Avista Utilities Demand Side Management Programs Idaho

2010-2012

09-26-2013

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RESIDENTIAL HOME IMPROVEMENT – ELECTRIC

Electric Home Improvement	2012	2011	2010
Participants (rebates)	931	1,054	2,291
Energy Savings (kWh)	1,068,185	1,646,287	3,807,586
Energy Savings (Therms) – interactive	(14,962)	(16,886)	(30,124)
Non-energy Benefits	n/a	n/a	n/a
Total Resource Cost B/C ratio	0.71	1.24	2.88
Program Administrator Cost B/C ratio	1.19	3.30	5.26
Participant B/C ratio	1.48	2.20	5.20
Rate Impact Measure B/C ratio	0.60	0.66	1.46
Net-to-gross factor – HE Equipment	45.5%[1]	45.5%[2]	61.0%[3]
Net-to-gross factor - Weatherization	68.3%[4]	68.3%[5]	63.8%[6]
Discount Rate	7.01%[7]	6.80%	6.80%
Non-Incentive Expenses[8]	$521,985	$65,636	$328,338
Incentive Expenses	$219,378	$252,119	$627,357

Program Description

Rebates are available for energy efficiency improvements on existing residential homes that heat primarily with Avista electricity. A rebate is provided to the customer after proof of purchase and other appropriate documentation has been provided. Customers have 90 days from the installation of the equipment to apply for an Avista rebate. The following are the measures that were eligible for electric rebates in 2012 in this category. Any differences from the 2012 program offering will be addressed by year later in this document

[1] Since the Net-to-Gross (NTG) on 2012 participation were not yet available, NTG from the most recent study was used.

[2] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.

[3] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.

[4] Since the Net-to-Gross (NTG) on 2012 participation were not yet available, NTG from the most recent study was used.

[4] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared

[5] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.

[6] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.

[7] Historically, Avista used the discount rate used for the Integrated Resource Plan. Discount rate changed from the last IRP.

[8] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level. This includes labor.

Electric to Natural Gas Conversion – Space Heat:

- Replacement of straight resistance electric heat with a central heat pump or replacement of straight resistance electric heat with a central natural gas heating system; Rebate $750
- Replacement of an electric tanked water heater with a natural gas tanked water heater; Rebate $200

High Efficiency HVAC

- Installation of ducted air source heat pump with HSPF of 8.5 (manufactured homes must have HSPF of 7.7 and 13 SEER); Rebate $400
- Installation of ductless heat pump with HSPF of 9.0; Rebate $200
- Installation of variable speed motor incorporated into a primary heating system; Rebate $100

High Efficiency Water Heaters

- Installation of high efficient tank water heater with an efficiency rating (EF) of 0.93 or greater; Rebate $50

Weatherization Improvements

Contactor installed either fitted/batt or blown-in insulation material

- Attic: R-10 or greater where less than R-19 exists; Rebate $0.25 per square foot
- Wall/Floor: R-10 or greater where less than R-5 exists; Rebate $0.50 per square foot

Fireplace Damper

- Installation of fireplace dampers to reduce the amount of heat loss through a chimney with existing wood burning fireplaces; only available for retrofit situations. Not allowable if there are combustion appliances using the chimney as an exhaust; Rebate $200 - Discontinued March 1 2012

Program Activity

The Fireplace Damper rebate was discontinued in March of 2012. This was the only change to this group of rebates. Other activities in 2012 included multiple meetings to provide information to vendors from a variety of sectors (HVAC, insulation, builders) about the Avista programs and protocols. An on-line rebate application process also went live in 2012 to provide an electronic means for customers to submit their projects for consideration.

Program Changes

The Electric Home Improvement Program is on-going and changes are made as needed. The 2012 rebates mentioned in Program Description were available in 2011 and 2010. Listed below are the notable differences in the measures offered and the rebates available in those prior program years.

<u>2011</u>

Electric to Natural Gas Conversions

- Water heater conversion rebate reduced from $250 to $200 (April)

Weatherization

- High Efficiency Windows – Discontinued - Installation of u-value windows of .30 or lower; Rebate $3.00 per sq ft (April)

- Insulation projects; must be contractor installed; no longer allow "do-it-yourself" to be eligible for rebate consideration (April)

Shade tree

- Spokane County Conservation District (SCCD) for planting qualifying shade trees – Rebate $18 per tree. SCCD worked with customers to identify potential sites and the appropriate tree in the right location for energy savings. The siting is 15-30 feet to the south of the home and avoiding overhead electrical and other utility lines. Discontinued for March 2012.

2010

HVAC Conversion

- Rebate for electric to natural gas forced air furnace was reduced from $1,000 to $750 (March)

High Efficiency HVAC

- Ground source heat pump of 13.6 HSPF (heating efficiency) or higher – Discontinued - Rebate $1,500 (March)
- High efficient central air conditioning of 14.0 SEER or higher – Discontinued - Rebate $350 - should replace old but functioning central air conditioning system Central air conditioning in this case is defined as a ducted air conditioning system of 1.5 tons (18,000 BTUs) cooling or higher, conditioning at least 75% of the home (March)

Water Heater

- Tankless water heater with 0.82 EF or higher - Discontinued - Rebate $200 - Discontinued during 2010; not cost effective (March)

Home Improvement – Electric List of Measures

Measure Description	UES (annual kWh)[9]	Non-Energy Benefits	Measure Life[10]
E Air Source Heat Pump	336.52	n/a	15
E Attic Insulation w Electric Heat	0.51/sq ft	n/a	18
E Ductless Heat Pump	184.63	n/a	15
E Electric to Air Source Heat Pump	6,589.31	n/a	15
E Electric to Natural Gas Furnace	12,012.42	n/a	20
E Electric to Natural Gas Water Heater	4,031.17	n/a	20
E Electric Water Heater	119.10	n/a	13
E Floor Insulation w Electric Heat	1.83/sq ft	n/a	18
E Variable Speed Motor	438.55	n/a	15
E Wall Insulation w Electric Heat	1.83/sq ft	n/a	18
E Fireplace Damper w Electric Heat *(discontinued)*	163	n/a	18

[9] Unit Estimated Savings (UES) are drawn from Avista's Technical Reference Manual as updated by Cadmus after their evaluation of Avista's 2011 energy efficiency programs.

[10] Measure lives were drawn from Avista's Technical Reference Manual as updated by Cadmus after their evaluation of Avista's 2011 energy efficiency programs.

RESIDENTIAL HOME IMPROVEMENT – NATURAL GAS

Natural Gas Home Improvement	2012	2011	2010
Participants (rebates)	1,261	1,994	2,710
Energy Savings (kWh) – interactive	(169,228)	613,172	379,420
Energy Savings (Therms)	118,607	133,399	239,321
Non-energy Benefits	n/a	n/a	n/a
Total Resource Cost B/C ratio	0.50	1.04	2.36
Program Administrator Cost B/C ratio	0.78	2.66	2.80
Participant B/C ratio	2.38	1.34	4.70
Rate Impact Measure B/C ratio	0.41	0.81	1.78
Net-to-gross factor – HE Equipment	45.5[11]	45.5%[12]	61.0%[13]
Net-to-gross factor - Weatherization	68.3[14]	68.3%[15]	63.8%[16]
Discount Rate	5.37%	4.17%	4.17%
Non-Incentive Expenses[17]	$240,969	$351,306	$297,988
Incentive Expenses	$468,333	$697,016	$887,783

Program Description

Rebates are available for energy efficiency improvements on existing residential homes that heat primarily with Avista natural gas. Rebates are provided to customers after proof of purchase and other appropriate documentation has been submitted. Customers have 90 days from the installation of the equipment to apply for an Avista rebate. The following are the measures that were eligible for natural gas rebates in 2012 in this category. Any differences from the 2012 program offering will be addressed by year later in this document

High Efficiency HVAC

- Natural gas furnace or boiler with 90% AFUE or better; Rebate $400 - Discontinued November 2012

High Efficiency Water Heaters

- Installation of natural gas tank water heater with an efficiency rating (EF) of 0.62 for 40 gallon or 0.60 for 50 gallon; Rebate $30 – Discontinued November 2012

[11] Since NTG results on 2012 programs were not yet available, Avista used NTG factors from the most recent study.
[12] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.
[13] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.
[14] Since NTG results on 2012 programs were not yet available, Avista used NTG factors from the most recent study.
[15] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.
[16] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.
[17] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

Weatherization Improvements
Contactor installed either fitted/batt or blown-in insulation material

- Attic: R-10 or greater where less than R-19 exists; Rebate $0.25 per square foot
- Wall/Floor: R-10 or greater where less than R-5 exists; Rebate $0.50 per square foot Discontinued for natural gas heated homes November 2012

Fireplace Damper

- Installation of fireplace dampers to reduce the amount of heat loss through a chimney with existing wood burning fireplaces; only available for retrofit situations. Not allowable if there are combustion appliances using the chimney as an exhaust; Rebate $200 - Discontinued March 2012

Program Activity

All rebates related to natural gas heated homes were discontinued in November. The Company's integrated resource plan for natural gas was evaluated in 2012 and identified a significant drop in avoided costs. As a result, natural gas rebate programs would not pass the cost effectiveness criteria. The Company filed a request to the Commission to "discontinue" natural gas rebate programs temporarily. In the event natural gas avoided costs start to rise, these programs will be re-evaluated for cost effectiveness. This filing was approved and natural gas rebates were no longer available as of November 1.

Other 2012 activities included meetings to help educate vendors from a variety of sectors (HVAC, insulation, builders) about Avista programs and protocols. An on-line rebate application process went live in 2012 to provide an electronic means for customers to submit their project for consideration.

Program Changes

The Natural Gas Home Improvement Program was on-going and changes are made on as needed. The 2012 rebates mentioned in Program Description were available in 2011 and 2010. Listed below are the notable differences in the measures offered and the rebates available in those prior program years.

<u>2011</u>

Weatherization Improvements

- High Efficiency Windows – Discontinued - Installation of u-value windows of .30 or lower; Rebate $3.00 per sq ft (July)
- Insulation projects; must be contractor installed; no longer allow "do-it-yourself" to be eligible for rebate consideration (July)

<u>2010</u>

High efficiency water heaters

- Tankless water heater rebate available for $200 with 0.82 EF or greater - discontinued March 2010 due to cost-effectiveness concerns

Home Improvement – Natural Gas List of Measures

Measure Description	UES (annual therms)[18]	Non-Energy Benefits	Measure Life[19]
G 40 Gallon Natural Gas Water Heater	8.80	n/a	13
G 50 Gallon Natural Gas Water Heater	9.04	n/a	13
G Attic Insulation w Natural Gas Heat	66.56/home	n/a	18
G Floor Insulation w Natural Gas Heat	66.56/home	n/a	18
G Natural Gas Boiler	93	n/a	20
G Natural Gas Furnace[20]	103	n/a	20
G Wall Insulation w Natural Gas Heat	66.56/home	n/a	18
G Fireplace Damper w Natural Gas Heat *(discontinued)*	5.56	n/a	18
G Replc Windows *(discontinued)*	22.46/home	n/a	20

[18] UES are drawn from Avista's Technical Reference Manual as updated by Cadmus after their evaluation of Avista's 2011 energy efficiency programs.

[19] Measure lives were drawn from Avista's Technical Reference Manual as updated by Cadmus after their evaluation of Avista's 2011 energy efficiency programs.

[20] This measure has negative interactive kWh of 165.10 per home due to the percentage of homes found to be getting air conditioning/heat pumps at the same time. This was discovered during the 2011 evaluation.

RESIDENTIAL NEW CONSTRUCTION – ELECTRIC

Please refer to Residential Home Improvement – Electric for historical statistics on this program. The new construction category has not been tracked separately within Avista's database nor reported separated.

Program Description

Rebates are available for energy efficiency improvements on new construction residential homes that heat primarily with Avista electric. A rebate is provided to the customer after proof of purchase and other appropriate documentation has been provided. Customers have 90 days from installation of the equipment to apply for an Avista rebate. The following are the measures that were eligible for electric rebates in 2012 in this category. Any differences from the 2012 program offering will be addressed by year later in this document

High Efficiency HVAC

- Installation of ducted air source heat pump with HSPF of 8.5 (manufactured homes must have HSPF of 7.7 and 13 SEER); Rebate $400
- Installation of ductless heat pump with HSPF of 9.0; Rebate $200
- Installation of variable speed motor incorporated into a primary heating system; Rebate $100

High Efficiency Water Heaters

- Installation of high efficient tank water heater with an efficiency rating (EF) of 0.93 or greater; Rebate $50

Program Activity

Activities in 2012 included multiple meetings to provide information to vendors from a variety of sectors (HVAC, insulation, builders) about the Avista programs and protocols. An on-line rebate application process went live in 2012 to provide an electronic means for customers to submit their projects for consideration. There was not any notable change to rebates within the Electric New Construction offers.

