the year. Program changes are also made throughout the year as necessary, but mid-year changes are less typical.

For residential programs, rebate amounts were updated to reflect business planning analysis and to include inputs such as new unit energy savings (UES) and cost values. For changes that were effective January 1, 2014, Avista continued to accept rebate applications and honored incentive amounts through March 31, 2014 for 2013 measures (the 90 days allowed for a smooth transition when rebate programs change, allowing enough time for customers in the pipeline to complete their projects, yet closed out changes in a timely but balanced approach).

The following outlines additions, adjustments and discontinuations of residential programs and incentive levels beginning in 2014:

3.1.1.1 Residential Program New Offerings

The following measures were added to the residential program offering beginning January 2014:

- In October 2014 Avista launched a smart thermostat program that offered customers installing qualifying wifi-enabled models either a \$50 rebate for do-it-yourself installation or \$100 for contractor installed devices.
- Windows offered at \$4.00 per square foot (replacement of single or double pane to U-factor of 0.30 or lower).

3.1.1.2 Residential Program Discontinuations

The following measures and/or programs were discontinued from the residential portfolio:

- High Efficiency Air Source Heat Pumps were discontinued in January 2014.

3.1.1.3 Residential Program Adjustments

The following adjustments in program requirements and/or incentives levels were made to the residential programs beginning January 2014:

- High Efficiency Electric Water Heater decreased from \$30 to \$20
- Electric to Natural Gas Furnace Conversion increased from \$750 to \$900
- Electric to Natural Gas Water Heater Conversion increased from \$200 to \$300
- Attic Insulation decreased from \$0.25 per square foot to \$0.15 per square foot (Existing insulation R-value changes from R-12 or less to R-19 or less to be eligible)
- Wall Insulation decreased from \$0.50 per square foot to \$0.25 per square foot
- Floor Insulation decreased from \$0.50 per square foot to \$0.20 per square foot
- Electric or electric and natural gas Energy Star® Home, Stick Built from \$650 to \$1,000
- Electric or electric and natural gas Energy Star®/Eco-Rated Home, Manufactured from \$650 to \$800
- Electric to Natural Gas Furnace Conversion increased from \$900 to \$2,300 (increased on September 16, 2014 due to Fuel Efficiency Tariff Change)
- Electric to Natural Gas Water Heater Conversion increased from \$300 to \$600 (increased on September 16, 2014 due to Fuel Efficiency Tariff Change)
- Combination Electric to Natural Gas Space and Water Heat increased from \$1,200 to \$3,200 (increased on September 16, 2014 due to Fuel Efficiency Tariff Change)

The remaining sub-sections outline each residential program offered in 2014 and the unverified participation, incentives, energy savings, among other program achievements.

3.1.2 Residential Appliance Recycling

Avista has partnered with JACO, one of the nation's leading appliance recyclers, to provide third-party administration of the refrigerator/freezer appliance recycling program. Customers received \$30 per appliance for participating which equated to \$8,130 in incentives. This appliance recycling program resulted in over 118 MWh in annual first-year savings in 2014 (see Table 3-1).

3.1.3 HVAC Program

Electric customers with electric home heat are eligible for a rebate for the installation of a variable speed motor on their forced air heating equipment (\$100 rebate), or a conversion of electric straight resistance space heat to an air source heat pump (\$900 rebate). This program achieved over 441 MWh in first-year savings in 2014 and customers received a total of \$83,758 in incentives (see Table 3-2).

3.1.4 Water Heat Program

The Water Heat Program offers a \$20 incentive for a high efficiency electric water heater (0.93 Energy Factor), and \$7 buydown for Simple Steps, Smart Savings showerheads (reflected in point of purchase price). Savings from free showerheads installed via the Shell program (described below) are also tallied under Water Heat. The Water Heat Program achieved 184 MWh in first-year savings in 2014 (see Table 3-3). \$10,525 was paid in incentives for this program.

3.1.5 ENERGY STAR HOMES

Avista customers with a certified ENERGY STAR Home or ENERGY STAR / ECORated Manufactured Home are eligible for a \$1,000 or \$800 rebate, respectively. Eligible homes must be all electric to qualify for these rebate levels. Alternatively, customers who subscribe to Avista electric service for lighting and appliances and natural gas service for space and water heating are eligible for a program rebate of \$650 regardless of construction type. Avista achieved 27 MWh savings in 2014 (see Table 3-4). A total of \$2,790 was paid out in incentives for this program.

3.1.6 Fuel Efficiency

This program offers incentives for converting existing straight resistance electric space heat to a natural gas furnace (\$900 rebate); and/or converting their existing electric water heater to a natural gas water heater (\$300 rebate). This program achieved 633 MWh in first-year savings in 2014 (see Table 3-5), with customers receiving \$120,100 in paid incentives.

3.1.7 Residential Lighting

Avista continues to participate in the regional manufacturer buy-down of CFL twists, specialty bulbs, LED bulbs, and showerheads through Northwest Energy Efficiency Alliance (NEEA) and its contactor. The bulbs resulted in 4,760 MWh in annual first-year savings during 2014 (see Table 3-6). The showerhead savings are tallied under Avista's Water Heat program. The Company contributed over \$280,260 in incentives toward this buydown effort.

3.1.8 Shell

The primary measures included wall, attic, and floor insulation and window replacements. In 2014, the Shell Program acquired 446 MWh in first-year energy savings (see Table 3-7).

3.1.9 Opower Home Energy Reports

Avista launched a Home Energy Reports program in June 2013, targeting 25,200 Idaho high use electric customers. Eligibility for treatment includes several criteria such as sufficient (2 year) billing history, enough peers to build comparison group, not in the control group, not a 'do not solicit' customer and high enough electric use to be cost-effectively treated, which produced a treatment group with an average over 18,000 kWh and the lowest use customers in the group were over 8,000 kWh annual. In an effort to reduce energy usage through behavioral changes, Home Energy Reports show personalized usage insights and energy saving tips. Customers also see a ranking of similar homes, comparison to themselves and a personal savings goal on the Reports. In addition to closely matching usage curves, the similar home comparisons are also based on the following four criteria, square footage, home type, heat type and proximity.

As shown in Table 3-8 initial participating customer counts began at higher counts than the program targets to account for Opt-Outs and Attrition. Customers have the choice of receiving the reports and can opt-out at any time. Attrition results in customers closing their Avista account and therefore no longer being counted in the Program. Opower's reported energy savings results (fixed-effects model as reported by OPower) in Idaho are 2,283 MWh (see Table 3-9).

3.1.10 Customer Outreach

Avista's DSM programs encourage the customer to take action through participation in currently available programs. Energy efficiency outreach efforts are varied and usually are a combination of both broad reach and targeted media, online, print and attendance at local community events. In 2014, Avista's residential outreach included the repeat of popular broad reach media promotions "Efficiency Matters" and "Home Energy Advisor". A bill insert in the early spring offered tips to manage energy use and a link to rebate offerings.

Idaho customers could tune into a radio segment called "House to Home" ; each quarter it featured an Avista energy engineer discussing energy efficiency information based on the season and related topics. Web searches for key words such as "gas conversion" or "rebates" resulted in a banner ad for Avista and a link to avistautilities.com. As opportunities arise, energy efficiency tips are provided to local media outlets. Typical topics include winter weather and summer heat energy efficiency tips. Avista provides updates to area vendors about program information through mailings and webinars who in turn pass that information on to their customers.

These are the highlights of specific activities that are reinforced and compliment the ongoing outreach and messaging through the website, customer service reps, printed rebate forms, trainings, sponsorships, etc. As noted in further detail in the Low Income outreach and while we target low income customers, our energy fairs are open to all customers.

Table 3-1: 2014 ID Residential Appliance Recycling Summary¹

Measure	Project Count	Incentives	kWh	Therms	kWh Avoided Costs	Therms Avoided Costs	Non-energy Benefits	Customer Incremental Costs	Non-incentive Utility Costs
Refrigerator	207	\$6,210	87,768	-	\$24,081	\$0	\$0	\$6,210	\$6,591
Freezer	64	\$1,920	30,592	-	\$8,845	\$0	\$0	\$1,920	\$2,421
Total	271	\$8,130	118,360	-	\$32,926	\$0	\$0	\$8,130	\$9,012

Table 3-2: 2014 ID Electric HVAC Program Summary¹

Measure	Project Count	Incentives	kWh	Therms	kWh Avoided Costs	Therms Avoided Costs	Non-energy Benefits	Customer Incremental Costs	Non-incentive Utility Costs
E Thermostat WA/ID DIY	1	\$50	961	-	\$559	\$0	\$0	\$264	\$153
X E Air Source Heat Pump	15	\$1,308	5,055	-	\$3,755	\$0	\$0	\$44,158	\$1,028
E Electric To Air Source Heat Pump	68	\$61,200	341,556	-	\$253,717	\$0	\$0	\$360,574	\$69,442
E Variable Speed Motor	211	\$21,100	93,068	-	\$57,211	\$0	\$0	\$273,837	\$15,659
E Thermostat WA/ID PD Install	1	\$100	961	-	\$559	\$0	\$0	\$445	\$153
Total	296	\$83,758	441,601	-	\$315,801	\$0	\$0	\$679,278	\$86,434

Table 3-3: 2014 ID Electric Water Heat Program Summary¹

¹ All kWh values reported in this table are gross, excluding the effect of applicable NTG ratios.

Measure	Project Count	Incentives	kWh	Therms	kWh Avoided Costs	Therms Avoided Costs	Non-energy Benefits	Customer Incremental Costs	Non-incentive Utility Costs
Simple Steps Showerheads	1,682	\$10,265	183,470	-	\$88,254	\$0	\$0	\$40,368	\$24,155
E Electric Water Heater	13	\$260	1,430	-	\$831	\$0	\$0	\$6,632	\$227
Total	1,695	\$10,525	184,900	-	\$89,085	\$0	\$0	\$47,000	\$24,383

Table 3-4: 2014 ID ENERGY STAR Homes Electric Program Summary²

Measure	Project Count	Incentives	kWh	Therms	kWh Avoided Costs	Therms Avoided Costs	Non-energy Benefits	Customer Incremental Costs	Non-incentive Utility Costs
E Estar Home - Manuf, Furnace	4	\$2,790	27,388	-	\$26,750	\$0	\$659	\$12,000	\$7,322
Total	4	\$2,790	27,388	-	\$26,750	\$0	\$659	\$12,000	\$7,322

Table 3-5: 2014 ID Electric Fuel Conversion Program Summary²

Measure	Project Count	Incentives	kWh	Therms	kWh Avoided Costs	Therms Avoided Costs	Non-energy Benefits	Customer Incremental Costs	Non-incentive Utility Costs
E Electric To Natural Gas Water Heater	17	\$10,200	62,577	(3,672)	\$25,156	-\$116,639	\$0	\$35,244	\$6,885

² All kWh values reported in this table are gross, excluding the effect of applicable NTG ratios.

E Electric To Natural Gas Furnace	45	\$103,500	540,540	(22,094)	\$217,302	-\$701,806	\$0	\$219,972	\$59,475
E Electric To Natural Gas Fur & WH	2	\$6,400	30,386	(1,426)	\$12,215	-\$45,296	\$0	\$10,576	\$3,343
Total	64	\$120,100	633,503	(27,192)	\$254,674	-\$863,741	\$0	\$265,792	\$69,704

Table 3-6: 2014 ID Electric Residential Lighting Program Summary²

Measure	Project Count	Incentives	kWh	Therms	kWh Avoided Costs	Therms Avoided Costs	Non-energy Benefits	Customer Incremental Costs	Non-incentive Utility Costs
Simple Steps LED	53,015	\$143,235	1,119,394	-	\$449,897	\$0	\$0	\$651,558	\$123,137
Simple Steps CFL	206,422	\$136,053	3,636,394	-	\$1,072,864	\$0	\$0	\$673,140	\$293,642
Customer Outreach CFLs (Residential)	240	\$720	3,600	-	\$1,041	\$0	\$0	\$359	\$285
Customer Outreach LEDs (Residential)	84	\$252	1,092	-	\$520	\$0	\$0	\$1,032	\$142
Total	259,761	\$280,260	4,760,480	-	\$1,524,322	\$0	\$0	\$1,326,090	\$417,206

Table 3-7: 2014 ID Electric Shell Program Summary³

Measure	Project Count	Incentives	kWh	Therms	kWh Avoided Costs	Therms Avoided Costs	Non-energy Benefits	Customer Incremental Costs	Non-incentive Utility Costs
E Attic Insulation With Electric Heat	21	\$4,569	22,267	-	\$20,184	\$0	\$742	\$28,109	\$5,524
E Floor Insulation With Electric Heat	6	\$1,690	9,949	-	\$9,018	\$0	\$212	\$7,696	\$2,468
E Wall Insulation With Electric Heat	12	\$3,189	22,331	-	\$20,242	\$0	\$339	\$12,717	\$5,540
E Window Replc From Double Pane W Elec Heat	80	\$30,286	142,941	-	\$129,570	\$0	\$0	\$264,582	\$35,463
E Window Replc From Single Pane W Elec Heat	67	\$29,504	246,514	-	\$223,455	\$0	\$0	\$257,323	\$61,159
G Window Replc With Natural Gas Heat	1	\$340	2,776	320	\$4,130	\$0	\$0	\$1,256	\$1,130
Total	187	\$69,578	446,778	320	\$406,599	\$0	\$1,294	\$571,681	\$111,286

Table 3-8: 2014 OPower Participation Summary

State	Program Target	Initial Participating Customers		Opt-outs		Closed Accounts		Participating Customers 2014 Year-End
		2013	2014	2013	2014	2013	2014	
ID	25,200	21,545	21,545	0.88%	1.11%	2,323	2,535	18,988

³ All kWh values reported in this table are gross, excluding the effect of applicable NTG ratios.

Table 3-9: 2014 ID Electric Residential OPower Program Summary

Measure	Project Count	Incentives	kWh	Therms	kWh Avoided Costs	Therms Avoided Costs	Non-energy Benefits	Customer Incremental Costs	Non-incentive Utility Costs
OPower Home Energy Reports	0	\$0	2,283,095	-	\$286,741	\$0	\$0	\$244,569	\$244,569

3.2 Low Income

The Company leverages one Community Action Program (CAP) agency to deliver energy efficiency programs for the Company's low income residential customers in the Idaho service territory. The Community Action Partnership out of Lewiston has resources to income qualify, prioritize and treat clients homes based upon a number of characteristics. In addition to the Company's annual funding, the agency has other monetary resources that they can leverage when treating a home with weatherization or other energy efficiency measures. The agency either has in-house or contractor crews to install many of the efficiency measures of the program.

3.2.1 Program Changes

In 2014, the Company continued to reimburse Community Action Agencies for 100% of the cost of installation for a select group of "Approved" energy efficiency measures.

New in 2014, the Company established a "Rebate List" of other energy efficiency measures. This rebate list allows the agencies to receive funding for measures that are not as cost-effective as those on the Approved List but are still necessary for the homes overall functionality. The reimbursement amount is only equal to the energy value of the improvement from the Utility perspective. This approach focuses the Agency towards installing measures that have the greatest cost-effectiveness, from the utility perspective, but still offers an opportunity to fund other measures if needed. To allow for additional flexibility, the agency may also choose to utilize their Health and Safety dollars to fully fund the cost of the measures on the Rebate list.