Program Changes

The New Construction Program is on-going and changes are made on as needed. The 2012 rebates mentioned in the Program Description were available in 2011 and 2010. Listed below are the notable differences in the measures offered and the rebates available in those prior program years.

<u>2011</u>

No changes to note

<u>2010</u>

Ground source heat pump rebate available for $1,500 for installation of a high efficiency ground source heat pump of 13.6 HSPF (heating efficiency) or higher. A comparable Coefficient of Perfomance rating would be a 3.5 COP or higher. This may not be combined with any other high efficiency incentives. *(discontinued March 2010 due to cost effectiveness)*

RESIDENTIAL NEW CONSTRUCTION – NATURAL GAS

Please refer to Residential Home Improvement – Natural Gas for historical statistics on this program. The new construction category has not been tracked separately within Avista's database nor reported separated.

Program Description

Rebates are available for energy efficiency improvements on new construction residential homes that heat primarily with Avista natural gas. A rebate is provided to the customer after proof of purchase and other appropriate documentation has been provided. Customers have 90 days from installation of the equipment to apply for an Avista rebate. The following are the measures that were eligible for natural gas rebates in 2012 in this category. Any differences from the 2012 program offering will be addressed by year later in this document

High Efficiency HVAC

- Natural gas furnace or boiler with 90% AFUE or better; Rebate $400 - Discontinued November 2012

High Efficiency Water Heaters

- Installation of natural gas tank water heater with an efficiency rating (EF) of 0.62 for 40 gallon or 0.60 for 50 gallon; Rebate $30 – Discontinued November 2012

Program Activity

All rebates related to natural gas heated homes were discontinued in November. The Company's integrated resource plan for natural gas was evaluated in 2012 and identified a significant drop in avoided costs. As a result, natural gas rebate programs would not pass the cost effectiveness criteria. The Company filed a request to the Commission to "discontinue" natural gas rebate programs temporarily. In the event natural gas avoided costs start to rise, these programs will be re-evaluated for cost effectiveness. This filing was approved and natural gas rebates were no longer available as of November 1.

Other 2012 activities included meetings to help educate vendors from a variety of sectors (HVAC, insulation, builders) about Avista programs and protocol. An on-line rebate application process went live in 2012 to provide an electronic means for customers to submit their projects for consideration.

Program Changes

The New Construction Program is on-going and changes are made on as needed. The 2012 rebates mentioned in the Program Description were available in 2011 and 2010. Listed below are the notable differences in the measures offered and the rebates available in those prior program years.

<u>2011</u>

No changes to note

<u>2010</u>

High Efficiency Water Heaters - Tankless water heater with 0.82 EF or greater; rebate available for $200 – Discontinued March 2010 due to cost-effectiveness

RESIDENTIAL ENERGY STAR® HOMES - ELECTRIC

Electric Energy Star® Homes	2012	2011	2010
Participants (rebates)	11	13	32
Energy Savings (kWh)	24,698	46,568	71,507
Energy Savings (Therms) – interactive	406	768	3,749
Non-energy Benefits	n/a	n/a	n/a
Total Resource Cost B/C ratio	0.66	1.61	0.70
Program Administrator Cost B/C ratio	1.26	4.66	2.27
Participant B/C ratio	1.23	2.33	12.11
Rate Impact Measure B/C ratio	0.59	0.76	0.92
Net-to-gross factor	73.6%	73.6%	73.6%[21]
Discount Rate	7.01%	6.80%	6.80%
Non-Incentive Expenses[22]	$15,840	$3,223	$1,704
Incentive Expenses	$9,900	$11,400	$28,250

Program Description

The Energy Star® Home program is available to builders of new construction homes that have Avista electricity for space and water heating needs that meet the criteria and are certified as an Energy Star® Home.

This $900 rebate may not be combined with any other incentive offered under the Residential New Construction Program or the Energy Star® Appliance Program.

Program Activity

This is the local version of NEEA's Northwest Energy Star® Homes initiative. Much of the information around this offering is funneled through that information channel. Vendor meetings held in 2012 referenced the program's availability and requirements.

Program Changes

The Energy Star® Homes Program is on-going and is reviewed on as needed. The 2012 rebates mentioned in Program Description were available in 2011 and 2010. There are no other notable changes to report.

[21] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.

[22] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level. This includes labor.

Energy Star® Homes – Electric List of Measures

Measure Description	UES (kWh)[23]	Non-Energy Benefits	Measure Life[24]
Energy Star® Home - All Electric	2,510	n/a	25
Energy Star® Home - Electric & Natural Gas	1,054	n/a	25

[23] UES are drawn from Avista's Technical Reference Manual as updated by Cadmus after their evaluation of Avista's 2011 energy efficiency programs.

[24] Measure lives were drawn from Avista's Technical Reference Manual as updated by Cadmus after their evaluation of Avista's 2011 energy efficiency programs.

RESIDENTIAL ENERGY STAR®HOMES – NATURAL GAS

Natural Gas Energy Star® Homes	2012	2011	2010
Participants (rebates)	7	13	15
Energy Savings (kWh) – interactive	n/a	n/a	n/a
Energy Savings (Therms)	1,423	1,665	2,453
Non-energy Benefits	n/a	n/a	n/a
Total Resource Cost B/C ratio	0.72	1.30	1.04
Program Administrator Cost B/C ratio	1.27	2.33	2.07
Participant B/C ratio	2.37	1.88	17.56
Rate Impact Measure B/C ratio	0.46	0.94	0.11
Net-to-gross factor	73.6%	73.6%	73.6%[25]
Discount Rate	5.37%	4.17%	4.17%
Non-Incentive Expenses[26]	$3,332	$5,638	$3,038
Incentive Expenses	$4,550	$8,450	$9,750

Program Description

The Energy Star® Home program is available to builders of new construction homes that have Avista natural gas for space and water heating needs that meet the criteria and are certified as an Energy Star® Homes.

This $650 rebate may not be combined with any other incentive offered under the Residential New Construction Program or the Energy Star® Appliance Program.

Program Activity

This is the local version of NEEA's Northwest Energy Star® Homes initiative. Much of the information around this offering is funneled through that information channel. Vendor meetings were held in 2012 referencing the availability and requirements of the program.

Program Changes

The Energy Star® Homes Program is on-going and is reviewed on as needed. The 2012 rebates mentioned in Program Description were available in 2011 and 2010. There are no other notable changes to report.

Energy Star®Homes – Natural Gas List of Measures

Measure Description	UES (annual therms)[27]	Non-Energy Benefits	Measure Life[28]
E Energy Star® Home – Natural Gas Only	203.3	n/a	25

[25] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.

[26] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level. This includes labor.

[27] UES are drawn from Avista's Technical Reference Manual as updated by Cadmus after their evaluation of Avista's 2011 energy efficiency programs.

[28] Measure lives were drawn from Avista's Technical Reference Manual as updated by Cadmus after their evaluation of Avista's 2011 energy efficiency programs.

RESIDENTIAL LIGHTING – ELECTRIC

Simple Steps Smart Savings	2012	2011	2010
Participants (simple steps bulbs)	137,024	157,710	69,555
Energy Savings (kWh)	2,997,434	4,620,825	1,736,608
Energy Savings (Therms) – interactive	n/a	n/a	n/a
Non-energy Benefits	n/a	n/a	n/a
Total Resource Cost B/C ratio	17.04	1.95	4.36
Program Administrator Cost B/C ratio	17.04	1.95	4.36
Participant B/C ratio	n/a	n/a	n/a
Rate Impact Measure B/C ratio	6.41	0.53	0.84
Net-to-gross factor	n/a	n/a	n/a
Discount Rate	7.01%	6.80%	6.80%
Non-Incentive Expenses[29]	$43,986	$268,686	$102,933
Incentive Expenses	$109,383	$525,889	$171,124

CFL Mail Distribution	2012	2011	2010
Participants (cfl mail distribution bulbs)	n/a	758,936	n/a
Energy Savings (kWh)	n/a	13,290,118	n/a
Energy Savings (Therms) – interactive	n/a	n/a	n/a
Non-energy Benefits	n/a	n/a	n/a
Total Resource Cost B/C ratio	n/a	3.46	n/a
Program Administrator Cost B/C ratio	n/a	3.46	n/a
Participant B/C ratio	n/a	n/a	n/a
Rate Impact Measure B/C ratio	n/a	0.60	n/a
Net-to-gross factor	n/a	65.8[30]	n/a
Discount Rate	n/a	6.80%	n/a
Non-Incentive Expenses[31]	n/a	$301,571	n/a
Incentive Expenses	n/a	$989,922	n/a

Program Description

This program is intended to prompt the customer to increase the energy-efficiency of their lighting equipment through financial incentives at the manufacturing level or through distribution of product. It indirectly supports the infrastructure and inventory necessary to ensure that customers install high-efficiency lamps.

Simple Steps, Smart Savings –Retail Buy-down Program:

This program provides Avista and its customers with a simple delivery mechanism for customers to purchase CFLs and showerheads that have the incentive incorporated into the manufacturer markdown

[29] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

[30] Since net-to-Gross results on 2012 programs were not available at the time of this report, Avista used net-to-gross factors from the most recent net-to-gross study.

[31] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

promotions. This program is intended to prompt the customer to increase the energy-efficiency of their lighting and hot water use through financial incentives provided upstream to manufacturers in order to offer participating regional retailers efficient product at decreased prices. These reduced prices are passed onto customers. It also indirectly supports the infrastructure and inventory necessary to ensure that the installation of high-efficiency lighting a viable option for the customer through local retailers.

Measure	Incentive
General Purpose CFL	$0.50
Specialty CFL	$2.00
LED Lamp	$3.00
LED Fixture	$8.00

Measures	Measures *(continued)*
Twists:	12,20,26 watt 3-Way
9W Spiral CFL	33W 3-Way
13W Spiral CFL	12,23,29 watt 3-Way
14W Spiral CFL	12, 23, 34 watt 3-Way
15W Spiral CFL	11W R20 Reflector
18W Spiral CFL	14W Reflector
20W Spiral CFL	15W R30 Reflector
23W Spiral CFL	23W R38 Reflector
30W Spiral CFL	26W R38 Reflector
40W Spiral CFL	26W R40 Reflector
13W Daylight	23W Outdoor Reflector
23W Daylight	26W Outdoor Reflector
9W A-lamp	23W R38 High Heat Reflector
15 W A-lamp	7W Candelabra
14W A19	9W Candelabra
Specialty CFLs:	13W Candelabra
14W Candle Base BW	12W Globe
16W R30 Flood	15W Globe
23W R40 Flood	

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

Program Activity

Portfolio acquisition and cost-effectiveness projections are closely related. The screening of measures and programs to exclude those that are not anticipated to be cost-effective on a net TRC basis (absent reasonable exceptions) clearly have an influence upon acquisition. Shifting cost-effectiveness is most frequently the result of changing technologies, the cost of those technologies, avoided costs, measure life and energy savings.