3.2.2 2014 Program Details

Eligible efficiency improvements are similar to those offered under the traditional residential rebate programs, as well as mirroring a variety of the same measures found on the state program priority list. An Avista approved measure list is provided to the agencies in an attempt to manage the cost-effectiveness of the low income program (see Table 3-10). The agencies are given discretion to spend their allotted funds on electric efficiency improvement based on the need of the clients. The program includes improvements to insulation, infiltration, ENERGY STAR® doors and refrigerators along with fuel conversion from electric resistance space and water heat to natural gas. Avista's funding covers the full cost of the improvement from the Approved Measures list.

Table 3-10: 2014 Low Income Program Approved Measure List

Electric Measures
<ul style="list-style-type: none">• Air infiltration• Insulation (floor and wall)• Duct sealing• ENERGY STAR doors• Electric to Natural Gas Conversion (Space and Water Heat)• ENERGY STAR Refrigerators• Variable speed Motor

As mentioned above, beginning in 2014 a “Rebate” list was established to allow the agencies to receive funding for measures that are not as cost-effective as those on the Approved List but are still necessary for the homes overall functionality. This measure list is outlined in Table 3-11.

Table 3-11: 2014 Low Income Program Rebate Measure List

Electric Measures
<ul style="list-style-type: none">• Insulation (duct and attic)• ENERGY STAR refrigerators (for replacement of a refrigerator that is not fully operational)• High efficient water heater• Electric to air source heat pump• Electric to natural gas water heater• ENERGY STAR windows• High efficiency air source heat pump

The one Idaho agency received a total funding amount of \$700,000 in 2014. The annual contract allows the agency to spend their annually allotted funds on electric efficiency measures at their discretion, and charge a 15 percent administration fee towards the cost of each measure. In addition, up to 15 percent of their annual funding allocation may be used towards Health and Safety improvements in support of energy efficiency measures installed in the home. It is at the agencies discretion whether or not to utilize their funds for health and safety and other home repairs to ensure the habitability of the home where the energy efficiency improvements were installed.

For the 2014 program year, Idaho income-qualified homes installed approximately 3,640 individual measures in 253 individual homes, acquiring more than 430 MWh while expending the \$700,000 thousand in Idaho contracts. Refer to Table 3-12 for details on the low income program.

In partnership with the Company's Demand-Side Management efforts, Avista's Consumer Affairs department conducts conservation education and outreach for the low income, senior and vulnerable customers. The company reaches the target population through workshops, energy fairs, mobile and general outreach. Each of these methods include demonstrations and distribution of low-cost and no-cost materials with a focus on energy efficiency, conservation tips and measures, and information regarding energy assistance that may be available through agencies.

The company has recognized the following educational strategies as efficient and effective activities for delivering the energy efficiency and conservation education and outreach:

- Energy Conservation workshops for groups of Avista customers where the primary target audiences are seniors and low income participants.
- Energy Fairs where attendees can receive information about low cost/no cost methods to weatherize their home; this information is provided in demonstrations and limited samples. In addition, fair attendees can learn about billing assistance and demonstrations of the online account and energy management tools. Community partners that provide services to low income populations and support to increase personal self-sufficiency are invited, at no cost, to host a booth to provide information about their services and how to access them.
- Mobile Outreach is conducted through the Avista Energy Resource Van (ERV) where visitors can learn about effective tips to manage their energy use, bill payment options and community assistance resources.
- General Outreach includes bill payment options and assistance resources in senior and low income publications. General Outreach can also be accomplished by providing energy management information and resources at events (such as resource fairs) and through partnerships that reach our target populations.

In 2014, in Idaho, Avista facilitated 16 workshops with 470 participants; two energy fairs that had 550 attendees; 19 mobile outreach events touching 3,319 visitors; and 4 general outreach partnerships and events reaching 455 individuals for a total of 4,794 senior and low income individual touches.

In addition to the Avista led outreach, a \$50,000 conservation education (ConEd) grant funded through the DSM tariff rider was provided to the Community Action Partnership (CAP) in Lewiston. The grant covers the costs for brochures and flyers to reach individuals seeking energy assistance at the CAP offices and in the service area. The objectives of CAP's low income consumer energy conservation education program include:

- Increase ConEd knowledge and awareness of low income individuals
- Build capacity for ConEd in local communities, and
- Decrease energy consumption

These objectives are achieved through low, medium and high impact strategies. These strategies start with basic awareness building (low impact) activities through a print materials that are available to individuals as they wait for their energy assistance appointment in CAP offices; through this strategy 17,791 individuals were reached in 2014. Medium impact includes workshops and participation in community events to increase individual knowledge of energy conservation; through this strategy 2,085 individuals were reached. Finally, high impact activities include one-on-one education with those are receiving weatherization and other energy efficiency installations in their home, 4 individuals received this form of education; additionally, 177 weatherization households were sent a letter that provided an analysis of their prior year's energy use.

Table 3-12: ID 2014 Electric Low-Income Measures Summary⁴

Measure	Project Count	Incentives	kWh	Therms	kWh Avoided Costs	Therms Avoided Costs	Non-energy Benefits	Customer Incremental Costs*	Non-incentive Utility Costs
Customer Outreach CFLs (Low Income)	2,977	\$3,558	49,620	-	\$14,347	\$0	\$0	\$4,457	\$5,072
Customer Outreach LEDs (Low Income)	285	\$341	3,705	-	\$1,764	\$0	\$0	\$5,130	\$624
E Ins - Ceil/Attic	25	\$26,325	9,261	-	\$15,763	\$0	\$0	\$12,156	\$5,572
E Ins - Duct	8	\$331	524	-	\$356	\$0	\$0	\$667	\$126
E Ins - Floor	41	\$96,197	60,842	-	\$103,556	\$0	\$0	\$80,890	\$36,609
E Ins - Wall	11	\$20,587	11,020	-	\$18,757	\$0	\$0	\$39,326	\$6,631
E Energy Star Windows	20	\$253	405	-	\$689	\$0	\$5,733	\$477	\$244
E Energy Star Doors	27	\$18,247	8,880	-	\$15,114	\$0	\$34,254	\$20,276	\$5,343
E To G Furnace Conversion	47	\$181,989	124,809	(5,989)	\$113,134	-\$40,941	\$78,000	\$176,031	\$39,995
E To G H ₂ O Conversion	38	\$96,225	44,672	(2,761)	\$22,881	-\$11,057	\$25,000	\$78,737	\$8,089
E To G Heat Pump Conversion	5	\$7,120	24,872	-	\$18,476	\$0	\$0	\$15,542	\$6,531
E Air Infiltration	54	\$55,570	29,084	-	\$21,604	\$0	\$0	\$73,624	\$7,637
Federal H&Hs	6	\$0	-	-	\$0	\$0	\$0	\$9,408	\$0
Health & Human Safety	53	\$183,306	-	-	\$0	\$0	\$446,441	\$90,907	\$0
E Duct Sealing	43	\$10,121	62,662	-	\$46,547	\$0	\$0	\$20,063	\$16,455
Total	3,640	\$700,170	430,356	(8,750)	\$392,989	-\$51,998	\$589,428	\$627,690	\$138,928

*Customer incremental costs are the incremental measure cost absent any incentive. Therefore, the values should not be zero for the low income program. These incremental values are used in cost-effectiveness calculations.

⁴ All kWh values reported in this table are gross, excluding the effect of applicable NTG ratios.

3.3 Nonresidential

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.

In 2014, 323 prescriptive and site specific nonresidential projects were incented. Avista contributed over \$967,000 for energy efficiency upgrades in nonresidential applications. Nonresidential programs contributed over 6,417 MWh in annual first-year energy savings. Table 3-15 and Table 3-16 provide details on the electric nonresidential programs.

3.3.1 Program Changes

Program changes made at the beginning of 2014 to the nonresidential programs include the addition of new program offerings, discontinued programs and changes to eligibility or incentive levels. Avista communicates the majority of program changes once the Business Plan is finalized and those changes become effective at the beginning of the year. In addition, some program changes are made throughout the year as necessary but these are less typical.

For nonresidential programs, rebates were updated to reflect business planning analysis to include inputs such as new unit energy savings (UES) and cost values. Changes were effective January 1, 2014 and Avista accepted rebate applications through March 31, 2014 for 2013 measures and amounts. This 90 day grace period allows for a smooth transition when rebate programs change to allow enough time for customers in the pipeline to complete their projects yet close out changes in a timely but balanced approach.

The following sections outline additions, adjustments and discontinuations of nonresidential programs and incentive levels beginning in 2014.

3.3.1.1 Nonresidential Program New Offerings

In 2014, Avista offered several new pilot programs as described in the Business Plan. The timing of projects for these pilot programs is identified as follows:

- AirGuardian Pilot:
 - Identification of pilot sites occurred in November 2014
 - Completion of device installations at pilot sites occurred in December 2014
 - Completion of data collection (pre- and post- device operation) in January 2015
 - Final report submitted to Avista in February 2015
- Cascade Energy Pilot:
 - The contract with the third-party implementer for this pilot was signed in February 2014 and all scoping reports were done that summer. No contracts have been

signed for Phase 2. Two customers are interested in going forward. One has operational constraints due to the type of manufacturing processes and security where they are still considering their option to proceed. A second company is also still evaluating timing of the investment and operational considerations.

- Fleet Heat Pilot:
 - The goal of this pilot is to determine if there are cost-effective savings without operational issues by adding a temperature device to turn engine block heaters on and off as appropriate during the winter season. Anecdotally the fleet approach is often to begin using engine block heaters around the end of October until the end of April due to potential cold temperatures. Avista delivered the cords to a local school district in November 2014 and a local packaged food delivery company and local freight company shortly after.

3.3.1.2 Nonresidential Program Discontinuations

The following nonresidential programs and/or measures were discontinued beginning January 2014:

- Nonresidential Hot Water Heater Program
- Standby Generator Block Heater Program
- From the Nonresidential Windows and Insulation Program new and retrofit windows were discontinued.
- From the Nonresidential Food Service Equipment Program hot food holding carts were discontinued.

3.3.1.3 Nonresidential Program Adjustments

The following adjustments in program requirements or incentive levels were made to the nonresidential programs beginning January 2014:

- Nonresidential HVAC VFD Program- all applications were changed to \$130 per HP
- Nonresidential Clothes Washers were increased from \$75 to \$100 per unit.
- Nonresidential Lighting Interior and Exterior Incentives Program Announcement: Avista offers a variety of prescriptive incentives for Non-T12 Lighting Retrofits. In 2014, Avista has expanded the interior and exterior incentive options which are now available on two separate Prescriptive Commercial Lighting Incentive Agreement Forms. Please note the lighting program changes listed in Table 3-13.

Table 3-13: Nonresidential Lighting Interior and Exterior Changes

Program Change	Existing Light	Retrofit Light	Old Incentive	New Incentive	Notes
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Deletion	1000 watt HID	400–575 watt Digital HID fixture	\$400	\$0	Exterior
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Deletion	1000 watt HID	400-470 watt LED fixture	\$475	\$0	Exterior
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Program Change	Existing Light	Retrofft Light	Old Incentive	New Incentive	Notes
Deletion	750 watt HID	320-400 watt Digital HID fixture	\$300	\$0	Exterior
Deletion	750 watt HID	210-240 watt LED fixture	\$350	\$0	Exterior
Increased Incentive	400 watt HID	250 watt Digital HID fixture	\$150	\$260	Exterior
Modified Eligibility	400 watt HID	125-175 watt LED fixture	\$275	\$255	Exterior
Addition	320 watt HID	125-160 watt LED fixture	\$0	\$180	Exterior
Modified Eligibility	250 watt HID	85-140 watt LED fixture	\$175-200	\$145	Exterior
Deletion	175 watt HID	40 watt Induction Fluorescent fixture	\$150	\$0	Exterior
Modified Eligibility	175 watt HID	35-85 watt LED fixture	\$175	\$135	Exterior
Modified Eligibility	150 watt HID	35-50 watt LED fixture	\$175	\$130	Exterior
Modified Eligibility	90-100 watt HID	25-50 watt LED fixture	\$100	\$75	Exterior
Modified Eligibility	70-90 watt HID	15-35 watt LED fixture	\$75	\$55	Exterior
Decreased Incentive	400 watt HID	4 lamp T5 fixture	\$110	\$105	Interior
Deletion	400 watt HID	6 lamp High Performance T8	\$140	\$0	Interior
Decreased Incentive	250 watt HID	4 lamp High Performance T8 or 2 lamp T5 fixture	\$55	\$50	Interior
Varied Incentive	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 lamp	N/A	\$6	Interior
Modified Eligibility	60 watt incandescent	9-13 watt LED lamp	N/A	\$8	Interior
Modified Eligibility	75-100 watt incandescent	12-20 watt LED lamp	N/A	\$10	Interior
Addition	20 watt MR16	2-4 watt MR16 LED lamp	N/A	\$5	Interior
Addition	35 watt MR16	4-6 watt MR16 LED lamp	N/A	\$6	Interior
Addition	50 watt MR16	6-9 watt LED* lamp	N/A	\$10	Interior

- Commercial Lighting Canopy LED and LED Sign Incentives Program Announcement: Avista increased the incentives for canopy LED lighting retrofits and added the LED Sign Lighting Program in the summer of 2014. The increased incentive amounts for canopy lighting were added on the Exterior Prescriptive Commercial Lighting Incentive Agreement Form. In order to qualify for this rebate, customers must meet the requirements of replacing all the canopy fixtures; and replacing at least 4 or more canopy LED lights which excludes LED wall packs, soffit fixtures and pole lights. The canopy LEDs must be on one of the approved LED fixture lists. In addition, the new LED Sign Lighting program has its own separate form and will state specific requirements in regards to LED sign lighting qualifications. Existing signs must be T12 fluorescent lighting and operate for at least 11.5 hours per day or 4,288 hours annually. Please note the Program changes in Table 3-14. New measures or increased incentives took effect July 1, 2014.

Table 3-14: Nonresidential Lighting Canopy LED and LED Sign Changes

Program Change	Existing Light	Retrofit Light	Old Incentive	New Incentive**	Notes
Increased Incentive	400 watt HID	122-175 watt LED Canopy fixture	\$255	\$325	Exterior
Increased Incentive	320 watt HID	122-160 watt LED Canopy fixture	\$180	\$250	Exterior
Addition	T12 Sign	Exterior LED Sign Lighting	Site Specific	\$17 per sq ft	Signs only

The remaining sub-sections outline the nonresidential programs offered in 2014 and the unverified participation, incentives, energy savings, etc for each measure offered in the programs.

3.3.2 Prescriptive Path

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. When applicable, the prescriptive measures utilize RTF unit energy savings.

3.3.3 Site Specific Path

Site specific is the most comprehensive offering of the nonresidential segment and brings in more than a third of the nonresidential savings. Avista's Account Executives work with nonresidential customers to provide assistance in identifying energy efficiency opportunities. Customers receive technical assistance in determining potential energy and cost savings as well as identifying and estimating incentives for participation. Site specific incentives, in which the tier structure applies, are capped at seventy percent of the incremental project cost for lighting projects with simple paybacks of less than 3 years and nonlighting projects (or lighting

projects with a verified life of 40,000 hours or more) with simple paybacks less than 5 years. All other project incentives calculated under the tier structure will be capped at fifty percent of the incremental project cost. Simple payback criteria for eligible projects is greater than 1 year and less than 8 years for lighting measures or less than 13 years for non-lighting and LED lighting measures. Site specific projects include appliances, compressed air, HVAC, industrial process, motors (non-prescriptive), shell and lighting with the majority being HVAC, lighting and shell.

Table 3-15: 2014 ID Electric Nonresidential Prescriptive Measures Summary⁵

Measure	Project Count	Incentives	kWh Savings	Therms Savings	kWh Avoided Costs	Therms Avoided Cost	Non-Energy Benefits	Customer Incremental Costs	Non-Incentive Utility Costs
PSC Com Water Heater	3	\$60	190	-	\$110	\$0	\$0	\$76	\$8
PSC Commercial Windows and Insul	5	\$4,066	35,561	-	\$28,676	\$0	\$0	\$16,118	\$2,002
PSC EnergySmart- Case Lighting	37	\$99,784	518,839	-	\$129,340	\$0	\$0	\$147,426	\$9,028
PSC EnergySmart- Industrial Proc	35	\$56,923	437,212	-	\$246,938	\$0	\$0	\$230,612	\$17,236
PSC Food Service Equipment	14	\$5,151	71,236	-	\$39,263	\$0	\$0	\$32,984	\$2,740
PSC Green Motors Rewind	18	\$2,883	32,893	-	\$13,223	\$0	\$0	\$5,949	\$923
PSC Lighting Exterior	94	\$227,357	1,022,213	-	\$523,526	\$0	\$56,590	\$435,894	\$36,541
PSC Lighting Interior	47	\$62,618	542,648	-	\$312,206	\$0	\$26,622	\$140,813	\$21,791
PSC Motor Controls HVAC	1	\$1,250	15,841	-	\$9,738	\$0	\$0	\$3,100	\$680
PSC Standby Generator Block	3	\$1,210	7,228	-	\$4,443	\$0	\$0	\$4,780	\$310
Total	257	\$461,302	2,683,860	-	\$1,307,465	\$0	\$83,212	\$1,017,751	\$91,259

⁵ All kWh values reported in this table are gross, excluding the effect of applicable NTG ratios.

Table 3-16: 2014 ID Electric Nonresidential Site Specific Measures Summary⁶

Measure	Project Count	Incentives	kWh Savings	Therms Savings	kWh Avoided Costs	Therms Avoided Cost	Non-Energy Benefits	Customer Incremental Costs	Non-Incentive Utility Costs
SS Appliances	1	\$7,817	4,092	2,598	\$10,810	\$9,689	\$0	\$15,510	\$1,422
SS Compressed Air	1	\$74,400	350,583	-	\$589,472	\$0	\$0	\$166,419	\$41,144
SS HVAC Combined	10	\$62,816	636,815	-	\$3,342,934	\$0	\$0	\$362,766	\$233,331
SS Industrial Process	2	\$28,422	270,682	-	\$1,573,061	\$0	\$0	\$54,974	\$109,797
SS Lighting Exterior	18	\$60,900	376,781	-	\$505,525	\$0	\$0	\$174,410	\$35,285
SS Lighting Interior	32	\$242,493	2,010,969	-	\$3,352,571	\$0	\$0	\$419,075	\$234,003
SS Motor Controls Industrial	1	\$17,716	83,483	-	\$95,542	\$0	\$0	\$37,954	\$6,669
SS HVAC Heating	1	\$11,611	-	4,834	\$0	\$23,133	\$0	\$23,037	\$1,594
Total	66	\$506,176	3,733,405	7,452	\$9,469,916	\$32,822	\$0	\$1,254,145	\$663,244

⁶ All kWh values reported in this table are gross, excluding the effect of applicable NTG ratios.

4 Evaluation, Measurement, and Verification (EM&V)

The Nexant Team was retained to provide impact and process evaluations for the 2014-2015 electric and natural gas programs.

The following sections outline the major recommendations from the impact and process evaluation reports completed for the 2012-2013 portfolio of programs and notes what changes were made to the 2014-2015 Avista programs as a result of these evaluations.

4.1 Process Evaluation Summary

Recommendations from Avista's 2012-2013 process evaluation⁷ report and subsequent implementation actions taken by Avista are summarized below.

4.1.1 Residential Sector

4.1.1.1 Program Participation

Conclusion: Avista's implementation of new and continued support for existing third-party implemented programs such as Simple Steps, Smart Savings and Residential Behavior effectively captures energy savings in the residential market segments.

Recommendation: Continue exploring new measures, program designs, and delivery mechanisms that leverage the national expertise of experienced third-party implementation firms. Possible programs may include additional partnership with ENERGY STAR in the form of the Home Performance with ENERGY STAR program.

Status: In 2014 the Company offered Energy Star rebates through NEEA as the implementer, and distinguished between an Energy Star stick build home and a manufactured home.

Conclusion: Avista's continued investment in pilot programs provides a low-risk way test the effectiveness of new measure offerings, delivery channels, and implementation partners.

Recommendation: Continue testing new program designs and measure offerings through the use of pilots—even if secondary sources of funding or local partners are not available.

⁷ Avista 2012-2013 Process Evaluation Report, The Cadmus Group, Inc., May 15, 2014.

Status: Avista initiated 3 pilot programs in 2014, a pilot program for reducing losses in compressed air systems called Air Guardian, a pilot program to test the efficacy of controlling block heaters on vehicles to reduce losses, and a pilot program to perform strategic energy management (SEM) in our industrial customers. The Company has yet to get an industrial customer to sign up for the second phase of the SEM initiative, but should have some preliminary results from the other two pilots by August of 2015.

Conclusion: While still early, evaluation findings indicate the Residential Behavior program is an effective way to capture savings in the residential market and Opower is a strong partner for program implementation.

Recommendation: If determined to be cost-effective, consider expanding the Residential Behavior program (for example, lowering the energy consumption threshold for participation and implementing measures to track the methods these customers use to save energy). Given that Avista has already included all cost-effective customers in their target population for this program, future opportunities for expansion may be limited.

Status: The Company will consider expansion of the OPower Residential Behavior program pending 2014-2015 cost effectiveness results. Avista will take into consideration the cost effectiveness of the program over the full program life.

4.1.1.2 Program Design

Conclusion: Inconsistencies continue to exist in measure and program naming and organization across program planning, tracking and reporting activities which result in less transparency in program operations and limit effective program evaluation.

Recommendation: As part of the transition to the new data tracking system, consider aligning program and measure names with offerings articulated in annual business plans and other planning materials.

Status: Avista's transition to a new tracking system has taken considerably longer to accomplish than was considered at the writing of this recommendation due to a prolonged initiation of the new customer information system. The present thought process, at the time of this report, is that Avista will enhance the historical savings database, SalesLogix, with tracking capabilities in the same database. As that change is made in the 2nd and 3rd quarter of 2015, the alignment of program, measure, planning materials and business planning will be a priority.

Conclusion: The elimination of appliance rebates gives customers fewer ways to participate in Avista energy-efficiency rebate programs.

Recommendation: Consider ways to encourage repeat participation (such as marketing targeted at previous participants and online profiles that reduce application paperwork).

Status: The Company has noted the response of its General Population Survey which indicated that approximately 10% of surveyed customers planned to replace HVAC equipment in the next couple years. Avista will continue to promote these measures to serve this demand.

Conclusion: Considering self-report customer freeridership scores and market baseline data from the RTF is an effective way to assess the appropriateness of measure offerings.

Recommendation: Continue use of customer freeridership and market assessments as a way to assess the appropriateness of measure offerings.

Status: Avista is employing accepted Northwest Power and Conservation Council methodologies to the extent possible, to include the use of unit energy savings and freeridership values as identified by the RTF. When such values are not available, Avista will utilize the best estimate of what future third-party impact evaluation will reveal. Avista will continue to track freeridership values for measures and programs and will consider program changes and measure offerings in cases where market transformation has fully occurred.

4.1.1.3 Program Implementation

Conclusion: Avista prioritization of customer satisfaction has been very successful and overall participant experience is very positive across all rebate programs.

Recommendation: Continue Avista's commitment to customer satisfaction, but monitor increased staffing costs and impacts of the 90-day participation window on freeridership.

Status: Avista agrees and continues to be committed to customer satisfaction. Staffing costs are continually tracked and efforts have been made to save where possible. Avista believes there is a long standing approach that balances customer's ability to participate along with implementation/operational considerations. Avista typically provides 90 days for program changes to allow for market communications and smooth transitions in and out of programs. Avista believes the 90 day participation window is an optimal, balanced approach considering customer equity and increasing documentation requirements.

4.1.1.4 Marketing and Outreach

Conclusion: Avista implements a strong general awareness campaign around energy-efficiency, but some room exists in market segmentation and targeting specific customer groups.

Recommendation: Utilize survey results from this evaluation and other data collection activities to understand which audiences are more likely to participate in Avista programs.

Status: Avista appreciates the intent of this recommendation, however, due to limitations in our customer care and billing system, the Company doesn't have a comprehensive

customer relationship management tool that allows for segmentation and targeting and campaign management. The Company does believe that a continued broad reach approach engages new customers and further engages customers who have previously participated in energy efficiency programs demonstrated by repeat customers. The Company has found success in highlighting some programs but usually in the context of broader messaging that drives customers to our website to find offerings that are available to them. The Company has also had success in stretching our outreach efforts by building relationships with media partners such as local television stations and personalities and weekly newspapers that leverage and add endorsement.

4.1.2 Nonresidential Sector

4.1.2.1 Program Management and Implementation

Conclusion: Several parties over several years, internal and external to Avista, have observed the need for greater data quality assurance, in both documentation and input tracking. Quantitative inputs to the savings and rebate calculations have repercussions for tariff compliance, incentive payments, and savings realization rates.

Recommendation: Avista should continue efforts to improve program processes. The evaluation team believes unifying the organizational structure under central leadership is a step in the right direction and may help alleviate some previously documented issues with internal communications. In addition to the reorganization, it was recommended that Avista develop standardized processes within the DSM group, including clear delineation of roles and precise description and assignment of all processes and responsibilities for both residential and nonresidential programs. All affected parties should be included in formalizing and standardizing the DSM group's processes, roles, and responsibilities. Further, all parties must formally agree to clearly delineated responsibilities under the new organizational structure. While these activities need to be prescriptive and precise, we caution that the resulting structure should still allow some flexibility: increased clarity, transparency, and accountability should serve to enhance program delivery and customer satisfaction.

Status: In 2014, the Company carefully reviewed the recommendations from external evaluators, Advisory Group and Commission Staff regarding the DSM Team Organization. By April 2014, the Customer Solutions Team, including the Energy Efficiency Group was reorganized and is now reporting to one Leadership individual, a Sr. Director. In July, the Energy Efficiency Team was re-organized to report to one Sr. Manager to include Program Managers across all three states (WA/ID/OR), Energy Efficiency Engineering, and the Analyst Team. This reorganization has facilitated coordination and communication by the team members in delivering successful programs to customers. In addition, this new organizational structure included a thorough review of the Standard Operating Practices, EM&V Framework, Dual Fuel Incentive Calculators, and the Top Sheet Reviews. These process documents are expected to be complete in early 2015 and made available to the Advisory Group at the

Spring 2015 meeting The team continues to be committed to developing, designing, and implementing prudent cost effective programs for the Company's customers.

4.1.2.2 Customer Feedback

Conclusion: Customers were highly satisfied with the program overall and with individual components. Customer satisfaction has increased since 2011, which had in turn increased from 2010.

Recommendation: Continue to prioritize and monitor program satisfaction.

Status: Customer satisfaction and feedback will continue to be collected on programs through third party evaluation efforts conducted for 2014-2015 program years.

4.1.2.3 Market Feedback

Conclusion: According to commercial lighting contractor feedback, the nonresidential programs are successful in driving incremental energy-efficient equipment sales, and the market has not yet transformed to make energy efficiency standard practice.

Recommendation: Continue to monitor market transformation indicators to measure programs' market impact over time.

Status: Avista will continue monitoring signs of market transformation in the Nonresidential sector through efforts taken by the third party evaluator.

4.1.2.4 Marketing and Outreach

Conclusion: The characteristics of the evaluation survey respondents indicate that the office / professional services and local government sectors may be underserved by the programs relative to their incidence in the nonparticipant population. Further research is necessary to determine whether this is true.

Recommendation: Identify underserved industries, and seek opportunities to target outreach to specific underserved industries such as; investigate overall customer industry distribution, compare to participant industry distribution, and develop targeted outreach strategies for any underserved sectors.

Status: This will be investigated as part of the 2014-2015 process evaluation.

4.1.2.5 Quality Assurance and Verification

Conclusion: Avista monitored its site-specific project review process and instituted refinements during the evaluation period in response to feedback from users. While this has led to improvements, including notably improved reliability of reported savings in 2012, quality assurance problems may persist.

Recommendation: Continue to monitor the effectiveness of the site-specific project review process and refine as needed. The third party evaluator recommends implementing the following to ensure continued improvement:

Status: Avista implemented the following review model on April 24, 2015 that focuses on review guidelines based on a risk assessment:

- Measures that have an incentive of \$0 and an energy based simple payback of over 20 years require no report and no review, just a form letter to the customer.
- Measures that have incentives between \$1 and \$2,000 will be processed by the reporting engineer without any other review.
- Measures that have incentives between \$2001 and \$25,000 will be reviewed before going to the customer by another qualified engineer.
- Measures over \$25,000 will be reviewed by another qualified engineer with an additional technical management review prior to releasing to the customer.
- Measures over \$40,000 will be reviewed by another qualified engineer, a technical manager, and an additional director review prior to releasing to the customer.
- Each review above will use the technical Top Sheet as a reviewing instrument with appropriate name and review level noted.
- A completed project must be re-submitted through the technical review process only if the incentive changes more than 10% when the savings or costs from the original report change. The report and DFIC will always be changed and recorded when savings or incremental costs change upon completion.

Recommendation: Conduct an external third-party review of Top Sheets, including reviewing a random sample of completed Top Sheets for completeness and accuracy. These were not reviewed as part of the 2012-2013 process evaluation, but should be included in the next process evaluation. Review should not only verify the presence of the Top Sheets, but also the quality and accuracy of the information provided.

Status: Several implementation improvements, either in-progress or recently completed, were reviewed and their impact upon 2014 program performance was discussed by the Avista implementation team. 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 three 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.

4.2 Impact Evaluation Summary

Recommendations from Avista's 2013 Idaho Electric Impact evaluation⁸ report and subsequent implementation actions taken by Avista are summarized below.

4.2.1 Recommendations

4.2.1.1 Residential Electric Programs

The 2013 Idaho Electric Impact evaluation recommended the following changes to Avista's residential electric programs. Applicable updates have been included under the "status" sub bullet.

Recommendation: Consider updating its per-unit assumptions of recycled equipment to reflect the 2012-2013 evaluation findings in order to ensure that planning estimates of program savings are in line with evaluated savings.

Status: Per unit energy savings for refrigerators were updated from 482 to 424 kWh, and per unit energy savings for freezers were updated from 555 to 478.

Recommendation: If clothes washer rebates are reinstated, Avista should track them all within the electric program unless there is a large penetration of gas dryers.

Status: Clothes washer rebates were not reinstated.

Recommendation: Increase the measure level detail captured on applications and include this detail in the tracking database. Specific additional information should include energy factors or model numbers, baseline information for insulation, and home square footage, particularly for the ENERGY STAR Homes program.

Status: Energy factors and home square footage are being captured in Avista's tracking database. Model numbers are captured on rebate applications as well as baseline information for insulation which will likely be considered in 2016 after the new tracking database has been stabilized. Energy Star Homes is a regional (NEEA) program that has its own builder training, inspections, certifications and database. Avista requires customers meet and provide proof of their Energy Star Homes certification. Avista also collects square footage, primary space heating fuel and primary water heating fuel.

Recommendation: Consider tiered incentives by SEER rating as higher SEER systems generally require ECM fan motors to achieve certain SEER ratings.