TRC cost-effectiveness results by measure from the most recent business plan:

Program	*Overall portfolio gross sub-TRC w/o NIUC*	*Overall portfolio gross sub-TRC w NIUC*	*Overall portfolio net sub-TRC w NIUC*
Res-Lighting	**2.06**	**1.75**	**1.60**
Event CFL Distribution		**11.70**	**11.70**

Program Changes

2011

Implemented a Direct Mail CFL Distribution effort (July)

2012

Added (January) and later removed (February 2013) showerheads as part of the Simple Steps, Smart Savings Program and discontinued Dollars for Change-School CFL Fundraising Program2013 due to cost-effectiveness (see table below for the statistics on the showerhead distribution through Simple Steps)

Simple Steps Smart Savings	**2012**	**2011**	**2010**
Participants **(simple steps showerheads)**	1,250	n/a	n/a
Energy Savings (kWh)	301,130	n/a	n/a
Energy Savings (Therms) – interactive	n/a	n/a	n/a
Non-energy Benefits	n/a	n/a	n/a
Total Resource Cost B/C ratio	7.30	n/a	n/a
Program Administrator Cost B/C ratio	7.30	n/a	n/a
Participant B/C ratio	n/a	n/a	n/a
Rate Impact Measure B/C ratio	0.88	n/a	n/a
Net-to-gross factor	n/a	n/a	n/a
Discount Rate	7.01%	n/a	n/a
Non-Incentive Expenses[32]	$7,016	n/a	n/a
Incentive Expenses	$17,447	n/a	n/a

[32] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

RESIDENTIAL ENERGY STAR® APPLIANCES – ELECTRIC and NATURAL GAS

(Discontinued Program)

Electric ES Appliances	2012	2011	2010
Participants (rebates)	1,791	2,870	3,801
Energy Savings (kWh)	380,897	342,497	438,818
Energy Savings (Therms) – interactive	n/a	n/a	n/a
Non-energy Benefits	36,356	n/a	n/a
Total Resource Cost B/C ratio	0.69	0.49	0.64
Program Administrator Cost B/C ratio	1.36	2.04	2.46
Participant B/C ratio	1.21	0.76	1.32
Rate Impact Measure B/C ratio	0.59	0.60	0.42
Net-to-gross factor	41.9%	41.9%[33]	52.0%[34]
Discount Rate	7.01%	6.80%	6.80%
Non-Incentive Expenses[35]	$135,704	$13,620	$22,188
Incentive Expenses	$50,770	$95,910	$123,390

Natural Gas ES Appliances	2012	2011	2010
Participants (rebates)	532	1,200	1,608
Energy Savings (kWh)	125,109	19,174	25,972
Energy Savings (Therms) – interactive	3,256	7,794	9,983
Non-energy Benefits	363	n/a	n/a
Total Resource Cost B/C ratio	0.82	0.35	0.27
Program Administrator Cost B/C ratio	4.02	1.22	1.04
Participant B/C ratio	1.13	0.51	10.77
Rate Impact Measure B/C ratio	0.28	0.52	0.03
Net-to-gross factor	41.9%	41.9%[36]	52.0%[37]
Discount Rate	5.37%	4.17%	4.17%
Non-Incentive Expenses[38]	$3,804	$10,710	$6,349
Incentive Expenses	$17,475	$48,275	$65,125

Program Description

Currently, Energy Star® rated freezers, refrigerators, dishwashers and clothes washer rebates have been discontinued, as of March 1, 2013. This program was designed for ease of use by Avista electric and natural gas residential customers in Idaho and Washington. Rebates were applicable to new or existing

[33] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.

[34] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.

[35] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

[36] Ibid.

[37] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.

[38] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

single and multi–family residences, including manufactured, modular homes and domestically used in businesses. Appliances for both new construction and retrofit purchases were eligible. Key external stakeholders included homeowners, landlords (and renters) and businesses. Key internal stakeholders included contact center, accounts payable, marketing and corporate communications.

Measures Incorporated within the Program: 2012-March 1, 2013 (Discontinued)

Measure	Incentive
Refrigerators	$25.00
Freezer	$20.00
Clothes Washers	$50.00

Measures Incorporated within the Program: 2010-2011

Measure	Incentive
Refrigerators	$25.00
Freezer	$20.00
Dishwaher	$25.00
Clothes Washers	$50.00

Program Activity

Avista has historically evaluated the DSM portfolio based upon varying levels of net-to-gross scenarios. With the compilation of the 2011 Cadmus net-to-gross study it was possible to substitute those estimates into the net cost-effectiveness calculations. This study revealed low NTG which led to the discontinuation of this measure.

TRC cost-effectiveness results by measure in the 2013 business plan estimated the following:

Measure package	*Overall portfolio gross sub-TRC w/o NIUC*	*Overall portfolio gross sub-TRC w NIUC*	*Overall portfolio net sub-TRC w NIUC*
Clothes Washer	**0.79**	**0.72**	**0.62**
Refrigerator/Freezer	**1.10**	**1.06**	**1.03**
Appliance Dishwasher[39]			

Program Changes

Due to the low sub TRC results for the clothes washers and other Energy Star® Appliances it was decided to discontinue the Energy Star® Appliance Rebate Program and the program ended March 1, 2013. The customers and retailers received 90 days advance notice of the discontinuation of the Energy Star® Appliance Rebate Program. Customers had 90 days to submit the form under old requirements. Direct mail communication was sent to retailers as well as, internal forms and website updates addressed the discontinuation of the Energy Star® Appliance Program.

2012

Clothes washers incentive was reduced from $50 to $25 (January) and dishwashers were discontinued (January).

[39] Discontinued in 2012 for freerider concerns – recent Net-to-Gross study found that this market had been transformed.

Energy Star® Appliances – Electric List of Measures

Measure Description	UES (annual kWh)[40]	Non-Energy Benefits	Measure Life[41]
E Clothes Washer w Electric Water Heater	490.14	n/a	10
E Freezer	46.52	n/a	20
E Refrigerator	65.52	n/a	20
E Dishwasher w Electric Water Heater	62	n/a	9

Energy Star®Appliances – Natural Gas List of Measures

Measure Description	UES (annual therms)[42]	Non-Energy Benefits	Measure Life[43]
G Clothes Washer w Natural Gas Water Heater	318	n/a	10
G Dishwasher w Natural Gas Water Heater	1.29	n/a	9

[40] UES are drawn from Avista's Technical Reference Manual as updated by Cadmus after their evaluation of Avista's 2011 energy efficiency programs.
[41] Measure lives were drawn from Avista's Technical Reference Manual as updated by Cadmus after their evaluation of Avista's 2011 energy efficiency programs.
[42] UES are drawn from Avista's Technical Reference Manual as updated by Cadmus after their evaluation of Avista's 2011 energy efficiency programs.
[43] Measure lives were drawn from Avista's Technical Reference Manual as updated by Cadmus after their evaluation of Avista's 2011 energy efficiency programs.

RESIDENTIAL APPLIANCE RECYCLING – ELECTRIC

Electric Appliance Recycling	2012	2011	2010
Participants (rebates)	426	554	392
Energy Savings (kWh)	442,944	575,209	457,351
Energy Savings (Therms) – interactive	n/a	n/a	n/a
Non-energy Benefits	n/a	n/a	n/a
Total Resource Cost B/C ratio	4.31	2.90	3.45
Program Administrator Cost B/C ratio	3.46	2.13	3.00
Participant B/C ratio	n/a	-2.98	-20.99
Rate Impact Measure B/C ratio	0.76	1.19	0.80
Net-to-gross factor	41.0%	41.0%[44]	n/a
Discount Rate	7.01%	6.80%	6.80%
Non-Incentive Expenses[45]	$52,386	$45,917	$78,305
Incentive Expenses	$12,780	$16,612	$11,760

Program Description

This program is applicable to residential electric or electric/natural gas combo customers seeking to recycle energy inefficient refrigerators or freezers, in Washington and Idaho. Key external stakeholders include JACO Environmental Inc (JACO), homeowners, renters and landlords. This program is intended to prompt the customer to decrease their energy used on inefficient second refrigerators or freezers by recycling and receiving financial incentives. JACO picks up a maximum of two Refrigerators and/or Freezers (units) from a customer's home when they request a pick-up. The pick-up service is free to the customer. A $30 rebate is provided for each operational refrigerator and/or freezer, up to two per household. The pre-1995 refrigerator(s) or freezer(s) are picked up and delivered to a recycling facility operated by JACO. JACO recycles nearly 95 percent of each refrigerator, and safely disposes the toxins and ozone-destroying chlorofluorocarbon gases from foam insulation. JACO works with local businesses to recycle glass, plastic and metal.

Program Criteria:

- The refrigerator or freezer needs to be in working condition and between 10 to 30 cubic feet in size. Units also must be 1995 models or older.
- The program is for Avista Electric or Electric/Gas customers only.
- Customers must own the unit(s) being recycled, with a limit of two units per account.
- The $30 rebate check will be mailed to the customer within 4 to 6 weeks after the appliance collection.

[44] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.

[45] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

Measures Incorporated within the Program: 2010-2013

Measure	Incentive
Refrigerators	$30.00
Freezer	$30.00

Program Activity

Portfolio acquisition and cost-effectiveness projections are closely related. The screening of measures and programs to exclude those that are not anticipated to be cost-effective on a net TRC basis (absent reasonable exceptions) clearly have an influence upon acquisition. Cost-effectiveness variability results from technology changes, the cost and customer acceptance of those technologies, avoided costs, measure lives and changes in energy savings estimates.

Program Changes

There have been no significant changes to this program from 2010 to date.

Appliance Recycling – Electric List of Measures

Measure Description	UES (annual kWh)[46]	Non-Energy Benefits	Measure Life[47]
E Recycled Freezer	880.69	n/a	6
E Recycled Refrigerator	1,082.99	n/a	9

[46] UES are drawn from Avista's Technical Reference Manual as updated by Cadmus after their evaluation of Avista's 2011 energy efficiency programs.

[47] Measure lives were drawn from Avista's Technical Reference Manual as updated by Cadmus after their evaluation of Avista's 2011 energy efficiency programs.

RESIDENTIAL GEOGRAPHIC SATURATION – ELECTRIC

	2012	2011	2010
Participants (rebates)	673	2,960	5,445
Energy Savings (kWh)	10,095	58,016	129,972
Energy Savings (Therms) – interactive	n/a	n/a	n/a
Non-energy Benefits	n/a	n/a	n/a
Total Resource Cost B/C ratio	1.41	2.90	5.95
Program Administrator Cost B/C ratio	1.41	2.13	5.95
Participant B/C ratio	n/a	n/a	n/a
Rate Impact Measure B/C ratio	0.56	1.19	0.97
Net-to-gross factor	n/a	n/a	n/a
Discount Rate	7.01%	6.80%	6.80%
Non-Incentive Expenses[48]	$1,334	$822,984	9,279
Incentive Expenses	$1,334	$4,291	5,445

Program Description

This program was intended to prompt and encourage Avista customers to increase the energy efficiency of their residences. As part of this strategy, the "Something for Everyone" or "Geographic Saturation" events promote energy efficiency measures and programs offered by Avista as well as other low cost measures that customers can implement in their homes.

Examples of events include:

- The program educates and gives an effective way to communicate energy efficiency and modifies behavior through awareness and product knowledge.
- Avista participates in workshops, conferences, energy fairs and community events throughout Avista's service territory in Washington and Idaho, to spread the energy efficiency message.
- Distributes energy efficiency materials, such as, CFLs and weatherization products to introduce the use of such products to our customers.
- Informs residential customers about the energy efficiency options and rebates available to them through Avista rebates.

Measures Incorporated within the Program: 2010-2013

Measure-Weatherization Product Distribution	Incentive(Product Cost)
CFL	$2.00
Rope Caulk	$1.00
Window Seal	$6.00
Showerheads	$3.00
Draft Stoppers	$1.00
V-Seal	$2.00

[48] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

Program Activity

Residential programs have benefitted from the sustained customer outreach campaign, Geographic Saturation, which educates the customer on the availability of Avista's energy efficiency programs. This program encourages customers to take action through participation in currently offered programs. It has also provided customers with energy efficiency information.

Program Changes

The 2010 business plan included a planned reduction in the number of scheduled events. Consequently, Avista scaled down its Geographic Saturation Program by participating in 41 community events throughout its service territory. In the few years prior, Avista participated in twice as many events. During those years we had reached and educated a significant number of customers. Avista concluded that we had succeeded in our goal to provide significant outreach to both rural and urban Avista customer communities and it was time to scale down the outreach efforts.

In 2011, Avista coordinated the community outreach program and developed a new approach, known as "outreach in a box". The "outreach in a box" can be used by the DSM or other Avista departments to promote current rebates and educate customers about energy efficiency. During 2011, DSM staff participated in selected community energy fairs and public engagements.

In 2012, Avista continued its approach to limit DSM-led outreach to select community events and focused on energy fairs and vendor outreach. Avista also continued to maintain DSM tools for other departments to leverage for use at their public engagements. This approach also known as "outreach in a box" was well received as DSM-led events reduced from over 50 to less than a dozen while making DSM messaging and support available to other Avista departments wanting to include energy efficiency awareness in their efforts.

Geographic Saturation – Electric List of Measures

Measure Description	UES (annual kWh)[49]	Non-Energy Benefits	Measure Life[50]
CFL Bulb	23.74	n/a	7

[49] UES are drawn from Avista's Technical Reference Manual as updated by Cadmus after their evaluation of Avista's 2011 energy efficiency programs.

[50] Measure lives were drawn from Avista's Technical Reference Manual as updated by Cadmus after their evaluation of Avista's 2011 energy efficiency programs.

LOW INCOME – ELECTRIC

Electric Low Income	2012	2011	2010
Participants (rebates)	214	378	191
Energy Savings (kWh)	274,949	236,767	78,835
Energy Savings (Therms) – interactive	(7,781)	n/a	n/a
Non-energy Benefits	$167,836	$40,587	$76,617
Total Resource Cost B/C ratio	1.07	0.43	0.83
Program Administrator Cost B/C ratio	0.67	0.38	0.46
Participant B/C ratio	n/a	6.14	n/a
Rate Impact Measure B/C ratio	0.48	0.25	0.36
Net-to-gross factor[51]	1.00	1.00	1.00
Discount Rate	7.01%	6.80%	6.80%
Non-Incentive Expenses[52]	$29,284	$31,937	$63,563
Incentive Expenses	$385,955	$383,244	$194,983

Program Description

Avista contracts with one community action agency to serve our Idaho service territory low income customers from Grangeville to Sandpoint and Post Falls to Wallace. This same agency also serves a small county in Washington state. The agency has the infrastructure in place to income qualify potential participants as well as provide the audit and installation of the identified measures.