Status: The Air Source Heat Pump rebate is no longer offered due to not meeting cost effectiveness requirements.

⁸ Avista 2013 Idaho Electric Impact Evaluation Report, The Cadmus Group, Inc., June 17, 2014.

Recommendation: Avista should consider completing a lighting logger study within its territory if Avista believes the results of the forthcoming RBSA study do not accurately represent usage in their territory.

Status: A lighting logger study is being conducted by the Nexant Team as a part of the 2014-2015 independent third-party evaluation activities.

Recommendation: Avista should consider researching the percentage of Simple Steps, Smart Savings bulb purchase that are installed in commercial settings. This could increase the average installed hours of use and increase program savings.

Status: This research is being conducted by the Nexant Team during the 2014-2015 evaluation period

Recommendation: Perform a billing analysis on ENERGY STAR homes using a non-participant comparison group once enough homes have participated under the new requirements to justify performing the work. This research could be used to demonstrate the achieved savings through energy efficiency construction practices.

Status: If enough homes participate during the 2014-2015 program period that allow for a study population large enough to produce statistically significant results, this research will be conducted by the Nexant Team during the 2014-2015 evaluation period.

Recommendation: Consider researching the current variable speed motor market activity to determine if this measure should continue as a stand-alone rebate or be packaged with other equipment purchases.

Status: This research is being conducted by the Nexant Team as part of the 2014-2015 evaluation.

Recommendation: Continue to promote efficiency programs in the Behavior Program energy reports, as the reports increased both the rate of efficiency program participation and savings.

Status: Avista will continue to promote efficiency programs bi-annually on the Behavior Program energy reports.

Recommendation: Avista should consider performing additional research about the peak-coincident demand savings from the behavior program.

Status: This will be considered for the 2014-2015 evaluation and largely depends on the data available and whether or not a study of peak-coincident demand savings is applicable for planning purposes.

4.2.1.2 Low Income Programs

The 2013 Idaho Electric Impact evaluation recommended the following changes to Avista's low income programs. Applicable updates have been included under the "status" sub bullet.

Recommendation: Consider including a control/comparison group in future billing analyses.

Status: In the 2014-2015 evaluation, a billing analysis will be used to analyze energy impacts; a comparison group approach will be used as the preferred method if sufficient data is available.

Recommendation: Consider options for increasing the analysis sample size due to small program populations (such as combining Washington and Idaho program participants).

Status: In the 2014-2015 evaluation, combination tactics are being utilized to increase the analysis sample size.

Recommendation: Obtain a full list of weatherization measures from agencies.

Status: The list of weatherization measures from agencies is provided in Section 3.2 of this report.

Recommendation: Consider targeting high-use customers.

Status: The Community Action Agencies have a priority screen that they utilize which includes high energy use customers. Additional data mining from Avista is not possible as the Utility does not have access to income data and as such does not presume that a high use customer would also be eligible for low income weatherization services. The high use customer data has been used in the past to target potential participants for the residential behavior program along with electric to natural gas conversion opportunities.

Recommendation: Track and compile additional data from agency audits.

Status: Avista includes on the Agency billing invoice a space for type of home (e.g. stick built or mobile) age of home, square footage of home, heating fuel and whether or not air conditioning exists. Additional data points will be gathered as needed.

Recommendation: Consider performing quantitative, non-energy benefit analyses.

Status: Avista currently quantifies two primary non-energy benefits for Low Income Programs. One is a dollar for dollar benefit related to health and human safety (H&HS) improvements. Savings are not currently claimed applicable to H&HS but these are improvements that protect the investment of and/or enable the energy efficiency improvements to occur. The other is the benefit equivalent to the cost of the standard efficient equipment benefit compared to the high efficiency equipment measure (e.g. furnaces, water heaters, refrigerators and broken windows). For some measures, like insulation, the incremental cost is the full cost as if the customer did not have to replace anything and could have just left the under-insulated space untreated. For the high efficiency improvements, Avista is making the assumption that the baseline equipment is at or close to end of life and, is therefore a replace upon burnout situation.

4.2.1.3 Nonresidential Electric Programs

The 2013 Idaho Electric Impact evaluation recommended the following changes to Avista's nonresidential electric programs. Applicable updates have been included under the "status" sub bullet.

Recommendation: Create a quality control system to double-check all projects with savings over 300,000 kWh.

Status: Avista implemented the review model on April 24, 2015 as discussed in Section 4.1.2 above. Avista uses measure level evaluation because the number of measures in a project may change, but the incentives and risks on a per measure basis will stay consistent. Avista found the incentive levels that most closely matched the 300,000 kWh threshold to create the risk-based strategy below as outlined.

Recommendation: Consider working with participants to accelerate the process of claiming energy savings and paying the project incentive. Preferably this should happen within one year of measure installation, depending on Avista's requirements for post-installation data on the particular project.

Status: Avista continually works with participants to accelerate the process of claiming energy savings and paying the project incentive. Balancing the level of rigor required to make sure savings claims are as accurate as possible, appropriate documentation is received and requirements for post installation data are achieved is part of our on-going active management of projects. Site specific projects that are not performance based are typically paid within weeks of invoice receipt and verification of installation. For performance based projects, the payment timeframe is determined by the ability to collect adequate performance data unique to the project parameters. Performance periods are typically within one year of installation.

Recommendation: Avista may want to consider tracking and reporting demand reduction to better understand measure load profiles and peak demand reduction opportunities.

Status: Avista is working with their Power Supply department to find the value of demand reduction at different times for different measures. Presently the program operates only on commodity savings. Avista already calculates and reports demand reduction when it occurs both in custom and prescriptive measures and will continue this process.

Recommendation: Update prescriptive measure assumptions and sources on a regular basis.

Status: Technical Reference Manual (TRM) updates, including prescriptive measure assumptions, are being conducted as part of the 2014-2015 independent evaluation activities.

Recommendation: Streamline its file structure to enable reviewers to more easily identify the latest documentation.

Status: All documentation pertaining to a project is now stored in one file for each project/opportunity. This includes; Energy Efficiency Report, DFIC, Top Sheets, Contract, Invoices, Installation/Verification report and copy of incentive check. A PDF file can easily be developed to upload to external FTP sites or it can be viewed by anyone with access to SalesLogix. Avista has changed the naming convention for projects to account for version control.

Recommendation: Continue to perform follow-up measure confirmation and/or site visits on a random sample of projects (at least 10%).

Status: Avista continues to perform installation verifications on all Site Specific projects and 10% of all Prescriptive projects.

Recommendation: Consider flagging sites for additional scrutiny when the paid invoice does not include installation labor.

Status: Avista will implement data collection concerning installation labor on the technical Top Sheet on May 11, 2015. While labor for some customers is a sunk cost and will not show up in the incremental costs, for those that must have it be a part of the incremental costs, it will be recorded and reviewed as part of the technical Top Sheet process.

Recommendation: Avista may consider adding a flag to the tracking database to automatically calculate the unit of energy savings per dollar (kWh/\$ or therm/\$) to provide a quick check to identify extreme outliers.

Status: Avista added this metric to the lighting calculators in 2014 and this will be added to the other calculators as they are updated in 2015.

Recommendation: In the case of redundancy, Avista may want to consider incenting pump projects through the Site-Specific Program to more accurately characterize the equipment operating hours.

Status: This issue has not been significant enough to change the prescriptive process for VFD's to site specific at this time.

Recommendation: Avista may want to adopt modeling design guidelines to set minimum standards, such as The Energy Trust of Oregon guidelines.

Status: Avista uses both eQUEST and Energy Plus for modeling and will design minimum standards for modeling design for contractors and Avista DSM engineers to use, drawing on the experience of Energy Trust and others in 2015.

4.2.2 Impact Evaluation Measurement Designations

As a result of efforts and activities conducted for the 2013 portfolio evaluation, the application of RTF unit energy savings values to measures offered through Avista's programs was defined. The 2014-2015 portfolio evaluation will continue to apply RTF UES values for applicable measures. Table 4-1 summarizes the evaluation and reporting methodology for gross and net energy savings values when RTF values are applicable and in instances where there is no RTF value to reference. The table presents the methodology applied for the 2013 evaluation and this table will be reviewed and updated as applicable for the 2014-2015 evaluation. The Designation column represents the identified evaluation methodology summarized by:

- RTF: Acquisition savings based on a UES value provided by the RTF library, including consideration of the adjusted market baseline inherent in the analysis, or the acquisition as derived by the savings calculation methodology including appropriate factors and criteria.
- Gross: Acquisition savings without the application of a NTG factor, using a traditional approach of code minimum or current standard practice as the evaluation baseline.
- Net: Acquisition savings resulting from the application of an evaluated survey-based net-to-gross factor or as a fundamental net savings based on the applied analysis method.

Table 4-1: 2012-2013 Impact Evaluation Methodology

Program	Designation	Reporting Method
Residential		
Appliance Recycling	RTF	RTF UES with spillover
CFL Contingency	RTF	RTF methodology and inputs
ENERGY STAR Products	RTF	RTF UES with spillover
ENERGY STAR Homes	RTF	RTF UES with spillover
Geographic CFL Giveaway	RTF	RTF methodology and inputs
Heating and Cooling Efficiency	Gross	Billing Analysis
Manufactured Home Duct Sealing	Gross	Direct install measures, NTG assumed as 1.00
Residential Behavior	Net	Billing analysis results net due to control group
Simple Steps, Smart Savings	RTF	RTF methodology and inputs
Space and Water Conversions	Gross	Billing analysis
Weatherization and Shell	Gross	Billing analysis
Water Heating Efficiency	RTF	RTF UES with spillover
Low Income		
All Measures	Gross	NTG assumed as 1.00
Nonresidential		
All Measures	Gross	Consistent with CPA, NTG assumed as 1.00
Notes: Regional Technical Forum (RTF), Unit Energy Savings (UES), Conservation Potential Assessment (CPA), Net-to-gross (NTG)		

The application of freeridership and spillover are also important considerations. Gross savings do not have freeridership or spillover factors applied. Net savings include both freeridership and spillover considerations. The RTF adjusted market baseline definition of savings accounts for freeridership but not spillover, allowing for identified spillover savings to be applied to the appropriate results when based on the RTF UES.

5 Distribution Efficiency

Avista did not acquire any distribution savings in Idaho in 2014.

6 Regional Market Transformation

Avista's local energy efficiency portfolio consists of programs and supporting infrastructure designed to enhance and accelerate the saturation of energy efficiency measures through a combination of financial incentives, technical assistance, program outreach and education. It is not feasible for Avista to independently have a meaningful impact upon regional or national markets.

Consequently, utilities within the northwest have cooperatively worked together through the Northwest Energy Efficiency Alliance (NEEA) to address those opportunities that are beyond the ability or reach of individual utilities. Avista has been participating in and funding NEEA since the 1997 founding of the organization. NEEA is currently in its fourth funding cycle (2010-2014). This fourth five-year period saw a doubling of the contractual funding from \$20 million to \$40 million regionally. Concurrently, Avista's share of NEEA funding increased from 4.0% to 5.4% due to shifts in the distribution of regional retail end-use load.

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 acquired through the Company's local portfolio alone. Avista has historically communicated with NEEA the importance of NEEA delivering cost-effective resources to our service territory. The Company believes that NEEA will continue to offer cost-effective electric market transformation in the foreseeable future. Avista will continue to play an active role in the organizational oversight of NEEA. This will be critical to insure that geographic equity, cost-effectiveness and resource acquisition continue to be primary areas of focus.

Electric savings by NEEA is provided after the Biennium period is complete, Avista expects to have the 2014-2015 NEEA savings by spring of 2016.

7 Energy Efficiency Expenditures

During 2014, Avista incurred over \$4.7 million in costs for the operation of electric energy efficiency programs. Of this amount, \$625,000 was contributed to the Northwest Energy Efficiency Alliance to fund regional market transformation ventures.

Forty-eight percent of expenditures were returned to ratepayers in the form of incentives or products (e.g. CFLs). During the 2014 calendar year, a little over \$200 thousand, or 4.2 percent, was spent on evaluation in an effort to continually improve program design, delivery and cost-effectiveness.

Evaluation, as well as other implementation expenditures, can be directly charged to the appropriate state and/or segment(s). In cases where the work benefits multiple states or segments, these expenditures are charged to a "general" category and are allocated based on avoided costs for cost-effectiveness purposes.

The expenditures illustrated in the following tables represent actual payments incurred in the 2014 calendar year and often differ from the cost-effectiveness section where all benefits and costs associated with projects completing in 2014 are evaluated in order to provide matching of benefits and expenditures resulting in a more accurate look at cost-effectiveness. While natural gas programs were suspended in 2014, minimal costs were incurred in the 2014 program year for natural gas measures carried over from 2013, and are therefore reported below.

Table 7-1 and Table 7-2 provide a summary of energy efficiency expenditures by fuel type.

Table 7-1: Avista Electricity Energy Efficiency Expenditures

Segment	Incentives	Implementation	EM&V	NEEA	Total
Residential	\$575,141	\$545,259	\$43,831	\$0	\$1,164,230
Low Income	\$700,170	\$63,880	\$11,687	\$0	\$775,737
Nonresidential	\$967,477	\$391,841	\$65,934	\$0	\$1,425,252
Regional	\$0	\$26,466	\$23,891	\$603,481	\$653,838
General	\$0	\$631,823	\$45,698	\$0	\$677,520
Research	\$0	\$11,771	\$0	\$0	\$11,771
Total	\$2,242,788	\$1,671,039	\$191,041	\$603,481	\$4,708,348

Table 7-2: Avista Natural Gas Energy Efficiency Expenditures

Segment	Incentives	Implementation	EM&V	NEEA	Total
Residential	\$1,310	\$710	\$0	\$0	\$2,020
Low Income	\$0	\$0	\$0	\$0	\$0
Nonresidential	\$18,938	\$404	\$0	\$0	\$19,342
Regional	\$0	\$116	\$0	\$21,662	\$21,778
General	\$0	\$259	\$10,061	\$0	\$10,311
Total	\$20,248	\$1,489	\$10,061	\$21,662	\$53,451

8 Tariff Rider Balances

As of the start of 2014, the Idaho electric and natural gas (aggregate) tariff rider balances were underfunded by \$2,785,130. During 2014, \$5.9 million in tariff rider revenue was collected to fund energy efficiency while \$4.7 million was expended to operate energy efficiency programs. The \$2.8 million under-collection of tariff rider funding resulted in a year-end balance of \$1.6 million underfunded balance.

During the first quarter of 2015, the underfunded balance has decreased to a total underfunded amount of \$1.1 million. The bulk of this amount is attributable to Idaho electric which ended the year with an underfunded balance of \$1.6 million mostly due to the nonresidential prescriptive and site specific lighting programs.

Table 8-1 illustrates the 2014 tariff rider activity by fuel type.

Table 8-1 Tariff Rider Activity

	Electric	Natural Gas
Beginning Balance (Underfunded)	(\$3,459,189)	\$674,059
Energy Efficiency Funding	\$6,542,812	(\$630,683)
Net Funding for Operations	\$3,083,623	\$43,376
Energy Efficiency Expenditures	\$4,708,389	\$53,463
Ending Balances (Underfunded)	(\$1,624,766)	(\$10,088)

9 Actual to Business Plan Comparison

For 2014 operations, Avista exceeded budgeted electric energy efficiency expenditures by \$80 thousand, or less than 2 percent and natural gas expenditures were exceeded by \$53 thousand. The biggest driver of expenditures is incentives. This demand for incentives was slightly higher than anticipated and its impact resulted in the underfunding in the Idaho electric programs. The Idaho Natural Gas Portfolio was discontinued in 2014 but minimal expenditures were made in 2014 due to carry-over measures from 2013.