A list of Avista approved measures with a high predictability of adequate cost-effectiveness is provided to the agency each year. Other measures may be submitted for approval if cost-effectiveness is in question. Health and human safety measures that are necessary to ensure the habitability of the home in order for residents to benefit from energy saving investments are allowed under these programs.

The agency completes installation of efficiency measures at no cost to qualified customers. Administrative fees are paid to the agency for delivery of these programs.

Below is the "Approved" Measure list for installation by the agency in Avista electrically heated homes:

- insulation for ceiling, wall, floor and duct
- air infiltration
- electric to natural gas conversions for space and water heat
- high efficient electric water heaters
- Energy Star® doors
- Energy Star® windows

Below is the " Pre-Approval" Measure list (must receive Avista authorization before installation):

- electric resistance heat to air source heat pump conversion
- high efficient air source heat pump installation
- Energy Star Energy Star® refrigerators

[51] The net-to-gross factor is assumed to be 1 for low income.

[52] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

Program Activity

Initial results of impact and process evaluations were becoming available in 2012. The amount of energy savings for measures being claimed in the low income residence was often in excess of what was being used by the entire home. Adjustments were made mid-way through 2012 to modify the unit energy savings (UES) amounts for measures in the event the actual residence was utilizing far less energy than the savings that were being claimed. This was an attempt to provide more accurate estimates of energy savings and improve realization rates for the evaluation on 2012 participation.

Program Changes

The Low Income Program is on-going and is reviewed on as needed. The 2012 measures mentioned in the Program Description were available in 2011 and 2010. The notable change began in 2010 to try to manage towards a better Total Resource Cost test. The development of the "Low Income Total Resource Cost Calculator" (LITRCC) occurred in late 2009/early 2010 and has been revised and improved over time to have a better working knowledge of where the program may be in the realm of cost-effectiveness at any given time during the program. This process is still in place at this time.

Low Income – Electric List of Measures

Measure Description	UES (annual kWh)[53]	Non-Energy Benefits[54]	Measure Life[55]
E Air Infiltration	0.31/sq ft	n/a	20
E Energy Star® Doors	248.21	Rebate Amt - $50	45
E Energy Star® Windows	0.33/sq ft	Rebate Amt –(Sq Ft * $3.99)	45
E HE Water Heater	105	$500	13
E Insulation – Ceiling/Attic	0.51/sq ft	n/a	45
E Insulation – Duct	0.53/sq ft	n/a	18
E Insulation – Floor	1.83/sq ft	n/a	45
E Insulation – Wall	1.83/sq ft	n/a	45
E Electric to Natural Gas Furnace Conversion	8,213.81	$1,500	25
E Electric to Natural Gas Water Conversion	3,042.63	$500	13

[53] UES are drawn from Avista's Technical Reference Manual as updated by Cadmus after their evaluation of Avista's 2011 energy efficiency programs.

[54] Other than Health & Human Safety, which is considered a dollar for dollar NEB, low income NEBs for each measure were calculated and provided by program implementation based on incremental cost difference between high-efficiency and stand efficiency options.

[55] Measure lives were drawn from Avista's Technical Reference Manual as updated by Cadmus after their evaluation of Avista's 2011 energy efficiency programs.

LOW INCOME – NATURAL GAS

Natural Gas Low Income	2012	2011	2010
Participants (rebates)	257	281	225
Energy Savings (kWh) – interactive	-485	n/a	n/a
Energy Savings (Therms)	9,363	12,835	8,886
Non-energy Benefits	$122,981	$64,464	n/a
Total Resource Cost B/C ratio	0.53	0.63	0.47
Program Administrator Cost B/C ratio	0.19	0.54	0.42
Participant B/C ratio	n/a	2.82	n/a
Rate Impact Measure B/C ratio	0.15	0.37	0.31
Net-to-gross factor[56]	1.00	1.00	1.00
Discount Rate	5.37%	4.17%	4.17%
Non-Incentive Expenses[57]	$45,200	$43,570	$60,839
Incentive Expenses	$314,027	$211,706	$184,591

Program Description

Avista contracts with one community action agency to serve our Idaho service territory low income customers from Grangeville to Sandpoint and Post Falls to Wallace. This same agency also serves a small county in Washington state. The agency has the infrastructure in place to income qualify potential participants as well as provide the audit and installation of the identified measures.

A list of Avista approved measures with a high predictability of adequate cost-effectiveness is provided to the agency each year. Other measures may be submitted for approval if cost-effectiveness is in question. Health and human safety measures that are necessary to ensure the habitability of the home in order for residents to benefit from energy saving investments are allowed under these programs.

The agency completes installation of efficiency measures at no cost to qualified customer. Administrative fees are paid to the agency for delivery of these programs.

Below is the "Approved" Measure list for installation by the agency in natural gas heated homes:

- insulation for ceiling, wall, floor and duct
- air infiltration
- Energy Star® doors
- Energy Star® windows

Below is the "Pre-Approved" Measure list the agency may consider (must receive Avista authorization before installation):

- furnaces
- water heaters
- wall heaters

[56] The net-to-gross factor is assumed to be 1 for low income.

[57] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

Program Activity

Initial results of impact and process evaluations were becoming available in 2012. The amount of energy savings for measures being claimed in the low income residence was often in excess of what was being used by the entire home. Adjustments were made mid-way through 2012 to modify the unit energy savings (UES) amounts for measures in the event the actual residence was utilizing far less energy than the savings that were being claimed. This was an attempt to provide more accurate estimates of energy savings and improve realization rates for the evaluation on 2012 participation.

Program Changes

The Low Income Program is on-going and is reviewed on as needed. The 2012 measures mentioned in the Program Description were available in 2011 and 2010. In 2010 an effort began to try to manage towards a better Total Resource Cost test. The development of the "Low Income Total Resource Cost Calculator" (LITRCC) occurred in late 2009/early 2010 and has been revised and improved over time to have a better working knowledge of where the program may be in the realm of cost-effectiveness at any given time during the program. This process is still in place.

Low Income – Natural Gas List of Measures

Measure Description	UES (annual therms)[58]	Non-Energy Benefits	Measure Life[59]
G Air Infiltration	0.01/sq ft[60]	n/a	20
G Energy Star® Doors	8.47[61]	Rebate Amt - $50	45
G Energy Star® Windows	22.46/home	Rebate Amt –(Sq Ft * $3.99)	45
G HE Furnace	103	Rebate Amt - $700	20
G Insulation – Ceiling/Attic	66.56/home	n/a	45
G Insulation – Duct	0.02/sq ft[62]	n/a	18[63]
G Insulation – Floor	66.56/home	n/a	45[64]
G Insulation – Wall	66.56/home	n/a	45
G Programmable Thermostat	14[65]	n/a	10

[58] UES are drawn from Avista's Technical Reference Manual as updated by Cadmus after their evaluation of Avista's 2011 energy efficiency programs.

[59] Measure lives were drawn from Avista's Technical Reference Manual as updated by Cadmus after their evaluation of Avista's 2011 energy efficiency programs.

[60] Since no natural gas UES was available in the TRM, Avista used the BTU-equivalent of the electric UES.

[61] Ibid.

[62] Ibid.

[63] Assumed the same measure life as was used for electric duct sealing in low income homes.

[64] Assumed the same measure life as was used for electric floor insulation in low income homes.

[65] Since no natural gas UES was available in the TRM, Avista used the BTU-equivalent of the electric UES

NONRES – PRESCRIPTIVE CLOTHES WASHERS ELECTRIC & NATURAL GAS

Electric Clothes Washers	2012	2011	2010
Participants (rebates)	0	0	2
Energy Savings (kWh)	n/a	n/a	10,152
Energy Savings (Therms) – interactive	n/a	n/a	n/a
Non-energy Benefits	n/a	n/a	$3,334
Total Resource Cost B/C ratio	n/a	n/a	2.01
Program Administrator Cost B/C ratio	n/a	n/a	2.74
Participant B/C ratio	n/a	n/a	3.41
Rate Impact Measure B/C ratio	n/a	n/a	0.89
Net-to-gross factor	n/a[66]	67.4%[67]	87.0%[68]
Discount Rate	7.01%	6.80%	6.80%
Non-Incentive Expenses[69]	n/a	n/a	$232
Incentive Expenses	n/a	n/a	$2,530

Natural Gas Clothes Washers	2012	2011	2010
Participants (rebates)	0	0	2
Energy Savings (kWh) – interactive	n/a	n/a	n/a
Energy Savings (Therms)	n/a	n/a	506
Non-energy Benefits	n/a	n/a	$5,202
Total Resource Cost B/C ratio	n/a	n/a	1.06
Program Administrator Cost B/C ratio	n/a	n/a	1.44
Participant B/C ratio	n/a	n/a	1.42
Rate Impact Measure B/C ratio	n/a	n/a	0.61
Net-to-gross factor	67.4%	67.4%[70]	87.0%[71]
Discount Rate	5.37%	4.17%	4.17%
Non-Incentive Expenses[72]	n/a	n/a	$323
Incentive Expenses	n/a	n/a	$1,671

[66] Since net-to-Gross results on 2012 programs were not available at the time of this report, Avista used net-to-gross factors from the most recent net-to-gross study.
[67] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.
[68] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.
[69] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.
[70] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.
[71] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.
[72] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

Program Description

Rebates are available for the installation of qualifying new equipment in commercial facilities with electric service on a commercial rate schedule provided by Avista for the hot water heater. A rebate is provided to the customer after proof of purchase and other appropriate documentation has been provided. Customers have 90 days from installation of the equipment to apply for an Avista rebate. The following are the measures that were eligible for electric rebates in 2012 in this category. Any differences from the 2012 program offering will be addressed by year later in this document.

Clothes Washers that either meet the Energy Star® or the Consortium for Energy Efficiency Specifications for commercial clothes washers are eligible for a $200 incentive per unit.

Program Activity

All rebates related to natural gas were discontinued in November 2012. The Company's integrated resource plan for natural gas was evaluated in 2012 and identified a significant drop in avoided costs. As a result, natural gas rebate programs did not pass the cost effectiveness criteria. The Company filed a request with the Commission to "discontinue" natural gas rebate programs temporarily. In the event natural gas avoided costs start to rise, these programs will be re-evaluated for cost effectiveness. This filing was approved and natural gas rebates were no longer available as of November 1, 2012.

Other 2012 activities included meetings to help educate vendors from a variety of sectors (HVAC, insulation, builders) about Avista programs and protocol.

Program Changes

The Commercial Clothes Washer Program is on-going and changes are made on an as needed basis. Listed below are the notable differences in the measures offered and the rebates available in those prior program years.

2010

The specifications for commercial clothes washers changed in 2010 and the program was modified in May from the measures and incentive provided below to what they are currently.

$250 Incentive for Energy Star® Equipment
$250 Incentive for CEE Tier 1 Equipment
$350 Incentive for CEE Tier 2 Equipment
$400 Incentive for CEE Tier 3 Equipment

Estimated Savings and Cost-effectiveness Components

RTF recommends a UES of 828 kWh at site and a measure life of 7 years. The two projects reported in 2010, one had a seven year estimated useful life and one had a ten year estimated useful life. Estimated useful life is one of many data input for each project. Non-energy benefits were provided for each of these projects. These were different amounts and provided by individual customers. The savings claimed were calculated using a prescriptive clothes washer calculator.

NONRESIDENTIAL –ENERGYSMART GROCER ELECTRIC

	2012	2011	2010
Participants (rebates)	88	144	145
Energy Savings (kWh)	1,586,096	2,430,313	4,872,650
Energy Savings (Therms) – interactive	(892)	(8,317)	(9,667)
Non-energy Benefits	n/a	n/a	n/a
Total Resource Cost B/C ratio	2.06	1.22	2.29
Program Administrator Cost B/C ratio	3.75	2.34	4.07
Participant B/C ratio	2.65	1.98	2.30
Rate Impact Measure B/C ratio	1.18	0.84	1.45
Net-to-gross factor	96.0%	96.0%[73]	90.0%[74]
Discount Rate	7.01%	6.80%	6.80%
Non-Incentive Expenses[75]	$71,787	$226,163	$543,484
Incentive Expenses	$228,179	$343,040	$633,463

Program Description

Customers are eligible to receive rebates and incentives on energy-efficient upgrades through the EnergySmart Grocer Program. The program helps grocery stores, supermarkets, convenience stores, and other customers with commercial refrigeration save money by reducing their energy use. The program offers personalized facility assessments to identify efficiency opportunities and incentives to offset the upfront costs of efficiency projects, making it easy and affordable for participating businesses to achieve significant savings on their utility bills. To be eligible for incentives, customers must be Avista electric customers on a nonresidiential rate schedule.