While the business plan provides an expectation for operational planning, Avista is required to incent all energy efficiency that qualifies under Schedules 90 and 190. Since customer incentives are the largest component of expenditures, customer demand can easily impact the funding level of the Tariff Riders.

Table 9-1 provides detail on the budget to actual comparison of energy efficiency expenditures by fuel type.

Table 9-1 Business Plan to Actual Comparison⁹

	Electric	Natural Gas
Business Plan		
Incentives Budget	\$2,089,705	\$0
Non-incentives and Labor	\$2,538,280	\$0
Total Budgeted Expenditures	\$4,627,985	\$0
Actual 2014 Expenditures		
Incentives	\$2,242,788	\$20,248
Non-Incentives & Labor	\$2,465,560	\$33,203
Total Actual Expenditures	\$4,708,348	\$53,451
Variance (Unfavorable)	(\$80,363)	(\$53,451)

⁹ Budget values are from 2014 Business Plan

10 Net Cost Effectiveness Results

This section reports the cost-effectiveness results with net to gross values, including freeridership and spillover, as determined in verification and impact evaluations conducted on the 2012-2013 programs. In summary, electric net TRC is 1.58. Electric net PAC test benefit-cost ratio is 2.46. Table 10-1 through Table 10-4 illustrate electric cost-effectiveness results.

10.1 Electric Cost Effectiveness Results

Table 10-1: 2014 ID Electric Total Resource Cost (TRC) (Net)

	Regular Income Portfolio	Low Income Portfolio	Overall Portfolio
Electric Avoided Costs	\$10,059,529	\$392,989	\$10,452,518
Natural Gas Avoided Costs	-\$311,417	-\$51,998	-\$363,416
Non-Energy Benefits	\$85,165	\$589,428	\$674,593
TRC Benefits	\$9,833,276	\$930,418	\$10,763,695
Non-Incentive Utility Costs	\$2,107,940	\$138,855	\$2,246,795
Customer Costs	\$3,946,791	\$627,690	\$4,574,481
TRC Costs	\$6,054,731	\$766,545	\$6,821,276
TRC Ratio	1.62	1.21	1.58
Residual TRC Benefits	\$3,778,546	\$163,873	\$3,942,419

Table 10-2: 2014 ID Electric Program Administrator Cost (PAC) (Net)

	Regular Income Portfolio	Low Income Portfolio	Overall Portfolio
Electric Avoided Costs	\$10,059,529	\$392,989	\$10,452,518
Natural Gas Avoided Costs	-\$311,417	-\$51,998	-\$363,416
PAC Benefits	\$9,748,111	\$340,991	\$10,089,102
Non-Incentive Utility Costs	\$2,107,940	\$138,855	\$2,246,795
Incentive Costs	\$1,157,898	\$700,170	\$1,858,067
PAC Costs	\$3,265,838	\$839,024	\$4,104,862
PAC Ratio	2.98	0.41	2.46
Net PAC Benefits	\$6,482,274	-\$498,034	\$5,984,240

Table 10-3: 2014 ID Electric Participant Cost (PCT) (Net)

	Regular Income Portfolio	Low Income Portfolio	Overall Portfolio
Electric Bill Reduction	\$13,059,770	\$654,626	\$13,714,396
Gas Bill Reduction	-\$11,080	-\$2,680	-\$13,760
Non-Energy Benefits	\$85,165	\$589,428	\$674,593
Participant Benefits	\$13,133,855	\$1,241,373	\$14,375,228
Customer Costs	\$3,946,791	\$627,690	\$4,574,481
Incentive Received	-\$1,157,898	-\$700,170	-\$1,858,067
Participant Costs	\$2,788,893	-\$72,479	\$2,716,414
Participant Ratio	4.71	N/A	5.29
Net Participant Benefits	\$10,344,962	\$1,313,853	\$11,658,815

Table 10-4: 2014 ID Electric Rate Impact Measure (RIM) (Net)

	Regular Income Portfolio	Low Income Portfolio	Overall Portfolio
Electric Avoided Cost Savings	\$10,059,529	\$392,989	\$10,452,518
Non-Participant Benefits	\$10,059,529	\$392,989	\$10,452,518
Electric Revenue Loss	\$13,059,770	\$654,626	\$13,714,396
Non-Incentive Utility Costs	\$2,107,940	\$138,855	\$2,246,795
Customer Incentives	\$1,157,898	\$700,170	\$1,858,067
Non-Participant Costs	\$16,325,608	\$1,493,650	\$17,819,258
RIM Ratio	0.62	0.26	0.59
Net RIM Benefits	-\$6,266,079	-\$1,100,661	-\$7,366,740

Appendix A Idaho 2014 Impact Memorandum

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Table of Contents

1	Executive Summary	4
2	Cost-Effectiveness	6
2.1	Electric Cost Effectiveness Results	8
3	Programs	10
3.1	Residential	10
3.1.1	Program Changes	11
3.1.1.1	<i>Residential Program Discontinuations</i>	<i>11</i>
3.1.1.2	<i>Residential Program Adjustments</i>	<i>11</i>
3.1.2	Residential Appliance Recycling	12
3.1.3	HVAC Program	12
3.1.4	Water Heat Program	12
3.1.5	ENERGY STAR HOMES	12
3.1.6	Fuel Efficiency	13
3.1.7	Residential Lighting	13
3.1.8	Shell	13
3.1.9	Opower Home Energy Reports	13
3.1.10	Customer Outreach	14
3.1.10.1	<i>Residential Customer Outreach</i>	<i>14</i>
3.1.10.2	<i>Nonresidential Customer Outreach</i>	<i>15</i>
3.2	Low Income	21
3.2.1	Program Changes	21
3.2.2	2015 Program Details	21
3.3	Nonresidential	25
3.3.1	Program Changes	25
3.3.1.1	<i>Nonresidential Program New Offerings</i>	<i>26</i>
3.3.1.2	<i>Nonresidential Program Discontinuations</i>	<i>26</i>
3.3.1.3	<i>Nonresidential Program Adjustments</i>	<i>26</i>
3.3.2	Prescriptive Path	29
3.3.3	Site Specific Path	29
4	Evaluation, Measurement, and Verification (EM&V)	32
5	Generation and Distribution Efficiency	32

6	Regional Market Transformation	32
7	Energy Efficiency Expenditures.....	34
8	Tariff Rider Balances	35
9	Actual to Business Plan Comparison.....	36
10	Net Cost Effectiveness Results.....	37
	10.1 Electric Cost Effectiveness Results.....	37

Appendix A Idaho 2014-2015 Electric Impact Evaluation ReportA-1

Appendix B 2014-2015 Process Evaluation Report.....B-1

1 Executive Summary

The 2015 Demand-Side Management (DSM) Annual Report summarizes Avista Utility's (Avista) annual energy efficiency achievements for its Idaho electric customers. These programs are intended to deliver a cost-effective, "least-cost" resource with the funding provided through Avista's Schedules 91 and 191, also known as the "Tariff Rider" which is a non-bypassable system benefit charge applied to all electric retail sales.

In 2015, Avista acquired 14,789,283 kWh (verified gross savings) in Idaho, or 94% percent of its Integrated Resource Plan (IRP) goal of 15,666,200 kWh (Table ES-1). A summary of acquired savings in 2015 by sector is provided in Table ES-2. Primary drivers for electric savings included the nonresidential site-specific and residential lighting efforts. Behavioral savings and nonresidential prescriptive lighting also contributed a significant amount to the overall savings.

Table ES-1: 2015 Idaho Electric Energy Savings vs IRP Goal

2015	kWh
Local Evaluated Savings	14,789,283
2015 IRP Goal (2013 IRP)	15,666,200
Percent of Goal	94%
ID Electric Realization Rate	97%

Table ES-2: 2015 Idaho Electric Energy Savings (Verified Gross)

Segment	kWh
Residential	8,995,214
Low Income	433,246
Nonresidential	5,360,823
Total	14,789,283

In 2014, Avista acquired 16,291,755 kWh (verified gross savings) or 106% of the Integrated Resource Plan goal (Table ES-3). Table ES-4 outlines Avista's verified savings achievements compared to the IRP goal for 2014-2015 combined.

Table ES-3: 2014 Idaho Electric Energy Savings vs IRP Goal

2014	kWh
Local Evaluated Savings	16,291,755
2014 IRP Goal (2013 IRP)	15,330,000
Percent of Goal	106%
ID Electric Realization Rate	97%

Table ES-4: 2014-2015 Idaho Electric Energy Savings vs IRP Goal

2014-2015	kWh
Local Evaluated Savings	31,081,038
2014-2015 IRP Goal (2013 IRP)	30,996,200
Percent of Goal	100%
Avista Idaho NEEA	4,029,600
ID Electric Realization Rate	97%

The above mentioned acquisition has been delivered through local energy efficiency programs managed by the utility or third-party contractors. Avista also funds a regional market transformation effort through the Northwest Energy Efficiency Alliance (NEEA), however, reported electric energy savings, cost- effectiveness and other related information is specific to local programs unless otherwise noted. The savings indicated above are gross, verified savings based on all program participants.

Avista judges the effectiveness of the energy efficiency portfolio based upon a number of metrics. Two of the most commonly applied metrics are the TRC test, a benefit-to-cost test encompassing the entire utility ratepayer population, and the PAC test, a benefit-to-cost test from the perspective of achieving a minimization of the utility cost of delivering energy efficiency services. Benefit-to-cost ratios in excess of 1.00 indicate that the benefits exceed the costs. In 2015, the gross TRC benefit-to-cost ratio was 1.29 and the PAC benefit-to-cost ratio was 2.39.

Nexant, Inc., in partnership with Research Into Action, (the evaluation team) was retained as the Company's external evaluator to independently measure and verify the portfolio energy savings for the 2014-2015 biennium period. The energy efficiency savings and associated cost-

effectiveness results presented in this 2015 Annual Report are based on the evaluation findings and are presented as gross, verified savings.

Though the nature of this report is to look backwards on the performance of the previous year, successes and lessons from this process are applied during the forward-looking business planning process to inform and improve program design, including program modification and termination where necessary. Avista remains committed to continuing to deliver responsible and cost-effective energy efficiency programs to our customers.

2 Cost-Effectiveness

The 2015 Demand-Side Management (DSM) Annual Report summarizes the Company's annual energy efficiency achievements of its DSM programs.

Cost-effectiveness was reviewed using four of the five California Standard Practice Tests including the Total Resource Cost (TRC), Program Administrator Cost (PAC), Participant, and Rate Impact Measure (RIM) tests. For this annual report, cost-effectiveness of DSM programs is based on unverified gross savings and methods consistent with those laid out in the California Standard Practice Manual for Economic Analysis of Demand-Side Programs and Projects as modified by the Council. Shown below in Table 2-2 through Table 2-5 are results for these four California Standard Practice Tests - Total Resource Cost, Program Administrator Cost, Participant, and Rate Impact Measure for electric and natural gas. Table 2-1 summarizes the allocation of cost-effectiveness components as a cost or benefit to each cost-effectiveness test.

Table 2-1: Cost-Effectiveness Component Inputs

Component	Program Administrator Cost Test (PACT)	Total Resource Cost (TRC)	Participant Cost Test (PCT)	Rate Impact Measure (RIM)
Utility Energy & Capacity Avoided Costs	Benefit	Benefit		Benefit
Non-Utility Energy & Capacity Energy Costs		Benefit	Benefit	
Non-Energy Benefit Impacts		Benefit	Benefit	
Incremental Equipment and Installation Costs		Cost	Cost	
Program Non-incentive (admin) Costs	Cost	Cost		Cost
Incentive Payments	Cost		Benefit	Cost

The cost-effectiveness calculations only include non-energy benefits where the values are reasonably defensible and quantifiable for a limited number of measures, including water savings, equipment replacement and operation and maintenance benefits. The calculations also include health and human safety non-energy benefits (dollar for dollar) for the low-income programs. Non energy benefits not included, because they are not easily quantifiable, include benefits for arrearage, health/safety/comfort, system reliability, and site specific air emissions to name a few. The evaluation team will include survey and on-site questions of participating customers to determine specific and demonstrable non-energy benefits as found and as applicable.

Cost effectiveness results within this report are based on verified savings. Energy savings reported by Avista's implementation team (both external and internal to Avista) were reviewed by the Company's external evaluator, adjusted for any major discrepancies in reporting and evaluated as part of the 2014-2015 evaluation activities. The savings estimates represent gross energy acquisition except as noted in Section 10 of this report.

In summary, electric gross TRC is 1.29 and the electric PAC test benefit-cost ratio is 2.39. Table 2-2 through Table 2-5 illustrates electric cost-effectiveness. Regular income includes all programs offered in the residential and Nonresidential sectors (not including NEEA) and low-income includes all programs offered in the low-income sector.

2.1 Electric Cost Effectiveness Results

Table 2-2: 2015 ID Electric Total Resource Cost (TRC) (Gross)

	Regular Income Portfolio	Low Income Portfolio	Overall Portfolio
Electric Avoided Costs	\$11,554,913	\$485,674	\$12,040,587
Natural Gas Avoided Costs	-\$1,498,596	-\$18,227	-\$1,516,823
Non-Energy Benefits	\$97,043	\$306,334	\$403,376
TRC Benefits	\$10,153,360	\$773,781	\$10,927,141
Non-Incentive Utility Costs	\$1,512,612	\$159,542	\$1,672,154
Customer Costs	\$6,162,777	\$616,385	\$6,779,161
TRC Costs	\$7,675,388	\$775,927	\$8,451,315
TRC Ratio	1.32	1.00	1.29
Residual* TRC Benefits	\$2,477,972	-\$2,146	\$2,475,826

*The "Residual TRC" is used to denote the difference between TRC benefits and costs. The term "Residual" is used in lieu of the term "Net" as not to be confused with TRC benefits and costs where Net to Gross adjustments have been applied.

**Includes costs funded to the CAP agencies.

Table 2-3: 2015 ID Electric Program Administrator Cost (PAC) (Gross)

	Regular Income Portfolio	Low Income Portfolio	Overall Portfolio
Electric Avoided Costs	\$11,554,913	\$485,674	\$12,040,587
Natural Gas Avoided Costs	-\$1,498,596	-\$18,227	-\$1,516,823
PAC Benefits	\$10,056,317	\$467,447	\$10,523,764
Non-Incentive Utility Costs	\$1,512,612	\$159,542	\$1,672,154
Incentive Costs	\$2,112,543	\$616,385	\$2,728,928
PAC Costs	\$3,625,155	\$775,927	\$4,401,082
PAC Ratio	2.77	0.60	2.39
Net PAC Benefits	\$6,431,162	-\$308,480	\$6,122,683

Table 2-4: 2015 ID Electric Participant Cost (PCT) (Gross)

	Regular Income Portfolio	Low Income Portfolio	Overall Portfolio
Electric Bill Reduction	\$16,030,397	\$667,521	\$16,697,918
Gas Bill Reduction	-\$29,905	-\$861	-\$30,767
Non-Energy Benefits	\$97,043	\$306,334	\$403,376
Participant Benefits	\$16,097,534	\$972,994	\$17,070,528
Customer Costs	\$6,162,777	\$616,385	\$6,779,161
Incentive Received	-\$2,112,543	-\$616,385	-\$2,728,928
Participant Costs	\$4,050,233	\$0	\$4,050,233
Participant Ratio	3.97	N/A	4.21
Net Participant Benefits	\$12,047,301	\$972,994	\$13,020,295

Table 2-5: 2015 ID Electric Rate Impact Measure (RIM) (Gross)

	Regular Income Portfolio	Low Income Portfolio	Overall Portfolio
Electric Avoided Cost Savings	\$11,554,913	\$485,674	\$12,040,587
Non-Participant Benefits	\$11,554,913	\$485,674	\$12,040,587
Electric Revenue Loss	\$16,030,397	\$667,521	\$16,697,918
Non-Incentive Utility Costs	\$1,512,612	\$159,542	\$1,672,154
Customer Incentives	\$2,112,543	\$616,385	\$2,728,928
Non-Participant Costs	\$19,655,552	\$1,443,448	\$21,099,000
RIM Ratio	0.59	0.34	0.57
Net RIM Benefits	-\$8,100,638	-\$957,774	-\$9,058,413

3 Programs

3.1 Residential

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, direct-install programs and a multi-faceted, multichannel outreach and customer engagement effort.