The following are measures that were eligible for electric rebates in 2012 through this program:

- Low Temp Open Case to Reach-in Case $150 per linear foot of case
- Medium Temp Open Case to Reach-in Case $50 per linear foot of case
- Low Temp Reach-in to High Efficiency Reach-in Case $150 per linear foot of case
- Low Temp Coffin to High Efficiency Reach-in $55 per linear foot of case
- Medium Temp Open Case to High Efficiency Open Case $20 per linear foot of case
- Special Doos with Low/No ASH for Low Temperature Reach-in $200 per door
- Add doors to Medium Temp Walk-in Reach-in Case $120 per linear foot of case
- Reach-in Case Light: T12 to Low Power LED, Retrofit $31 per linear foot of LED
- Reach-in Case Light: T12 to High Power LED, Retrofit $21 per linear foot of LED
- Reach-in Case Light: T8 to Low Power LED, Retrofit $21 per linear foot of LED
- Reach-in Case Light: T8 to High Pwer LED, Retrofit $12 per linear foot of LED
- Reach-in Case Light: T8 to Low Power LED, New Case $21 per linear foot of LED
- Reach in Case Light: T8 to High Power LED, New Case $12 per linear foot of LED

[73] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.

[74] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.

[75] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

- Reach-in Case Light: Add Motion Sensor to Low Power LED $1 per linear foot of LED
- Reach-in Case Light: Add Motion Sensor to High Power LED $2 per linear foot of LED
- T-10/12 to T8, 6ft $30 per lamp
- T-10/12 to T8, 5 ft $30 per lamp
- T-10/12 to T8, 4 ft $30 per lamp
- Anti-Sweat Heat with Energy Management System $14 per linear foot of case
- Anti-Sweat Heat without Energy Management System- Med Temp $40 per linear foot of case
- Anti-Sweat Heat without Energy Management System- Low Temp $50 per linear foot of case
- Evaporated Fan- Walk-In ECM Controller- Low Temp- 1/10-1/20 HP $35 per motor controlled
- Evaporated Fan- Walk-In ECM controller- Med Temp- 1/10-1/20 HP $35 per motor controlled
- Controls-Visi cooler $90 per controller
- Strip Curtains for Supermaket Walk-in Cooler $5 per square foot
- Strip Curtains for Supermaket Walk-in Freezer $5 per square foot
- Strip Curtains for Convenience Store Walk-in Freezer $5 per square foot
- Strip Curtains for Restaurant Walk-in Freezer $5 per square foot
- Gaskets for Walk-in Cooler-Main Door $25 per door
- Gaskets for Walk-in Freezer-Main Door $65 per door
- Gaskets for Reach-in Glass Door, Medium Temp $25 per door
- Gaskets for Reach-in Glass Door, Low Temp $40 per door
- Auto-closers for Walk-in Freezer $250 per closer
- Auto-closers for Walk-in Cooler $25 per closer
- Auto-closers for Glass Reach-in Doors- Freezer $40 per closer
- Auto-closers for Glass Reach-in Doors- Cooler $40 per closer
- Evaporator Motors- Shaded Pole to ECM in Display cases $55 per motor
- Evaporator Motors- Shaded Pole to ECM in Walk-in $140 per motor
- Evaporator Motors- Shaded Pole to PSC in Display cases $25 per motor
- Evaporator Motors- Shaded Pole to PSC in Walk-ins $40 per motor
- Condenser Fan-VSD $100 per fan hp
- EMCs for Compressor Head Fans $80 per motor
- High Efficiency Multiplex Compressor System $235 per ton
- Efficient/Oversized Condenser for Multiples $110 per ton
- Controls-Floating Head Pressure with Variable Frequency Drive (VFD) $80 per hp
- Controls-Floating Head Pressure without VFD $60 per hp
- Controls-Floating Suction Pressure $15 per hp
- Floating Head Pressure on Singles, LT condensing Unit $100 per hp
- Floating Head Pressure on Singles, MT condensing Unit $100 per hp
- Floating Head Pressure on Singles, LT Remote Condenser $100 per hp
- Floating Head Pressure on Singles, MT Remote Condenser $100 per hp
- Efficient Compressors- Low Temp $45 per ton

Program Activity

Activities in 2012 included vendor meetings with vendors from a variety of sectors (HVAC, insulation, builders) to educate about Avista programs and protocols.

Program Changes

The Commercial EnergySmart Program is on-going and changes are made as needed. No significant changes have occurred.

Estimated Savings and Cost-effectiveness Components

No UES exist for the regional EnergySmart Grocer program since this is implemented by a third-party contractor. Therefore, the estimated savings for this program are subject to annual evaluation. For purposes of the most recent annual report, a 15 year useful measure life was used.

NONRESIDENTIAL –ENERGYSMART GROCER NATURAL GAS

	2012	2011	2010
Participants (rebates)	0	0	1
Energy Savings (kWh) – interactive	n/a	n/a	n/a
Energy Savings (Therms)	n/a	n/a	2,457
Non-energy Benefits	n/a	n/a	n/a
Total Resource Cost B/C ratio	n/a	n/a	0.44
Program Administrator Cost B/C ratio	n/a	n/a	2.43
Participant B/C ratio	n/a	n/a	0.47
Rate Impact Measure B/C ratio	n/a	n/a	0.77
Net-to-gross factor	96.0%	96.0%[76]	90.0%[77]
Discount Rate	5.37%	4.17%	4.17%
Non-Incentive Expenses[78]	n/a	n/a	$3,349
Incentive Expenses	n/a	n/a	$3,780

Program Description

Customers are eligible to receive rebates and incentives on energy-efficient upgrades through the EnergySmart Grocer Program. The program helps grocery stores, supermarkets, convenience stores, and other customers with commercial refrigeration save money by reducing their energy use. The program offers personalized facility assessments to identify efficiency opportunities and incentives to offset the upfront costs of efficiency projects, making it easy and affordable for participating businesses to achieve significant savings on their utility bills. To be eligible for incentives, customers must be Avista retail natural gas customers on a non-residiential rate schedule. Natural gas measures are done on a custom basis.

Program Activity

All rebates related to natural gas were discontinued in November 2012. The Company's integrated resource plan for natural gas was evaluated in 2012 and identified a significant drop in avoided costs. As a result, natural gas rebate programs would not pass the cost effectiveness criteria. The Company filed a request to the Commission to "discontinue" natural gas rebate programs temporarily. In the event natural gas avoided costs start to rise, these programs will be re-evaluated for cost-effectiveness. This filing was approved and natural gas rebates were no longer available as of November 1, 2012.

Other 2012 activities included vendor meetings with vendors from a variety of sectors (HVAC, insulation, builders) to educate about Avista programs and protocols.

Program Changes

The Commercial EnergySmart Grocer Program is on-going and changes are made as needed.

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[76] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.

[77] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.

[78] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

Estimated Savings and Cost-effectiveness Components

No UES exist for the regional EnergySmart Grocer program since this is implemented by a third-party contractor. Therefore, the program is subject to annual evaluation and a 15 year measure life is used for cost-effectiveness purposes.

NONRESIDENTIAL – FOOD SERVICE EQUIPMENT ELECTRIC

	2012	2011	2010
Participants (rebates)	21	31	28
Energy Savings (kWh)	111,600	242,269	110,271
Energy Savings (Therms) – interactive	n/a	n/a	n/a
Non-energy Benefits	$9,753	$13,720	$8,436
Total Resource Cost B/C ratio	1.77	1.68	2.01
Program Administrator Cost B/C ratio	4.61	4.85	7.65
Participant B/C ratio	2.01	2.05	1.26
Rate Impact Measure B/C ratio	1.07	0.98	1.76
Net-to-gross factor	67.4%[79]	67.4%[80]	87.0%[81]
Discount Rate	7.01%	6.80%	6.80%
Non-Incentive Expenses[82]	$4,985	$5,389	$3,985
Incentive Expenses	$12,060	$22,169	$13,039

Program Description

Rebates are available for the installation of qualifying food service equipment in commercial facilities with electric service on a commercial rate schedule provided by Avista. A rebate is provided to the customer after proof of purchase and other appropriate documentation has been provided. Customers have 90 days from installation of the equipment to apply for an Avista rebate. The following are the measures that were eligible for electric rebates in 2012 in this category. Any differences from the 2012 program offering will be addressed by year later in this document.

Commercial Fryer (Electric)

The commercial fryer must meet ENERGY STAR® specifications for energy efficiency or must have a tested heavy load cooking energy efficiency of ≥80% utilizing ASTM Standard F1361. Incentive is $150 each.

Commercial Steam Cooker (Electric)

The commercial steam cooker must meet ENERGY STAR® specifications for energy efficiency or must have a tested heavy load potato cooking energy efficiency of ≥50% utilizing ASTM Standard F1484. Incentives are $450 for a 3 Pan Steam Cooker, $570 for a 4 Pan Steam Cooker, $640 for a 5 Pan Steam Cooker and $720 for a 6 Pan Steam Cooker.

[79] Since net-to-Gross results on 2012 programs were not available at the time of this report, Avista used net-to-gross factors from the most recent net-to-gross study.

[80] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.

[81] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.

[82] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

Hot Food Holding Cabinets (Electric)
The hot food holding cabinets must meet ENERGY STAR® specifications for energy efficiency. Incentives are $300 for an electric hot food holding cabinet 9 to 12 feet, $400 for an electric hot food holding cabinet 12 to 18 feet, and $500 for an electric hot food holding cabinet over 8 feet.
Commercial Solid Door and Glass Door Refrigerators
The refrigeration system must be built-in (packaged). Cases with remote refrigeration systems do not qualify. ENERGY STAR® product lists for qualifying commercial refrigerators can be found at www.energystar.gov. Incentives are $50 for a solid 1 door Energy Star refrigerator, $70 for a solid 2 door Energy Star refrigerator, $90 for a solid 3 door Energy Star refrigerator, $50 for a glass 1 door Energy Star refrigerator, $80 for a glass 2 door Energy Star refrigerator and $100 for a glass 3 door Energy Star refrigerator.

Commercial Solid Door Frezers
The refrigeration system must be built-in (packaged). Cases with remote refrigeration systems do not qualify. ENERGY STAR product lists for qualifying commercial freezers can be found at www.energystar.gov. Incentives are $70 for a solid 1 door Energy Star freezer, $110 for a solid 2 door Energy Star freezer and $140 for a solid 3 door Energy Star freezer.

Vent Hood Controls
This rebate applies toward the purchase and installation of a new commercial kitchen exhaust hood control system installed in a dedicated commercial kitchen exhaust hood and make-up air system. If the vent hood has a dedicated make-up air unit (MAU) then the MAU fan must also be controlled to receive rebate. In this case, rebates are available for vent hood controls as well as for the installation of a VFD on the make-up air unit. Incentives are $650/kCFM for Vent Hood Variable Speed Control with Electric Space Heat and $650/kCFM and $130/HP for Combined Variable Speed Control of Vent Hood Make-Up Air Unit and Vent Hood Variable Speed Control with Electric Space Heat.

Commercial Convection Oven (Electric)
The tested oven must meet or exceed heavy load potato cooking energy efficiency of ≥70% utilizing ASTM Standard F1496. Incentives are $400 each.

Commercial Combination Oven (Electric)
The tested oven must meet or exceed heavy load cooking energy efficiency of ≥60% utilizing ASTM Standard F1639. Incentives are $1,000 each.

Commercial Griddle (Electric)
The tested griddle must meet or exceed heavy load cooking efficiency of ≥70% utilizing ASTM Standard F1275. Incentives are $250 each.

Commercial Dishwashers
Qualifying dishwashers must meet ENERGY STAR® specifications. Incentives are $250 each for under counter, $1,000 for Single Tank Door Type, $1,500 for Single Tank Conveyor and $2,000 for Multi Tank Conveyor.

Commercial Ice Machines
Qualifying ice machines must be ENERGY STAR® (or equivalent CEE Tier 2) or CEE Tier 3. Air-cooled machines (self-contained, ice making heads or remote condensing) are eligible. Water-cooled machines

are eligible if they are installed on a closed loop or remote evaporative condenser system. The test method must be in accordance with the Air Conditioning and Refrigeration Institute (ARI) Standard 810.