Over \$2.7 million in rebates were provided directly to Idaho residential customers to offset the cost of implementing these energy efficiency measures. All programs within the residential portfolio contributed over 8,995 MWh to the 2015 annual energy savings.

3.1.1 Program Changes

Program changes were made for the 2014-2015 Biennium, including the introduction of new programs, the discontinuation of programs and changes to eligibility or incentive levels of existing programs. Avista communicates the majority of program changes once the Business Plan is finalized and typically makes the changes effective at the beginning of the year. Program changes are also made throughout the year as necessary, but mid-year changes are less typical.

For residential programs, rebate amounts were updated to reflect business planning analysis and to include inputs such as new unit energy savings (UES) and cost values. For changes that were effective January 1, 2015, Avista continued to accept rebate applications and honored incentive amounts through March 31, 2015 for 2014 measures (the 90 days allowed for a smooth transition when rebate programs change, allowing enough time for customers in the pipeline to complete their projects, yet closed out changes in a timely but balanced approach).

The following outlines additions, adjustments and discontinuations of residential programs and incentive levels beginning in 2015:

3.1.1.1 Residential Program Discontinuations

The following measures and/or programs were discontinued from the residential portfolio:

- The Appliance Recycling Program was discontinued in June 2015.

3.1.1.2 Residential Program Adjustments

The following adjustments in program requirements and/or incentives levels were made to the residential programs beginning January 2015:

- Electric to Natural Gas Direct Vent Wall Heater was added to the Fuel Efficiency Program at an incentive of \$1,300

The remaining sub-sections outline each residential program offered in 2015 and the verified participation, incentives, energy savings, among other program achievements.

3.1.2 Residential Appliance Recycling

Avista partnered with JACO, one of the nation's leading appliance recyclers, to provide third-party administration of the refrigerator/freezer appliance recycling program until June 30, 2015. After this date the program ended because it became non-cost effective due to revised RTF values that came into effect July 2015. Customers received \$30 per appliance for participating which equated to \$3,390 in incentives. This appliance recycling program resulted in over 71 MWh in annual first-year savings in 2015 (see Table 3-1).

3.1.3 HVAC Program

Electric customers with electric home heat are eligible for a rebate for the installation of a variable speed motor on their forced air heating equipment (\$100 rebate), or a conversion of electric straight resistance space heat to an air source heat pump (\$900 rebate). Customers are also eligible for the installation of a smart thermostat. This program achieved over 262 MWh in first-year savings in 2015 and customers received a total of \$85,188 in incentives (see Table 3-2).

3.1.4 Water Heat Program

The Water Heat Program offers a \$20 incentive for a high efficiency electric water heater (0.94 Energy Factor), \$7 buydown for Simple Steps, Smart Savings showerheads and \$35 buydown for Simple Steps, Smart Savings clothes washers (reflected in point of purchase price). The Water Heat Program achieved 216 MWh in first-year savings in 2015 (see Table 3-3). \$28,833 was paid in incentives for this program.

3.1.5 ENERGY STAR HOMES

Avista customers with a certified ENERGY STAR Home or ENERGY STAR / ECORated Manufactured Home are eligible for a \$1,000 or \$800 rebate, respectively. Eligible homes must be all electric to qualify for these rebate levels. Alternatively, customers who subscribe to Avista electric service for lighting and appliances and natural gas service for space and water heating are eligible for a program rebate of \$650 regardless of construction type. Avista achieved 132 MWh savings in 2015 (see Table 3-4). A total of \$14,043 was paid out in incentives for this program.

3.1.6 Fuel Efficiency

The Fuel Efficiency Program offers incentives for converting existing straight resistance electric space heat to a natural gas furnace (\$2,300 rebate); and/or converting their existing electric water heater to a natural gas water heater (\$600 rebate). The program also offers an incentive for the conversion of electric to natural wall heaters (\$1,300 rebate). This program achieved 2,786 MWh in first-year savings in 2015 (see Table 3-5), with customers receiving \$939,873 in paid incentives.

3.1.7 Residential Lighting

Avista continues to participate in the regional manufacturer buy-down of CFL lamps, specialty bulbs, LED bulbs, and showerheads through Northwest Energy Efficiency Alliance (NEEA) and its contactor and some self-directed giveaways. The bulbs resulted in 5,151 MWh in annual first-year savings during 2015 (see Table 3-6). The Simple Steps showerhead savings are tallied under Avista's Water Heat program. The Company contributed over \$168,521 in incentives toward this buydown effort.

3.1.8 Shell

The primary measures included in the Shell Program are wall, attic, and floor insulation and window replacements. In 2015, the Shell Program acquired over 174 MWh in first-year energy savings (see Table 3-7).

3.1.9 Opower Home Energy Reports

Avista launched a Home Energy Reports program in June 2013, targeting 25,200 Idaho high use electric customers. Eligibility for treatment included several criteria such as sufficient (2 year) billing history, enough peers to build comparison group, not in the control group, not a 'do not solicit' customer and high enough electric use to be cost-effectively treated. In an effort to reduce energy usage through behavioral changes, Home Energy Reports show personalized usage insights and energy saving tips. Customers also see a ranking of similar homes, comparison to themselves and a personal savings goal on the Reports. In addition to closely matching usage curves, the similar home comparisons are also based on the following four criteria; square footage, home type, heat type and proximity.

As shown in

Table 3-8, initial participating customer counts began at higher counts than the program targets to account for opt-outs and attrition. Customers have the choice of receiving the reports and can opt-out at any time. Attrition results in customers closing their Avista account and therefore no longer being counted in the Program.

The program saved 2,815 MWh (gross verified) in Idaho over the 2014-2015 biennium (see Table 3-9).

3.1.10 Customer Outreach

Avista's programs encourage the customer to take action through participation in currently available programs. Energy efficiency outreach efforts are varied and usually are a combination of both broad reach and targeted media as well as attendance at local community events. Energy Efficiency is also featured throughout the year in Avista's "Connections" monthly newsletter, distributed with the bill and posted online.

3.1.10.1 Residential Customer Outreach

Avista's residential outreach included the repeat of the popular broad reach media promotions "Efficiency Matters" (April-June). A bill insert in the early spring offered tips to manage energy use and a link to rebate offerings.

Avista conducted four Energy Fairs in September and October – two were held in Spokane, one in Lewiston, ID and another in Post Falls, ID. Communications tactics used to increase awareness of the Energy Fairs included a media partnership with KXLY (ABC), posters, emails, news releases, and print/ radio/ online advertising.

In October and November, Avista ran a campaign to increase awareness of/ participation in energy efficiency programs for residential customers. The campaign utilized radio and online advertising to communicate low-cost/ no-cost energy savings tips and to promote the rebates we offer. It also included direct mail, which highlighted our enhanced electric-to-natural gas conversion rebate. Social media was utilized throughout the campaign to extend reach.

We continued to update and promote the online fuel cost calculator that helped customers understand the value of natural gas compared to other heating fuel types. We also leveraged

local sponsorships to highlight “Energy Efficiency Night” at Spokane Chiefs hockey and Gonzaga University basketball games.

In November, we fielded a survey to determine customer opinions on energy efficiency – including awareness of and participation in Avista’s programs.

We also had varied activities for commercial and industrial customers. Print ads and case studies featuring two of our large account customers ran in various local, regional, trade, and national (zoned) publications (September-December). We updated collateral and delivered via the commercial account executives to highlight the multifamily natural gas direct use program. Targeted print advertising opportunities were utilized at local contractor associations that promoted residential programs as well as engaged developers.

3.1.10.2 Nonresidential Customer Outreach

In 2015 we continued our effort of building awareness of energy efficiency and programs through our electronic newsletter to commercial customers.

While we moved away from quarterly updates due to a lack of engagement from dealers, we continued to offer 1-2 rounds of updates for HVAC dealers focused on primarily residential programs and outreach for lighting contractors and electricians focused on commercial lighting. We offered these in various locations throughout the service territory and through webinar to increase accessibility.

As opportunities arise, energy efficiency tips are provided to local media outlets. Typical topics include winter weather and summer heat energy efficiency tips. Avista provides updates to area vendors about program information through mailings and webinars who in turn pass that information on to their customers. The general awareness efforts successfully position Avista to actively pursue and react to these earned media opportunities.

These are the highlights of specific activities that are reinforced and compliment the ongoing outreach and messaging through the website, customer service reps, printed rebate forms, trainings, sponsorships, etc.

Table 3-1: 2015 ID Residential Appliance Recycling Summary¹

Measure	Project Count	Incentives	kWh	Therms	kWh Avoided Costs	Therms Avoided Costs	Non-energy Benefits	Customer Incremental Costs	Non-incentive Utility Costs
Refrigerator	90	\$2,700	57,240	-	\$15,414	\$0	\$0	\$2,700	\$1,306
Freezer	23	\$690	14,076	-	\$4,390	\$0	\$0	\$690	\$372
Total	113	\$3,390	71,316	-	\$19,804	\$0	\$0	\$3,390	\$1,678

Table 3-2: 2015 ID Electric HVAC Program Summary¹

Measure	Project Count	Incentives	kWh	Therms	kWh Avoided Costs	Therms Avoided Costs	Non-energy Benefits	Customer Incremental Costs	Non-incentive Utility Costs
E Smart Thermostat Diy	2	\$103	1,922	-	\$847	\$0	\$0	\$301	\$72
E Electric To Air Source Heat Pump	64	\$60,406	155,370	-	\$162,723	\$0	\$0	\$361,904	\$13,791
E Variable Speed Motor	226	\$23,543	94,859	-	\$62,336	\$0	\$0	\$225,395	\$5,283
E Smart Thermostat Paid Install	11	\$1,136	10,571	-	\$4,658	\$0	\$0	\$11,424	\$395
Total	303	\$85,188	262,722	-	\$230,564	\$0	\$0	\$599,024	\$19,541

Table 3-3: 2015 ID Electric Water Heat Program Summary²

Measure	Project Count	Incentives	kWh	Therms	kWh Avoided Costs	Therms Avoided Costs	Non-energy Benefits	Customer Incremental Costs	Non-incentive Utility Costs
Simple Steps: Clothes Washer	432	\$15,120	57,024	-	\$24,763	\$0	\$0	\$34,560	\$2,099
Simple Steps Showerheads	1,971	\$13,639	158,849	3,063	\$82,051	\$12,317	\$0	\$23,652	\$6,954
E Electric Water Heater	6	\$124	660	-	\$469	\$0	\$0	\$3,132	\$40
Total	2,409	\$28,883	216,533	3,063	\$107,283	\$12,317	\$0	\$61,344	\$9,093

Table 3-4: 2015 ID ENERGY STAR Homes Electric Program Summary²

Measure	Project Count	Incentives	kWh	Therms	kWh Avoided Costs	Therms Avoided Costs	Non-energy Benefits	Customer Incremental Costs	Non-incentive Utility Costs
E Energy Star Home - Stick Built, Id	2	\$4,130	26,801	-	\$46,071	\$0	\$0	\$12,000	\$3,905
E Estar Home - Manuf, Furnace	12	\$9,913	106,114	-	\$142,464	\$0	\$1,978	\$36,000	\$12,074
Total	14	\$14,043	132,915	-	\$188,535	-	\$1,978	\$48,000	\$15,979

¹ All kWh and therm values reported in this table are gross, excluding the effect of applicable NTG ratios.

² All kWh and therm values reported in this table are gross, excluding the effect of applicable NTG ratios.

Table 3-5: 2015 ID Electric Fuel Conversion Program Summary³

Measure	Project Count	Incentives	kWh	Therms	kWh Avoided Costs	Therms Avoided Costs	Non-energy Benefits	Customer Incremental Costs	Non-incentive Utility Costs
E Electric To Natural Gas Water Heater	13	\$7,866	47,010	(2,586)	\$33,371	-\$12,531	\$0	\$22,160	\$2,828
E Electric To Natural Gas Wall Heater	3	\$4,027	31,873	(1,398)	\$34,508	-\$10,095	\$0	\$14,967	\$2,925
E Electric To Natural Gas Furnace	157	\$372,865	1,166,064	(78,142)	\$1,464,686	-\$564,239	\$0	\$648,219	\$124,137
E Electric To Natural Gas Fur & Wh	168	\$555,115	1,541,530	(119,816)	\$1,936,305	-\$865,157	\$0	\$765,369	\$164,109
Total	341	\$939,873	2,786,477	(201,942)	\$3,468,870	\$1,452,021	\$0	\$1,450,715	\$293,999

Table 3-6: 2015 ID Electric Residential Lighting Program Summary³

Measure	Project Count	Incentives	kWh	Therms	kWh Avoided Costs	Therms Avoided Costs	Non-energy Benefits	Customer Incremental Costs	Non-incentive Utility Costs
Simple Steps LED	36,298	\$34,063	923,288	-	\$646,078	\$0	\$0	\$242,424	\$54,757
Simple Steps CFL	189,226	\$129,892	4,179,278	-	\$1,852,813	\$0	\$0	\$392,495	\$157,032
Customer Outreach CFLs (Residential)	1,584	\$2,919	47,639	-	\$20,639	\$0	\$0	\$2,827	\$1,749
Customer Outreach LEDs (Residential)	295	\$1,646	1,161	-	\$813	\$0	\$0	\$1,594	\$69
Total	227,403	\$168,521	5,151,365	-	\$2,520,342	\$0	\$0	\$639,341	\$213,608

Table 3-7: 2015 ID Electric Shell Program Summary³

Measure	Project Count	Incentives	kWh	Therms	kWh Avoided Costs	Therms Avoided Costs	Non-energy Benefits	Customer Incremental Costs	Non-incentive Utility Costs
E Manuf Attic Insulation With Electric Heat	1	\$170	197	-	\$391	\$0	\$0	\$706	\$33
E Attic Insulation With Electric Heat	23	\$4,585	8,930	-	\$11,217	\$0	\$813	\$20,494	\$951
E Floor Insulation With Electric Heat	6	\$1,197	3,053	-	\$3,835	\$0	\$212	\$6,393	\$325
E Wall Insulation With Electric Heat	5	\$1,283	5,199	-	\$6,531	\$0	\$141	\$7,769	\$554
E Window Replc From Double Pane W Elec Heat	70	\$33,860	59,092	-	\$74,225	\$0	\$0	\$277,101	\$6,291
E Window Replc From Single Pane W Elec Heat	78	\$33,497	97,980	-	\$123,073	\$0	\$0	\$303,972	\$10,431
Total	183	\$74,593	174,453	-	\$219,272	\$0	\$1,166	\$616,435	\$18,584

Table 3-8 2014-2015 ID Opower Participation Summary

State	Program Target	Initial Participating Customers		Closed Accounts		Participating Customers 2015 Year-End
		2014	2015	2014	2015	
ID	25,200	22,122	22,122	2,756	1,731	17,635

³ All kWh and therm values reported in this table are gross, excluding the effect of applicable NTG ratios.