To qualify, the entire ARI tested ice making system must be purchased. Remote machines must be purchased with qualifying remote condenser or remote condenser/compressor units. Incentives are as follows:

ENERGY STAR® or CEE Tier 2 Ice Machines

- $100/Each for a 101-200 lbs/day capacity
- $125/Each for a 201-300 lbs/day capacity
- $125/Each for a 301-400 lbs/day capacity
- $125/Each for a 401-500 lbs/day capacity
- $125/Each for a 501-1000 lbs/day capacity
- $200/Each for a 1001-1500 lbs/day capacity
- $380/Each for a Over 1500 lbs/day capacity

Super Efficient CEE Tier 3 Ice Machines

- $200/Each for a 101-200 lbs/day capacity
- $200/Each for a 201-300 lbs/day capacity
- $200/Each for a 301-400 lbs/day capacity
- $200/Each for a 401-500 lbs/day capacity
- $200/Each for a 501-1000 lbs/day capacity
- $300/Each for a 1001-1500 lbs/day capacity
- $500/Each for a Over 1500 lbs/day capacity

Program Activity

Activities in 2012 included vendor meetings with vendors from a variety of sectors (HVAC, insulation, builders) to educate about Avista programs and protocols.

Program Changes

The Commercial Food Service Equipment Program is on-going and changes are made on an as needed basis. Listed below are the notable differences in the measures offered and the rebates available in those prior program years.

<u>2010</u>

August 1, 2010, Avista eliminated Hot Water Circulating Pump Time clocks and the CEE Tier 2 Refrigerators and Freezers. The incentives were changed for the solid door refrigerators as follows:

Solid 1 Door	was	$70	changed to	$50
Solid 2 Door	was	$90	changed to	$70
Solid 3 Door	was	$140	changed to	$90

Avista eliminated the stand alone measure of Variable Speed Control of Vent Hood Make-Up Air Unit and added two new additional measures to combine this measure with Vent Hood Variable Speed Control with Electric Space Heat.

The measures above were offered at the following incentives:

Time clock Control of Electric Hot Water Heater Circulating Pump - The time clock is to turn off the DHW recirculation pump after facility operating hours. Incentive is $40 per unit.

CEE Tier 2 Freezer, Solid 1 Door	$150 Each
CEE Tier 2 Freezer, Solid 2 Door	$200 Each
CEE Tier 2 Freezer, Solid 3 Door	$250 Each
CEE Tier 2 Refrigerator, Solid 1 Door	$100 Each
CEE Tier 2 Refrigerator, Solid 2 Door	$150 Each
CEE Tier 2 Refrigerator, Solid 3 Door	$200 Each
CEE Tier 2 Refrigerator, Glass 1 Door	$100 Each
CEE Tier 2 Refrigerator, Glass 2 Door	$150 Each
CEE Tier 2, Refrigerator, Glass 3 Door	$200 Each

Estimated Savings and Cost-effectiveness Components

No UES exists for the electric prescriptive food service program but is rather calculated through a prescriptive calculator. The estimated savings for this program are subject to annual evaluation. Historically, Avista has used a 12 year useful measure life for cost-effectiveness purposes.

NONRESIDENTIAL – FOOD SERVICE EQUIPMENT NATURAL GAS

	2012	2011	2010
Participants (rebates)	6	10	7
Energy Savings (kWh) – interactive	n/a	n/a	n/a
Energy Savings (Therms)	10,169	6,340	12,721
Non-energy Benefits	$2,210	$10,533	$4,397
Total Resource Cost B/C ratio	0.74	1.08	0.89
Program Administrator Cost B/C ratio	1.86	2.38	3.99
Participant B/C ratio	1.42	1.44	1.02
Rate Impact Measure B/C ratio	0.57	0.81	0.87
Net-to-gross factor	67.4%[83]	67.4%[84]	87.0%[85]
Discount Rate	5.37%	4.17%	4.17%
Non-Incentive Expenses[86]	$14,688	$8,292	$3,349
Incentive Expenses	$8,041	$10,470	$12,366

Program Description

Rebates are available for the installation of qualifying food service equipment in commercial facilities with retail natural gas service provided by Avista. A rebate is provided to the customer after proof of purchase and other appropriate documentation has been provided. Customers have 90 days from installation of the equipment to apply for an Avista rebate.

The following are the measures that were eligible for natural gas rebates in 2012 in this category. Any differences from the 2012 program offering will be addressed by year later in this document.

Commercial Fryer (Natural Gas)

The commercial fryer must meet ENERGY STAR® specifications for energy efficiency or must have a tested heavy load cooking energy efficiency of ≥50% utilizing ASTM Standard F1361. Incentive is $500 each.

Commercial Steam Cooker (Natural Gas)

The commercial steam cooker must meet ENERGY STAR® specifications for energy efficiency or must have a tested heavy load potato cooking energy efficiency of ≥38% utilizing ASTM Standard F1484. Incentive is $500 for 3 Pan Steam Cooker, $540 for a 4 Pan Steam Cooker, $590 for a 5 Pan Steam Cooker and $630 for 6 Pan Steam Cooker.

[83] Since net-to-Gross results on 2012 programs were not available at the time of this report, Avista used net-to-gross factors from the most recent net-to-gross study.

[84] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.

[85] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.

[86] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

Vent Hood Controls

This rebate applies toward the purchase and installation of a new commercial kitchen exhaust hood control system installed in a dedicated commercial kitchen exhaust hood and make-up air system. If the vent hood has a dedicated make-up air unit (MAU) then the MAU fan must also be controlled to receive rebate. In this case, rebates are available for vent hood controls as well as for the installation of a VFD on the make-up air unit. Incentives are $650/kCFM for Vent Hood Variable Speed Control with Natural Gas Space Heat and $640/kCFM & $130/HP for Combined Variable Speed Control of Vent Hood Make-Up Air Unit and Vent Hood Variable Speed Control with Natural Gas Space Heat

Commercial Convection Oven (Natural Gas)

The tested oven must meet or exceed heavy load potato cooking energy efficiency of ≥40% utilizing ASTM Standard F1496. Incentives are $500 each.

Commercial Combination Oven (Natural Gas)

The tested oven must meet or exceed heavy load cooking energy efficiency of ≥40% utilizing ASTM Standard F1639. Incentives are $1,000 each.

Commercial Rack Oven (Natural Gas)

The tested rack oven must meet or exceed baking energy efficiency of ≥50% utilizing ASTM Standard F2093. Incentives are $1,000 for a single oven and $2,000 for a double oven.

Commercial Griddle (Natural Gas)

The tested griddle must meet or exceed heavy load cooking efficiency of ≥40% utilizing ASTM Standard F1275. Incentives are $250 each.

Commercial Dishwashers

Qualifying dishwashers must meet ENERGY STAR® specifications. Incentives are $250 each for undercounter, $1,000 for Single Tank Door Type, $1,500 for Single Tank Conveyor and $2,000 for Multi Tank Conveyor.

Program Activity

All rebates related to natural gas were discontinued in November 2012. The Company's integrated resource plan for natural gas was evaluated in 2012 and identified a significant drop in avoided costs. As a result, natural gas rebate programs would not pass the cost effectiveness criteria. The Company filed a request to the Commission to "discontinue" natural gas rebate programs temporarily. In the event natural gas avoided costs start to rise, these programs will be re-evaluated for cost effectiveness. This filing was approved and natural gas rebates were no longer available as of November 1, 2012.

Other 2012 activities included meetings to help educate vendors from a variety of sectors (HVAC, insulation, builders) about Avista programs and protocol.

Program Changes

The Commercial Food Service Equipment Program is on-going and changes are made on an as needed basis. Listed below are the notable differences in the measures offered and the rebates available in those prior program years.

2010

August 1, 2010 Avista eliminated the High Efficiency (HE) Natural Gas Hot Water Heaters and Hot Water Circulating Pump Time clocks and the HE Gas Char Broiler. Avista eliminated the stand alone measure of Variable Speed Control of Vent Hood Make-Up Air Unit and added two new measures to combine this measure with Vent Hood Variable Speed Control with Natural Gas Heat.

The measures above were offered at the following incentives:

High Efficiency Gas Hot Water Heaters - To qualify for a rebate, the hot water heater must have an energy factor of equal to or greater than 64%. Qualifying hot water heaters can be determined using GAMA's Consumer's Directory of Certified Efficiency Ratings for Heating and Water Heating Equipment www.gamanet.org. Incentives of $50 per unit.

High Efficiency Condensing Natural Gas Hot Water Heater, Over 75,000 BTU/HR - To qualify for a rebate, the hot water heater must have an energy factor of equal to or greater than 90%. Qualifying hot water heaters can be determined using GAMA's Consumer's Directory of Certified Efficiency Ratings for Heating and Water Heating Equipment www.gamanet.org. Incentives are $50 per unit. Incentives are $1,000 for 75,000 BTU/hr to 250,000 BTU/hr capacity and $2,000 for units over 250,000 BTU/hr capacity.

Point of Use Natural Gas Hot Water Heater - To qualify for a rebate, the tankless hot water heater must have a thermal efficiency of equal to or greater than 83% or and energy factor of equal to or greater than 69%. Qualifying hot water heaters can be determined using GAMA's Consumer's Directory of Certified Efficiency Ratings for Heating and Water Heating Equipment www.gamanet.org. Incentives are $60 per unit.

Timeclock Control of Natural Gas Hot Water Heater Circulating Pump - The timeclock is to turn off the DHW recirculation pump after faciltiy operating hours. Incentive is $40 per unit.

High Efficiency Natural Gas Char Broiler - The char broiler cooking energy density is not to exceed 10.4 kBTU/fr/sq/ft or cooking grid area. The efficiency must be based on the ASTM Standard Test Method F1695-03. Incentive is $400 per unit.

Estimated Savings and Cost-effectiveness Components

No UES exists for the natural gas prescriptive food service program but is rather calculated through a prescriptive calculator. The estimated savings for this program are subject to annual evaluation. Historically, Avista has used a 12 year useful measure life for cost-effectiveness purposes.

NONRESIDENTIAL – GREEN MOTORS REWIND ELECTRIC

	2012	2011	2010
Participants (rebates)	14	38	19
Energy Savings (kWh)	14,481	29,990	57,425
Energy Savings (Therms) – interactive	n/a	n/a	n/a
Non-energy Benefits	n/a	n/a	n/a
Total Resource Cost B/C ratio	1.85	1.42	2.99
Program Administrator Cost B/C ratio	3.76	3.57	4.01
Participant B/C ratio	2.04	1.61	5.58
Rate Impact Measure B/C ratio	1.21	1.04	1.38
Net-to-gross factor	67.4%[87]	67.4%[88]	87.0%[89]
Discount Rate	7.01%	6.80%	6.80%
Non-Incentive Expenses[90]	$546	$555	$4,124
Incentive Expenses	$1,740	$3,300	$6,760

Program Description

Incentives of $1 per horsepower are available for Green Rewinds of NEMA rated motors from 15 hp - 500 hp. Incentives are paid as an instant rebate on the invoice from a participating service center. To be eligible for this rebate, you must be an Avista electric customer on a non-residiential rate schedule.

Program Activity

2012 activities included meetings to help educate vendors from a variety of sectors (HVAC, insulation, builders) about Avista programs and protocol.

Program Changes

This program has had no significant changes during the 2010-2012 time period.

Estimated Savings and Cost-effectiveness Components

No UES exists for the electric prescriptive green motors rewind program. The estimated savings are calculated through the use of a prescriptive calculator. The estimated savings for this program are subject to annual evaluation. Historically, Avista has used a 10 year useful measure life for cost-effectiveness purposes.

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[87] Since net-to-Gross results on 2012 programs were not available at the time of this report, Avista used the net-to-gross factors from the most recent net-to-gross study.

[88] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.

[89] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.

[90] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

NONRESIDENTIAL – HVAC VARIABLE FREQUENCY DRIVES ELECTRIC

	2012	2011	2010
Participants (rebates)	2	13	5
Energy Savings (kWh)	61,555	1,473,147	139,626
Energy Savings (Therms) – interactive	n/a	n/a	n/a
Non-energy Benefits	n/a	n/a	n/a
Total Resource Cost B/C ratio	3.19	2.55	5.24
Program Administrator Cost B/C ratio	6.80	6.54	8.51
Participant B/C ratio	2.78	2.61	6.18
Rate Impact Measure B/C ratio	1.65	1.28	1.75
Net-to-gross factor	67.4%[91]	67.4%[92]	87.0%[93]
Discount Rate	7.01%	6.80%	6.80%
Non-Incentive Expenses[94]	$3,459	$42,355	$5,716
Incentive Expenses	$4,555	$118,295	$11,040

Program Description

Incentives apply to retrofits of variable frequency drives installed on commercial heating, ventilation and air conditioning equipment served on an Avista nonresidential rate schedule. New construction projects are not eligible for incentives. Include primary pumps and fans only; secondary or spare pumps or fans do not qualify. A rebate is provided to the customer after proof of purchase and other appropriate documentation has been provided. Customers have 90 days from installation of the equipment to apply for an Avista rebate.