Table 3-9: 2014-2015 ID Electric Residential Opower Program Summary

Measure	Project Count	Incentives	kWh	Therms	kWh Avoided Costs	Therms Avoided Costs	Non-energy Benefits	Customer Incremental Costs	Non-incentive Utility Costs
OPower Home Energy Reports	1	\$0	2,814,300	-	\$312,482	\$0	\$0	\$0	\$501,853

3.2 Low Income

The Company leverages the one Community Action Program (CAP) agency to deliver energy efficiency programs for the Company's low income residential customers in the Idaho service territory. The Community Action Partnership out of Lewiston has resources to income qualify, prioritize and treat clients homes based upon a number of characteristics. In addition to the Company's annual funding, the agency has other monetary resources that they can leverage when treating a home with weatherization or other energy efficiency measures. The agencies either have in-house or contractor crews to install many of the efficiency measures of the program.

3.2.1 Program Changes

In 2015, the Company continued to reimburse Community Action Agencies for 100% of the cost of installation for a select group of "Approved" energy efficiency measures, and continued to offer an additional "Rebate List" of other energy efficiency measures. This rebate list allows the agencies to receive funding for measures that are not as cost-effective as those on the Approved List but are still necessary for the homes overall functionality. The reimbursement amount is only equal to the energy value of the improvement from the Utility perspective. This approach focuses the Agency towards installing measures that have the greatest cost-effectiveness, from the utility perspective, but still offers an opportunity to fund other measures if needed. To allow for additional flexibility, the agency may also choose to utilize their Health and Safety dollars to fully fund the cost of the measures on the Rebate list.

3.2.2 2015 Program Details

Eligible efficiency improvements are similar to those offered under the traditional residential rebate programs, as well as mirroring a variety of the same measures found on the state program priority list. An Avista approved measure list is provided to the agencies in an attempt to manage the cost-effectiveness of the low income program (see Table 3-10). The agencies are given discretion to spend their allotted funds on either electric or natural gas efficiency improvement based on the need of the client. The program includes improvements to insulation, infiltration, ENERGY STAR® doors and refrigerators along with fuel conversion from electric resistance

space and water heat to natural gas. Avista's funding covers the full cost of the improvement from the Approved Measures list.

Table 3-10: 2015 Low Income Program Approved Measure List

Electric Measures	Natural Gas Measures
<ul style="list-style-type: none"> • Air infiltration • Insulation (floor, ceiling, wall) • Duct sealing • ENERGY STAR doors • Electric to Natural Gas Conversion (Space and Water Heat) • ENERGY STAR Refrigerators 	<ul style="list-style-type: none"> • Insulation (Wall, Ceiling, and Floor) • Air infiltration • Duct sealing • ENERGY STAR doors • ENERGY STAR windows

Along with the Approved Measure List, Avista has also established a "Rebate List" of eligible measures. The Rebate List allows the agencies to receive funding for other measures that are not as cost-effective as those on the Approved List but are still necessary for the homes overall functionality. This measure list is outlined in Table 3-11.

Table 3-11: 2015 Low Income Program Rebate Measure List

Electric Measures	Natural Gas Measures
<ul style="list-style-type: none"> • Duct insulation • ENERGY STAR refrigerators (for replacement of a refrigerator that is not fully operational) • High efficient water heater • Electric to air source heat pump • Electric to natural gas water heater • ENERGY STAR windows 	<ul style="list-style-type: none"> • Duct insulation • High efficiency furnace • High efficiency water heater

Individually, the annual contract for each agency allows them to spend their annually allotted funds on either natural gas or electric efficiency measures at their discretion, and charge a 15 percent administration fee towards the cost of each measure. In addition, up to 15 percent of their annual funding allocation may be used towards Health and Safety improvements in support of energy efficiency measures installed in the home. It is at the agencies' discretion whether or not to utilize their funds for health and safety and other home repairs to ensure the habitability of the home where the energy efficiency improvements were installed.

For the 2015 program year, Idaho income-qualified homes installed over 3,760 individual measures, acquiring more than 426 MWh . Refer to Table 3-12 for details on low income programs.

In partnership with the Company's Demand-Side Management efforts, Avista's Consumer Affairs department conducts conservation education and outreach for our low income, senior and vulnerable customers. The company reaches the target population through workshops, energy fairs, mobile and general outreach. Each of these methods include demonstrations and distribution of low-cost and no-cost materials with a focus on energy efficiency, conservation tips and measures, and information regarding energy assistance that may be available through agencies. Low income and senior outreach goals increase awareness of energy assistance programs such as the Avista Low Income Rate Assistance Program (LIRAP) in Washington and Oregon and the Low Income Home Energy Assistance Program (LIHEAP) and Project Share in all jurisdictions.

The Company has recognized the following educational strategies as efficient and effective activities for delivering the energy efficiency and conservation education and outreach:

- Energy Conservation workshops for groups of Avista customers where the primary target audiences are seniors and low income participants.
- Energy Fairs where attendees can receive information about low cost/no cost methods to weatherize their home; this information is provided in demonstrations and limited samples. In addition, fair attendees can learn about billing assistance and demonstrations of the online account and energy management tools. Community partners that provide services to low income populations and support to increase personal self-sufficiency are invited, at no cost, to host a booth to provide information about their services and how to access them.
- Mobile Outreach is conducted through the Avista Energy Resource Van (ERV) where visitors can learn about effective tips to manage their energy use, bill payment options and community assistance resources.
- General Outreach is accomplished by providing energy management information and resources at events (such as resource fairs) and through partnerships that reach our target populations. General Outreach also includes bill payment options and assistance resources in senior and low income publications.

In 2015, in Idaho, Avista facilitated 13 workshops with 278 participants; two energy fairs that had 500 attendees; 21 mobile outreach events to 5,273 visitors; and 8 general outreach partnerships and events reaching 1,014 individuals for a total of 7,065 contacts with senior and low income individuals.

Table 3-12: ID 2015 Electric Low-Income Measures Summary⁴

Measure	Project Count	Incentives	kWh	Therms	kWh Avoided Costs	Therms Avoided Costs	Non-energy Benefits	Customer Incremental Costs*	Non-incentive Utility Costs
Customer Outreach CFLs (Low Income)	1,549	\$4,764	23,235	-	\$10,066	\$0	\$0	\$4,764	\$3,307
Customer Outreach LEDs (Low Income)	1,838	\$29,669	23,894	-	\$16,720	\$0	\$0	\$29,669	\$5,492
E INS - Attic	22	\$12,639	4,949	-	\$11,228	\$0	\$0	\$12,639	\$3,688
E INS - DUCT	14	\$909	528	-	\$509	\$0	\$0	\$909	\$167
E INS - FLOOR	37	\$72,106	20,031	-	\$45,444	\$0	\$0	\$72,106	\$14,928
E INS - WALL	6	\$8,385	1,211	-	\$2,747	\$0	\$0	\$8,385	\$903
E HE Water Heater	1	\$49	61	-	\$30	\$0	\$0	\$49	\$10
E Energy Star Windows	33	\$1,697	578	-	\$1,311	\$0	\$63,059	\$1,697	\$431
E Energy Star Doors	33	\$23,103	4,766	-	\$10,812	\$0	\$53,827	\$23,103	\$3,552
E To G Furnace Conversion	30	\$148,961	179,982	(2,009)	\$226,074	-\$14,509	\$45,000	\$148,961	\$74,264
E To G H2o Conversion	22	\$60,549	67,675	(868)	\$49,939	-\$3,718	\$11,000	\$60,549	\$16,405
E To Heat Pump Conversion	9	\$29,673	43,157	-	\$45,199	\$0	\$0	\$29,673	\$14,848
E Air Infiltration	59	\$87,818	16,674	-	\$17,463	\$0	\$0	\$87,818	\$5,737
Health & Human Safety	55	\$106,172	385	-	\$17	\$0	\$133,447	\$106,172	\$6
E Duct Sealing	54	\$21,812	39,688	-	\$41,566	\$0	\$0	\$21,812	\$13,654
Total	3,762	\$608,304	426,815	(2,877)	\$479,128	-\$18,227	\$306,334	\$608,304	\$157,391

*Customer incremental costs are the incremental measure cost absent any incentive. Therefore, the values should not be zero for the low income program. These incremental values are used in cost-effectiveness calculations.

⁴ All kWh and therm values reported in this table are gross, excluding the effect of applicable NTG ratios.

3.3 Nonresidential

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.

In 2015, 333 prescriptive and site specific nonresidential projects were incented. Avista contributed more than \$750,000 for energy efficiency upgrades in nonresidential applications. Nonresidential programs realized over 5,000 MWh in annual first-year energy savings. Table 3-14 and Table 3-15 provide detail on the electric nonresidential programs.

3.3.1 Program Changes

Program changes made at the beginning of 2015 to the nonresidential programs include the addition of new program offerings and changes to eligibility or incentive levels. Avista communicates the majority of program changes once the Business Plan is finalized and those changes become effective at the beginning of the year. In addition, some program changes are made throughout the year as necessary but these are less typical.

For nonresidential programs, rebates were updated to reflect business planning analysis to include inputs such as new unit energy savings (UES) and cost values. Changes were effective January 1, 2015 and Avista accepted rebate applications through March 31, 2015 for 2014 measures and amounts. This 90 day grace period allows for a smooth transition when rebate programs change to allow enough time for customers in the pipeline to complete their projects yet close out changes in a timely but balanced approach.

The following sections outline additions, adjustments and discontinuations of nonresidential programs and incentive levels beginning in 2015.

3.3.1.1 Nonresidential Program New Offerings

In 2015, Avista added the Small Business program to their nonresidential offering.

3.3.1.2 Nonresidential Program Discontinuations

The following programs/measures were discontinued during the 2015 program year:

- Standby Generator Block Heater Program – last day to apply for rebate was March 31, 2015
- Commercial Water Heater Rebate Program – last day to apply for rebate was March 31, 2015
- Commercial Window Program, New and Retrofit – last day to apply for rebate was March 31, 2015
- Commercial Food Service Equipment- Hot Food Holding Cabinets measure was discontinued

3.3.1.3 Nonresidential Program Adjustments

The following adjustments in program requirements or incentive levels were made to the nonresidential programs beginning January 2015:

- Commercial HVAC Variable Frequency Drive Retrofit was increased to \$130 per HP for all
- Commercial Clothes Washer rebates was increased to \$100 per unit
- Avista increased the incentives for canopy LED lighting fixture retrofits and added the LED Sign Lighting and T12/T8 to High Performance T8 or LEDs to the Commercial Lighting Program. New measures and increased incentives took effect January 1, 2015. Commercial Lighting Program changes are listed in Table 3-13 Nonresidential Lighting Interior and Exterior Changes below:

Program Change	Existing Light	Retrofit Light	Old Incentive	New Incentive**	Notes
Increased Incentive	400 watt Canopy HID	122-175 watt LED* Canopy Fixture	\$255	\$325	Exterior**
Increased Incentive	320 watt Canopy HID	122-160 watt LED* Canopy Fixture	\$180	\$250	Exterior**
Addition	250 watt Canopy HID	85-140 watt LED* Canopy Fixture	\$145	\$155	Exterior**
Addition	T12 Sign	Exterior LED Sign Lighting	Site Specific	\$17 per sq ft	Sign
Addition	1000 watt HID	400-575 watt Digital HID Fixture	Site Specific	\$225	Exterior**
Decreased Incentive	400 watt HID	250 watt Digital HID Fixture	\$260	\$150	Exterior**
Modified Eligibility	400 watt HID	122-175 watt LED* Fixture	\$255	\$255	Exterior**
Modified Eligibility	320 watt HID	122-160 watt LED* Fixture	\$180	\$180	Exterior**
Modified Eligibility	250 watt HID	85-140 watt LED* Fixture	\$145	\$145	Exterior**
Modified Eligibility	175 watt HID	35-85 watt LED* Fixture	\$135	\$135	Exterior**
Modified Eligibility	150 watt HID	35-50 watt LED* Fixture	\$130	\$130	Exterior**
Modified Eligibility	90-100 watt HID	25-50 watt LED	\$75	\$75	Exterior**
Modified Eligibility	70-90 watt HID	15-35 watt LED* Fixture	\$55	\$55	Exterior**
Addition	4'4lamp T12/T8	4'3 lamp HP T8***	Site Specific	\$32	Interior
Addition	4'4lamp T12/T8	4'2 lamp HP T8***	Site Specific	\$35	Interior
Addition	4'3lamp T12/T8	LED* 2x4 Fixture	Site Specific	\$60	Interior
Addition	4'3lamp T12/T8	4'2 lamp HP T8***	Site Specific	\$15	Interior
Addition	4'2lamp T12/T8	4'1 lamp HP T8***	Site Specific	\$13	Interior
Addition	4'1lamp T12/T8	4'1 lamp HP T8***	Site Specific	\$13	Interior
Addition	8'4lamp T12/T8	8'4 lamp or 4'8 lamp HP T8***	Site Specific	\$54	Interior
Addition	8'2lamp T12/T8	LED* Fixture	Site Specific	\$80	Interior
Addition	8'1lamp T12/T8	LED* Fixture	Site Specific	\$40	Interior

Program Change	Existing Light	Retrofit Light	Old Incentive	New Incentive**	Notes
Increased Incentive	400 watt HID	4 lamp T5 or 6 lamp HP T8 Fixture	\$105	\$120	Interior
Increased Incentive	400 watt HID	4 lamp T5 or 6 lamp HP T8 Fixture w/ OC	\$145	\$150	Interior
Increased Incentive	400 watt HID	8 lamp HP T8 Fixture	\$115	\$125	Interior
Increased Incentive	400 watt HID	8 lamp HP T8 Fixture with OC sensor	\$145	\$155	Interior
Increased Incentive	250 watt HID	4 lamp HP T8* or 2 lamp T5	\$50	\$90	Interior
Increased Incentive	250 watt HID	4 lamp HP T8* or 2 lamp T5 plus OC Sensor	\$80	\$120	Interior
Increased Incentive	75-100 watt incandescent	12-20 watt LED* lamp	\$10	\$15	Interior
Increased Incentive	60 watt Incandescent	9-13 watt LED* lamp	\$8	\$12	Interior
Increased Incentive	40 watt Incandescent	6-10 watt LED* lamp	\$6	\$10	Interior
Increased Incentive	50 watt MR16	6-9 watt LED* lamp	\$10	\$12	Interior
Increased Incentive	35 watt MR16	4-6 watt MR16 LED* lamp	\$8	\$11	Interior
Increased Incentive	20 watt MR16	2-4 watt MR16 LED* lamp	\$5	\$10	Interior
Deletion	Exit Signs	New LED Exit Signs	\$20	\$0	Interior
Increased Incentive	No Oc Sensor	Occupancy Sensor with relays	\$20	\$30	Interior

* LED Requirements-Fixtures and Lamps (for each type) must be on approved LED lists; go to www.lightingdesignlab.com. Invoices must include LED Manufacturer name, model #, and wattage. Application must include a printed screen shot (.pdf) of the LED product on the approved list for each fixture and/or lamp.

** New construction incentives takes effect January 1, 2015.

The remaining sub-sections outline the nonresidential prescriptive and site specific program paths offered in 2015 and the small business program which began mid-2015. The verified participation, incentives, energy savings, etc for each measure offered in the programs is outlined in Table 3-14 and Table 3-15.