The following are the measures that were eligible for rebates in 2012 in this category. Any differences from the 2012 program offering will be addressed by year later in this document. Rebates are for the following applications:

- Supply fan or supply air handler
- Boiler feed water pump
- Supply fan on VAV packaged or rooftop HVAC unit
- Cooling tower pump
- Return fan of return air handler
- Chilled water pump
- Return fan on VAV packaged or rooftop HVAC unit
- Condensing water pump
- Building exhaust fan

[91] Since net-to-Gross results on 2012 programs was not available at the time of this report, Avista used the net-to-gross factors from the most recent net-to-gross study.
[92] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.
[93] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.
[94] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

Incentives are paid at $80/HP for VFD Fans, $85/HP for VFD Cooling Pump only and $100/HP for VFD Heating Pump only or Combined Heating and Cooling Pump.

Program Activity

Activities in 2012 included vendor meetings with vendors from a variety of sectors (HVAC, insulation, builders) to educate about Avista programs and protocols. Mailings to vendors and past participants went out in 2011 to inform of program changes.

Program Changes

This program was modified in April of 2011 to only allow for retrofits due to new construction code changes that occurred in 2010.

Estimated Savings and Cost-effectiveness Components

No UES exists for the electric prescriptive HVAC VFD program. The estimated savings are calculated through the use of a prescriptive calculator. The estimated savings for this program are subject to annual evaluation. Avista engineers estimate the useful life for each nonresidential project. For VFDs the estimated useful life varies from 10 to 16 years.

NONRESIDENTIAL – STANDBY GENERATOR BLOCK HEATER ELECTRIC

	2012	2011	2010
Participants (rebates)	5	4	n/a
Energy Savings (kWh)	9,442	6,112	n/a
Energy Savings (Therms) – interactive	n/a	n/a	n/a
Non-energy Benefits	n/a	n/a	n/a
Total Resource Cost B/C ratio	1.94	0.59	n/a
Program Administrator Cost B/C ratio	3.25	2.43	n/a
Participant B/C ratio	3.61	0.66	n/a
Rate Impact Measure B/C ratio	0.94	0.80	n/a
Net-to-gross factor	67.4%[95]	67.4%[96]	87.0%[97]
Discount Rate	7.01%	6.80%	6.80%
Non-Incentive Expenses[98]	$571	$174	n/a
Incentive Expenses	$2,000	$1,600	n/a

Program Description

Incentives are available for a retrofit from a thermosiphon circulating block heater to a pump driven circulating block heater that operates continuously. Rebates are available for commercial facilities with electric service provided by Avista Utilities on a nonresidential rate schedule. Incentives are offered at $400 per heater. A rebate is provided to the customer after proof of purchase and other appropriate documentation has been provided. Customers have 90 days from installation of the equipment to apply for an Avista rebate.

Program Activity

2012 activities included meetings to help educate vendors from a variety of sectors (HVAC, insulation, builders) about Avista programs and protocol. Mailings to vendors and customers that may have a standby generator went out when the program was rolled out.

Program Changes

This program was rolled out in April of 2011 and has had no changes.

Estimated Savings and Cost-effectiveness Components

No UES exists for the electric prescriptive standby generator block heater program. The estimated savings are calculated through the use of a prescriptive calculator. The estimated savings for this program are subject to annual evaluation. Avista uses an estimated useful life of 16 years for cost-effectiveness purposes.

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[95] Since net-to-Gross results on 2012 programs were not available at the time of this report, Avista used the net-to-gross factors from the most recent net-to-gross study.

[96] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.

[97] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.

[98] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

NONRESIDENTIAL – POWER MANAGEMENT FOR PC NETWORKS ELECTRIC

	2012	2011	2010
Participants (rebates)	1	n/a	n/a
Energy Savings (kWh)	21,000	n/a	n/a
Energy Savings (Therms) – interactive	n/a	n/a	n/a
Non-energy Benefits	n/a	n/a	n/a
Total Resource Cost B/C ratio	0.98	n/a	n/a
Program Administrator Cost B/C ratio	3.70	n/a	n/a
Participant B/C ratio	0.85	n/a	n/a
Rate Impact Measure B/C ratio	1.10	n/a	n/a
Net-to-gross factor	67.4%[99]	67.4%[100]	87.0%[101]
Discount Rate	7.01%	6.80%	6.80%
Non-Incentive Expenses[102]	$644	n/a	n/a
Incentive Expenses	$2,100	n/a	n/a

Program Description

Rebates are available for the installation of qualifying software in commercial facilities with electric service provided by Avista on a commercial rate schedule. This incentive is for installing a network based power management software solution. The software must provide regular energy use reports with overall average personal computer (PC) energy savings. The software must control every available level of power management offered by the PC hardware and monitor at the time of installation. Achieve a minimum average savings of 100 annual kWh per controlled PC. Provide usage data prior to installation of controls for two consecutive weeks during a normal operating period. This data will be used for comparison of usage once controls are installed. Software must remain operational for a minimum of 3 years with the ability for continued reporting every six months of savings/use data upon Avista's request. Incentives are paid at $10 per controlled PC. A rebate is provided to the customer after proof of purchase and other appropriate documentation has been provided. Customers have 90 days from installation of the equipment to apply for an Avista rebate.

Program Activity

Activities in 2012 included vendor meetings with vendors from a variety of sectors (HVAC, insulation, builders) to educate about Avista programs and protocols.

Program Changes

There have been no significant program changes.

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[99] Since net-to-Gross results on 2012 programs were not available at the time of this report, Avista used the net-to-gross factors from the most recent net-to-gross study.

[100] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.

[101] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.

[102] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

Estimated Savings and Cost-effectiveness Components

No UES exists for the electric prescriptive standby power management for the PC networks program. The estimated savings are calculated through the use of a prescriptive calculator. The estimated savings for this program are subject to annual evaluation. Avista uses an estimated useful life of 8 years for cost-effectiveness purposes.

NONRESIDENTIAL – DEMAND-CONTROLLED VENTILATION ELECTRIC

	2012	2011	2010
Participants (rebates)	n/a	3	4
Energy Savings (kWh)	n/a	29,483	23,676
Energy Savings (Therms) – interactive	n/a	n/a	n/a
Non-energy Benefits	n/a	n/a	n/a
Total Resource Cost B/C ratio	n/a	3.63	2.51
Program Administrator Cost B/C ratio	n/a	7.24	5.05
Participant B/C ratio	n/a	5.38	2.64
Rate Impact Measure B/C ratio	n/a	1.14	1.37
Net-to-gross factor	67.4%[103]	67.4%[104]	87.0%[105]
Discount Rate	7.01%	6.80%	6.80%
Non-Incentive Expenses[106]	n/a	$842	$599
Incentive Expenses	n/a	$2,042	$3,275

Program Description

Avista offers incentives for installing ventilation controls on existing buildings that use carbon dioxide levels to measure occupancy and modify the percentage of outside air based on variable levels. Rather than setting intake rates for maximum occupancy levels at all times, demand-controlled ventilation measures the approximate number of people occupying a space and resets the intake rates based on that measurement. In order to be eligible for incentives, conditioned spaces must be kept between 65 and 75 degrees during operating hours. Incentives are based on the total square footage of the controlled conditioned space with a 2,000 square feet minimum. Incentives will be paid at a rate of $.25 per square foot with a cap of 2,500 square foot per sensor. If the space has portable walls, each room must be controlled separately. Controlled space must meet a minimum of ASHREA 62 standards. This program is available where the fuel source used to heat the conditioned space must be purchased from Avista. A rebate is provided to the customer after proof of purchase and other appropriate documentation has been provided. Customers have 90 days from installation of the equipment to apply for an Avista rebate. The incentive for this measure is the square feet of controlled space times .25.

Program Activity

We did not have any activity for this program in 2012, as the program was discontinued in 2011.

Program Changes

The Demand Controlled Ventilation program ran the same in 2010 and 2011. The program was discontinued in September of 2011 and customers had until December to submit paperwork for rebates.

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[103] Since net-to-Gross results on 2012 programs were not available at the time of this report, Avista used the net-to-gross factors from the most recent net-to-gross study.

[104] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.

[105] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.

[106] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

Estimated Savings and Cost-effectiveness Components

No UES exists for the electric prescriptive demand-controlled ventilation program. The estimated savings are calculated through the use of a prescriptive calculator. The estimated savings for this program are subject to annual evaluation. Avista uses an estimated useful life of 16 years for cost-effectiveness purposes.

NONRESIDENTIAL – DEMAND CONTROLLED VENTILATION NATURAL GAS

	2012	2011	2010
Participants (rebates)	n/a	2	3
Energy Savings (kWh) – interactive	n/a	n/a	n/a
Energy Savings (Therms)	n/a	783	1,314
Non-energy Benefits	n/a	n/a	$4,397
Total Resource Cost B/C ratio	n/a	1.32	0.45
Program Administrator Cost B/C ratio	n/a	3.19	0.79
Participant B/C ratio	n/a	1.75	1.10
Rate Impact Measure B/C ratio	n/a	0.92	0.43
Net-to-gross factor	67.4%[107]	67.4%[108]	87.0%[109]
Discount Rate	5.37%	4.17%	4.17%
Non-Incentive Expenses[110]	n/a	$1,375	$792
Incentive Expenses	n/a	$950	$8,100

Program Description

Avista offers incentives for installing ventilation controls on existing buildings that use carbon dioxide levels to measure occupancy and modify the percentage of outside air based on variable levels. Rather than setting intake rates for maximum occupancy levels at all times, demand-controlled ventilation measures the approximate number of people occupying a space and resets the intake rates based on that measurement. In order to be eligible for incentives, conditioned spaces must be kept between 65 and 75 degrees during operating hours. Incentives are based on the total square footage of the controlled conditioned space with a 2,000 square feet minimum. Incentives will be paid at a rate of $.25 per square foot with a cap of 2,500 square foot per sensor. If the space has portable walls, each room must be controlled separately. Controlled space must meet a minimum of ASHREA 62 standards. This program is available where the fuel source used to heat the conditioned space must be purchased from Avista. A rebate is provided to the customer after proof of purchase and other appropriate documentation has been provided. Customers have 90 days from installation of the equipment to apply for an Avista rebate. The incentive for this measure is the square feet of controlled space times .25.

Program Activity

We did not have any activity for this program in 2012, as the program was discontinued in 2011.

Program Changes

The Demand Controlled Ventilation program ran the same in 2010 and 2011. The program was discontinued in September of 2011 and customers had until December to submit paperwork for rebates.

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[107] Since net-to-Gross results on 2012 programs were not available at the time of this report, Avista used net-to-gross factors from the most recent net-to-gross study.

[108] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.

[109] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.

[110] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

Estimated Savings and Cost-effectiveness Components

No UES exists for the natural gas prescriptive demand-controlled ventilation program but is rather calculated through a prescriptive calculator. The estimated savings for this program are subject to annual evaluation. Historically, Avista has used a 16 year useful measure life for cost-effectiveness purposes.

NONRESIDENTIAL – PRESCRIPTIVE WINDOWS & INSULATION ELECTRIC

	2012	2011	2010
Participants (rebates)	19	18	n/a
Energy Savings (kWh)	96,189	40,687	n/a
Energy Savings (Therms) – interactive	n/a	n/a	n/a
Non-energy Benefits	n/a	n/a	n/a
Total Resource Cost B/C ratio	2.81	1.92	n/a
Program Administrator Cost B/C ratio	4.71	4.89	n/a
Participant B/C ratio	3.95	3.04	n/a
Rate Impact Measure B/C ratio	1.29	0.86	n/a
Net-to-gross factor	67.4%[111]	67.4%[112]	87.0%[113]
Discount Rate	7.01%	6.80%	6.80%
Non-Incentive Expenses[114]	$6,737	$1,515	n/a
Incentive Expenses	$15,808	$6,125	n/a

Program Description

Rebates are available for the installation of qualifying insulation and window measures in commercial facilities with electric service as the primary heat source provided by Avista. A rebate is provided to the customer after proof of purchase and other appropriate documentation has been provided. Customers have 90 days from installation of the equipment to apply for an Avista rebate. The following are the measures that were eligible for electric rebates in 2012 in this category. Any differences from the 2012 program offering will be addressed by year later in this document.

New Construction Windows with a U-Factor less than or equal to 0.30 and a solar heat gain coefficient less than or equal to 035 is eligible for an incentive of $1.00 per square foot.