3.3.2 Prescriptive Path

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. When applicable, the prescriptive measures utilize RTF unit energy savings.

3.3.3 Site Specific Path

Site specific is the most comprehensive offering of the nonresidential segment and brings in more than half of the nonresidential savings. Avista's Account Executives work with nonresidential customers to provide assistance in identifying energy efficiency opportunities. Customers receive technical assistance in determining potential energy and cost savings as well as identifying and estimating incentives for participation. Site specific incentives, in which the tier structure applies, are capped at seventy percent of the incremental project cost for lighting projects with simple paybacks of less than 3 years and non-lighting projects (or lighting projects with a verified life of 40,000 hours or more) with simple paybacks less than 5 years. All other project incentives calculated under the tier structure will be capped at fifty percent of the incremental project cost. Simple payback criteria for eligible projects is greater than 1 year and less than 8 years for lighting measures or less than 13 years for non-lighting and LED lighting measures. Site specific projects include appliances, compressed air, HVAC, industrial process, motors (non-prescriptive), shell and lighting with the majority being lighting measures.

Table 3-14: 2015 ID Electric Nonresidential Prescriptive Measures Summary⁵

Measure	Project Count	Incentives	kWh	Therms	kWh Avoided Costs	Therms Avoided Cost	Non-Energy Benefits	Customer Incremental Costs	Non-Incentive Utility Costs
PSC Commercial Windows and Insul	4	\$2,032	10,200	-	\$8,629	\$0	\$0	\$19,798	\$1,235
PSC EnergySmart- Case Lighting	34	\$78,300	719,497	-	\$192,996	\$0	\$0	\$232,584	\$27,622
PSC EnergySmart- Industrial Proc	38	\$45,939	390,989	-	\$230,771	\$0	\$0	\$131,033	\$33,028
PSC Food Service Equipment	6	\$1,563	32,362	-	\$16,053	\$0	\$0	\$27,524	\$2,298
PSC Green Motors Rewind	5	\$762	5,995	-	\$2,536	\$0	\$0	\$22,772	\$363
PSC Lighting Exterior	144	\$197,781	1,192,613	-	\$728,272	\$0	\$38,346	\$645,933	\$104,231
PSC Lighting Interior	44	\$53,937	717,780	-	\$437,034	\$0	\$55,059	\$138,193	\$62,549
PSC Motor Controls HVAC	3	\$28,343	244,166	-	\$156,866	\$0	\$0	\$51,755	\$22,451
Total	278	\$408,656	3,313,602	-	\$1,773,157	\$0	\$93,405	\$1,269,593	\$253,775

⁵ All kWh and therm values reported in this table are gross, excluding the effect of applicable NTG ratios.

Table 3-15: 2015 ID Electric Nonresidential Site Specific Measures Summary⁶

Measure	Project Count	Incentives	kWh	Therms	kWh Avoided Costs	Therms Avoided Cost	Non-Energy Benefits	Customer Incremental Costs	Non-Incentive Utility Costs
SS Appliances	2	\$624	3,877	-	\$9,726	\$0	\$0	\$3,196	\$1,392
SS HVAC Combined	1	\$486	5,041	-	\$3,266	\$0	\$0	\$897	\$467
SS Industrial Process	1	\$11,012	68,455	-	\$54,746	\$0	\$0	\$36,448	\$7,835
SS EnergySmart-Industrial Proce	5	\$17,898	188,890	-	\$185,382	\$0	\$0	\$46,389	\$26,532
SS Lighting Exterior	20	\$69,645	552,892	-	\$809,076	\$0	\$132	\$270,642	\$115,796
SS Lighting Interior	23	\$90,593	693,679	-	\$1,615,454	\$0	\$361	\$265,446	\$231,205
SS Multifamily	2	\$162,029	272,581	(12,620)	\$169,923	-\$58,892	\$0	\$442,888	\$24,319
SS HVAC Heating	1	\$882	5,482	-	\$3,615	\$0	\$0	\$5,107	\$517
Total	55	\$353,168	1,790,898	(12,620)	\$2,851,188	-\$58,892	\$493	\$1,071,013	\$408,064

⁶ All kWh and therm values reported in this table are gross, excluding the effect of applicable NTG ratios.

4 Evaluation, Measurement, and Verification (EM&V)

Nexant, Inc., in partnership with Research Into Action, (the evaluation team) was retained as the Company's external evaluator to independently measure and verify the portfolio energy savings for the 2014-2015 biennium period. The energy efficiency savings and associated cost-effectiveness results presented in this 2015 Annual Report are based on the evaluation findings and are presented as gross, verified savings.

The impact and process evaluation reports can be found in Appendix A and B respectively.

5 Generation and Distribution Efficiency

Avista did not acquire any generation and distribution savings in Idaho in 2015.

6 Regional Market Transformation

Avista's local energy efficiency portfolio consists of programs and supporting infrastructure designed to enhance and accelerate the saturation of energy efficiency measures through a combination of financial incentives, technical assistance, program outreach and education. It is not feasible for Avista to independently have a meaningful impact upon regional or national markets.

Consequently, utilities within the northwest have cooperatively worked together through the Northwest Energy Efficiency Alliance (NEEA) to address those opportunities that are beyond the ability or reach of individual utilities. Avista has been participating in and funding NEEA since the 1997 founding of the organization.

NEEA allocates the savings using funder shares. The shares vary based on the funding cycle. Savings from previous investments receive the previous funder share. Savings from current investments receive the current funder share.

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 acquired through the Company's local portfolio alone. Avista has historically communicated with NEEA the importance of NEEA delivering cost-effective resources to our service territory. The Company believes that NEEA will continue to offer cost-effective electric market transformation in the foreseeable future. Avista will continue to play an active role in the organizational oversight of NEEA. This will be critical to insure that geographic equity, cost-effectiveness and resource acquisition continue to be primary areas of focus.

NEEA estimates Avista's 2015 annual electricity energy savings are 0.46 aMW (4,029 MWh) (Table 7-2). These savings are above the NEEA baseline⁷ and not counted as part of Avista's Idaho local program savings.⁸

Table 6-1 2015 Annual Report Savings Estimates for Idaho Service Territory (aMW)

2015 (aMW)	Total Regional Savings	Co-Created Savings	Net Market Effects*
Residential	1.40	0.37	0.36
Commercial	0.29	0.06	0.05
Industrial	0.12	0.04	0.04
Agriculture	0.00	0.00	0.00
TOTAL	1.81	0.47	0.46

*Net Market Effects are electric energy savings less savings counted as Baseline and/or claimed through the Energy Trust of Oregon, Bonneville Power Administration, and local utilities.

⁷ NEEA estimates Baseline as the savings that would have occurred without NEEA, utility, the Bonneville Power Administration, and the Energy Trust of Oregon's market intervention.

⁸ NEEA estimates the share of energy savings claimed through Bonneville, the Energy Trust of Oregon and local utilities based on program data and on NEEA's annual survey of local utility programs.

7 Energy Efficiency Expenditures

During 2015, Avista incurred over \$5.3 million in costs for the operation of electric energy efficiency programs in Idaho. Of this amount, \$564,000 was contributed to the Northwest Energy Efficiency Alliance to fund regional market transformation ventures.

Forty seven percent of expenditures were returned to ratepayers in the form of incentives or products (e.g. CFLs). During the 2015 calendar year, a little over \$311 thousand, or 5.9 percent, was spent on evaluation in an effort to continually improve program design, delivery and cost-effectiveness.

Evaluation, as well as other implementation expenditures, can be directly charged to the appropriate state and/or segment(s). In cases where the work benefits multiple states or segments, these expenditures are charged to a "general" category and are allocated based on avoided costs for cost-effectiveness purposes.

The expenditures illustrated in the following tables represent actual payments incurred in the 2015 calendar year and often differ from the cost-effectiveness section where all benefits and costs associated with projects completing in 2015 are evaluated in order to provide matching of benefits and expenditures resulting in a more accurate look at cost-effectiveness.

Table 7-1 and Table 7-2 provide a summary of energy efficiency expenditures by fuel type.

Table 7-1: Avista Electricity Energy Efficiency Expenditures (ID)*

Segment	Incentives	Implementation	EM&V	NEEA	Total
Residential	\$1,315,523	\$529,201	\$21	\$0	\$1,844,745
Low Income	\$379,332	\$62,367	\$0	\$0	\$441,699
Nonresidential	\$797,020	\$370,950	\$19,891	\$0	\$1,187,861
Regional	\$0	\$852	\$27,590	\$563,571	\$592,013
General	\$0	\$708,784	\$263,830	\$0	\$972,614
Research	\$0	\$252,461	\$0	\$0	\$252,461
Total	\$2,491,875	\$1,924,615	\$311,332	\$563,571	\$5,291,394

* Year-end accruals for low income incentives for Washington electric and Idaho electric did not occur correctly, but the tariff rider balances for both are correct as of the end of January 2016. The expenditure charts match the financial accounting system, but for accuracy in the cost effectiveness tests \$273,052.57 low income incentive expenditures have been moved resulting in a decrease in Washington electric low income expenditures and an increase in Idaho electric low income expenditures.

Table 7-2: Avista Natural Gas Energy Efficiency Expenditures (ID)*

Segment	Incentives	Implementation	EM&V	NEEA	Total
Residential	\$0	\$0	\$0	\$0	\$0
Low Income	\$0	\$0	\$0	\$0	\$0
Nonresidential	\$0	\$0	\$0	\$0	\$0
Regional	\$0	\$0	\$0	\$50,807	\$50,807
General	\$0	\$127	\$0	\$0	\$127
Total	\$0	\$127	\$0	\$50,807	\$50,680

8 Tariff Rider Balances

As of the start of 2015, the Idaho electric and natural gas (aggregate) tariff rider balances were underfunded by \$1,634,854. During 2015, \$6.5 million in tariff rider revenue was collected to fund energy efficiency while \$5.3 million was expended to operate energy efficiency programs. The \$1.6 million under-collection of tariff rider funding resulted in a year-end balance of \$493 thousand underfunded balance.

Table 8-1 illustrates the 2015 tariff rider activity by fuel type.

Table 8-1 Tariff Rider Activity (2015)

	Electric	Natural Gas
Beginning Balance (Underfunded)	(\$1,624,766)	(\$10,088)
Energy Efficiency Funding	\$6,484,376	\$0
Net Funding of Operations	\$4,859,610	\$10,088
Energy Efficiency Expenditures	\$5,291,394	\$50,681
Ending Balances (Underfunded)	(\$431,784)	(\$60,768)

9 Actual to Business Plan Comparison

For 2015 operations, Avista exceeded budgeted electric energy efficiency expenditures by just under \$300 thousand, or less than six percent, and natural gas expenditures were exceeded by \$51 thousand. The biggest driver of expenditures is incentives. This demand for incentives was slightly higher than anticipated and its impact resulted in the underfunding in the Idaho electric programs. The Idaho Natural Gas Portfolio was discontinued in 2014 but minimal expenditures were made in 2015 due to carry-over measures from 2014.

While the business plan provides an expectation for operational planning, Avista is required to incent all energy efficiency that qualifies under Schedules 90 and 190. Since customer incentives are the largest component of expenditures, customer demand can easily impact the funding level of the Tariff Riders.

Table 9-1 provides detail on the budget to actual comparison of energy efficiency expenditures by fuel type.

Table 9-1 Business Plan to Actual Comparison⁹

	Electric	Natural Gas
Business Plan		
Incentives Budget	\$3,159,736	\$0
Non-incentives and Labor	\$2,430,543	\$0
Total Budgeted Expenditures	\$5,590,279	\$0
Actual 2015 Expenditures		
Incentives	\$2,491,875	\$0
Non-incentives and Labor	\$2,799,518	\$50,681
Total Actual Expenditures	\$5,291,394	\$50,681
Variance (Unfavorable)	\$298,885	(\$50,681)

⁹ Budget values are from 2015 Business Plan

10 Net Cost Effectiveness Results

This section reports the cost-effectiveness results with net to gross values, including freeridership and spillover, as determined in the impact evaluations conducted on the 2014-2015 programs. In summary, electric net TRC is 1.03 and the electric net PAC test benefit-cost ratio is 1.48. Table 10-1 through Table 10-4 illustrate electric cost-effectiveness results.

Electric Cost Effectiveness Results

Table 10-1: 2015 ID Electric Total Resource Cost (TRC) (Net)

	Regular Income Portfolio	Low Income Portfolio	Overall Portfolio
Electric Avoided Costs	\$7,138,288	\$485,674	\$7,623,962
Natural Gas Avoided Costs	-\$1,080,219	-\$18,227	-\$1,098,446
Non-Energy Benefits	\$97,043	\$306,334	\$403,376
TRC Benefits	\$6,155,112	\$773,781	\$6,928,893
Non-Incentive Utility Costs	\$2,268,943	\$159,542	\$2,428,485
Customer Costs	\$3,663,386	\$616,385	\$4,279,770
TRC Costs	\$5,932,329	\$775,927	\$6,708,256
TRC Ratio	1.04	1.00	1.03
Residual TRC Benefits	\$222,783	-\$2,146	\$220,637

Table 10-2: 2015 ID Electric Program Administrator Cost (PAC) (Net)

	Regular Income Portfolio	Low Income Portfolio	Overall Portfolio
Electric Avoided Costs	\$7,138,288	\$485,674	\$7,623,962
Natural Gas Avoided Costs	-\$1,080,219	-\$18,227	-\$1,098,446
PAC Benefits	\$6,058,069	\$467,447	\$6,525,516
Non-Incentive Utility Costs	\$2,268,943	\$159,542	\$2,428,485
Incentive Costs	\$1,356,212	\$616,385	\$1,972,597
PAC Costs	\$3,625,155	\$775,927	\$4,401,082
PAC Ratio	1.67	0.60	1.48
Net PAC Benefits	\$2,432,914	-\$308,480	\$2,124,434

Table 10-3: 2015 ID Electric Participant Cost (PCT) (Net)

	Regular Income Portfolio	Low Income Portfolio	Overall Portfolio
Electric Bill Reduction	\$10,135,501	\$667,521	\$10,803,022
Gas Bill Reduction	-\$50,408	-\$873	-\$51,281
Non-Energy Benefits	\$97,043	\$306,334	\$403,376
Participant Benefits	\$10,182,136	\$972,982	\$11,155,118
Customer Costs	\$3,663,386	\$616,385	\$4,279,770
Incentive Received	-\$1,356,212	-\$616,385	-\$1,972,597
Participant Costs	\$2,307,174	\$0	\$2,307,174
Participant Ratio	4.41	N/A	4.83
Net Participant Benefits	\$7,874,962	\$972,982	\$8,847,944

Table 10-4: 2015 ID Electric Rate Impact Measure (RIM) (Net)

	Regular Income Portfolio	Low Income Portfolio	Overall Portfolio
Electric Avoided Cost Savings	\$7,138,288	\$485,674	\$7,623,962
Non-Participant Benefits	\$7,138,288	\$485,674	\$7,623,962
Electric Revenue Loss	\$10,135,501	\$667,521	\$10,803,022
Non-Incentive Utility Costs	\$2,268,943	\$159,542	\$2,428,485
Customer Incentives	\$1,356,212	\$616,385	\$1,972,597
Non-Participant Costs	\$13,760,656	\$1,443,448	\$15,204,104
RIM Ratio	0.52	0.34	0.50
Net RIM Benefits	-\$6,622,368	-\$957,774	-\$7,580,142

**Appendix A Idaho 2014-2015 Electric Impact Evaluation
Report**

Appendix B 2014-2015 Process Evaluation Report