Retrofit Windows with a U-Factor less than or equal to 0.30 and a solar heat gain coefficient less than or equal to 0.35 is eligible for an incentive of $3.40 per square foot.

Wall Insulation for retrofits with existing insulation R4 or less and new R-Value at least R11 and up to R18 is eligible for an incentive of $0.30 per square foot.

Wall Insulation for retrofits with existing insulation R4 or less and new R-Value at least R19 or greater is eligible for an incentive of $0.35 per square foot.

Attic Insulation for retrofits with existing insulation R11 or less and new R-Value at least R30 and up to R44 is eligible for an incentive of $0.28 per square foot.

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[111] Since net-to-Gross results on 2012 programs were not available at the time of this report, Avista used the net-to-gross factors from the most recent net-to-gross study.

[112] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.

[113] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.

[114] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

Wall Insulation for retrofits with existing insulation R11 or less and new R-Value at least R45 or greater is eligible for an incentive of $0.35 per square foot.

Roof Insulation for retrofits with existing insulation R11 or less and new R-Value at least R30 or greater is eligible for an incentive of $0.28 per square foot.

Program Activity

Activities in 2012 included meetings to help educate vendors from a variety of sectors (HVAC, insulation, builders) about Avista programs and protocols.

Program Changes

The Commercial Windows and Insulation Program is an on-going program and changes are made as needed. This program was rolled out in January of 2011 and no significant changes have been made.

Estimated Savings and Cost-effectiveness Components

No UES exists for the electric prescriptive demand-controlled ventilation program. The estimated savings are calculated through the use of a prescriptive calculator. The estimated savings for this program are subject to annual evaluation. Avista uses an estimated useful life of 22 years for cost-effectiveness purposes.

NONRESIDENTIAL – PRESCRIPTIVE WINDOWS & INSULATION NATURAL GAS

	2012	2011	2010
Participants (rebates)	21	14	n/a
Energy Savings (kWh) – interactive	n/a	n/a	n/a
Energy Savings (Therms)	8,737	2,333	n/a
Non-energy Benefits	n/a	n/a	n/a
Total Resource Cost B/C ratio	0.59	1.72	n/a
Program Administrator Cost B/C ratio	1.29	3.58	n/a
Participant B/C ratio	1.41	2.61	n/a
Rate Impact Measure B/C ratio	0.48	0.94	n/a
Net-to-gross factor	67.4%[115]	67.4%[116]	87.0%[117]
Discount Rate	5.37%	4.17%	4.17%
Non-Incentive Expenses[118]	$19,898	$3,217	n/a
Incentive Expenses	$24,242	$5,195	n/a

Program Description

Rebates are available for the installation of qualifying insulation and window measures in commercial facilities with electric service as the primary heat source provided by Avista. A rebate is provided to the customer after proof of purchase and other appropriate documentation has been provided. Customers have 90 days from installation of the equipment to apply for an Avista rebate. The following are the measures that were eligible for natural gas rebates in 2012 in this category. Any differences from the 2012 program offering will be addressed by year later in this document.

New Construction Windows with a U-Factor less than or equal to 0.30 and a solar heat gain coefficient less than or equal to 035 is eligible for an incentive of $1.00 per square foot.

Retrofit Windows with a U-Factor less than or equal to 0.30 and a solar heat gain coefficient less than or equal to 0.35 is eligible for an incentive of $3.40 per square foot.

Wall Insulation for retrofits with existing insulation R4 or less and new R-Value at least R11 and up to R18 is eligible for an incentive of $0.30 per square foot.

Wall Insulation for retrofits with existing insulation R4 or less and new R-Value at least R19 or greater is eligible for an incentive of $0.35 per square foot.

Attic Insulation for retrofits with existing insulation R11 or less and new R-Value at least R30 and up to R44 is eligible for an incentive of $0.28 per square foot.

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[115] Since net-to-Gross results on 2012 programs were not available at the time of this report, Avista used net-to-gross factors from the most recent net-to-gross study.

[116] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.

[117] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.

[118] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

Wall Insulation for retrofits with existing insulation R11 or less and new R-Value at least R45 or greater is eligible for an incentive of $0.35 per square foot.

Roof Insulation for retrofits with existing insulation R11 or less and new R-Value at least R30 or greater is eligible for an incentive of $0.28 per square foot.

Program Activity

All rebates related to natural gas were discontinued in November 2012. The Company's integrated resource plan for natural gas was evaluated in 2012 and identified a significant drop in avoided costs. As a result, natural gas rebate programs were not passing the cost effectiveness criteria. The Company filed a request to the Commission to temporarily "discontinue" natural gas rebate programs. In the event natural gas avoided costs start to rise, these programs will be re-evaluated for cost effectiveness. This filing was approved and natural gas rebates were no longer available as of November 1, 2012.

Other 2012 activities included meetings to help educate vendors from a variety of sectors (HVAC, insulation, builders) about Avista programs and protocols.

Program Changes

The Commercial Windows and Insulation Program is an on-going program and changes are made as needed. This program was rolled out in January of 2011 and no significant changes have been made.

Estimated Savings and Cost-effectiveness Components

No UES exists for the electric prescriptive demand-controlled ventilation program. The estimated savings are calculated through the use of a prescriptive calculator. The estimated savings for this program are subject to annual evaluation. Avista uses an estimated useful life of 22 years for cost-effectiveness purposes.

NONRESIDENTIAL – PREMIUM EFFICIENCY MOTORS ELECTRIC

	2012	2011	2010
Participants (rebates)	n/a	10	14
Energy Savings (kWh)	n/a	148,436	308,757
Energy Savings (Therms) – interactive	n/a	n/a	n/a
Non-energy Benefits	n/a	n/a	n/a
Total Resource Cost B/C ratio	n/a	1.94	3.58
Program Administrator Cost B/C ratio	n/a	3.48	6.96
Participant B/C ratio	n/a	3.09	2.85
Rate Impact Measure B/C ratio	n/a	1.01	1.89
Net-to-gross factor	67.4%[119]	67.4%[120]	87.0%[121]
Discount Rate	7.01%	6.80%	6.80%
Non-Incentive Expenses[122]	n/a	$8,061	$10,884
Incentive Expenses	n/a	$20,430	$43,020

Program Description

Rebates are available for new motors that are in continuous operation only and must be listed on the CEE Premium Efficiency Motors list. The new motor must be in a commercial facility with electric service provided by Avista on a commercial rate schedule. A rebate is provided to the customer after proof of purchase and other appropriate documentation has been provided. Customers have 90 days from installation of the equipment to apply for an Avista rebate. The following are the measures and incentives that were eligible for rebates in 2012 in this category. Any differences from the 2012 program offering will be addressed by year later in this document.

Program Activity

In 2011, activities included vendor meetings with vendors from a variety of sectors (HVAC, insulation, builders) to educate about Avista programs and protocols. In addition, mailings were sent to vendors and past participants to inform them of program changes. Program manager visited motor distributors to educate and get input regarding program changes.

Program Changes

The Premium Efficiency Motor Program is on-going and changes are made on an as needed basis. Listed below are the notable differences in the measures offered and the rebates available in those prior program years.

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[119] Since net-to-Gross results on 2012 programs were not available at the time of this report, Avista used the net-to-gross factors from the most recent net-to-gross study.

[120] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.

[121] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.

[122] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

2011

This program was modified in July of 2011 due to standard changes that occurred in December of 2010. We changed our program to still offer incentives for motors that were above standard efficiency. The rebate was also changed to require that all motors be in continuous operation and be between 1 and 200 horsepower. To qualify, motors must be on the CEE Premium Efficiency Motors List.

2010

The incentives that were offered are listed below.

HorsePower	ODP inc	TEFC inc
1	$50.00	$50.00
1.5	-	$25.00
2	-	$20.00
3	-	$25.00
5	$100.00	-
7.5	$110.00	-
10	$80.00	-
15	$105.00	$140.00
20	$150.00	$140.00
25	$180.00	$200.00
30	$200.00	$300.00
40	$250.00	$250.00
50	$250.00	-
60	$250.00	$190.00
75	$400.00	$250.00
100	$575.00	$650.00
125	$640.00	$650.00
150	$875.00	$850.00
200	-	$750.00

Estimated Savings and Cost-effectiveness Components

No UES exists for the electric prescriptive premium efficiency motors program. The estimated savings are calculated through the use of a prescriptive calculator. The estimated savings for this program are subject to annual evaluation. Avista uses an estimated useful life of 15 years for cost-effectiveness purposes.

NONRESIDENTIAL – PRESCRIPTIVE SIDE-STREAM FILTRATION ELECTRIC

	2012	2011	2010
Participants (rebates)	n/a	2	n/a
Energy Savings (kWh)	n/a	155,730	n/a
Energy Savings (Therms) – interactive	n/a	n/a	n/a
Non-energy Benefits	n/a	n/a	n/a
Total Resource Cost B/C ratio	n/a	0.57	n/a
Program Administrator Cost B/C ratio	n/a	3.67	n/a
Participant B/C ratio	n/a	0.41	n/a
Rate Impact Measure B/C ratio	n/a	1.14	n/a
Net-to-gross factor	67.4%[123]	67.4%[124]	87.0%[125]
Discount Rate	7.01%	6.80%	6.80%
Non-Incentive Expenses[126]	n/a	$4,221	n/a
Incentive Expenses	n/a	$24,300	n/a

Program Description

Avista offers incentives for the installation of permanent side-stream filtration systems on open loop chiller/cooling tower systems. Side-stream filtration systems are easily installed on new or existing systems. Side-Stream filtration does not replace normal maintenance, but helps the equipment operate more efficiently between normal cleaning and inspections. This program helps keep the exterior water loop cleaner and therefore makes the exchange of heating or cooling more efficient. Customers must have Avista electric service, a minimum filter efficiency of at least 75 percent, must filter at least 2 percent of the full chilled water circuit flow and must have automatic backwash system and controls. The filter medis must remove particles 0.5 microns and greater in size. If chiller and cooling tower systems are interconnected, the entire system must be filtered. This incentive is only available for open loop evaporative cooling tower/chiller systems. Normal annual teardown, inspection and maintenance of the chiller must still be performed and upon request, a copy of the annual maintenance report must be provided to Avista for two years after completion of the measure. A rebate is provided to the customer after proof of purchase and other appropriate documentation has been provided. Customers have 90 days from installation of the equipment to apply for an Avista rebate. The incentives for this measure are $18 per ton or 50 percent of the installed cost, whichever is less.

Program Activity

There was no activity for this program in 2012, as the program was discontinued in 2011. There were no Idaho participants in 2010.

[123] Since net-to-Gross results on 2012 programs were not available at the time of this report, Avista used the net-to-gross factors from the most recent net-to-gross study.

[124] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.

[125] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.

[126] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

Program Changes

The Side Stream Filtration program ran the same in 2010 and 2011. The program was discontinued in September of 2011 and customers had until December to submit paperwork for rebates.

Estimated Savings and Cost-effectiveness Components

No UES exists for the electric prescriptive premium efficiency motors program. The estimated savings are calculated through the use of a prescriptive calculator. The estimated savings for this program are subject to annual evaluation. Avista uses an estimated useful life of 15 years for cost-effectiveness purposes.

NONRESIDENTIAL – PRESCRIPTIVE LIGHTING ELECTRIC

	2012	2011	2010
Participants (rebates)	1,213	282	429
Energy Savings (kWh)	10,922,065	3,219,736	4,520,538
Energy Savings (Therms) – interactive	-75,213	-20,210	-26,809
Non-energy Benefits	$168,279	$61,346	$49,542
Total Resource Cost B/C ratio	1.42	2.05	3.07
Program Administrator Cost B/C ratio	2.08	4.06	6.19
Participant B/C ratio	2.58	3.83	3.34
Rate Impact Measure B/C ratio	0.91	0.90	1.37
Net-to-gross factor	67.4%	67.4%[127]	87.0%[128]
Discount Rate	7.01%	6.80%	6.80%
Non-Incentive Expenses[129]	$488,468	$71,380	$131,105
Incentive Expenses	$3,056,199	$329,636	$530,004

Program Description

This program is intended to prompt commercial electric customers to increase the energy efficiency of their lighting equipment through direct financial incentives. It indirectly supports the infrastructure and inventory necessary to ensure that the installation of high-efficiency equipment is a viable option for the customer.

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

Below is the "Approved" Measure list:

Measure	Incentive
Exterior	
70-90 watt HID Fixture to 10-20 watt approved LED	$75.00
100 watt HID Fixture to 20-25 watt Induction Fluorescent Fixture	$100.00
150-175 watt HID Fixture to 20-30 watt approved LED Wall Pack Fixture	$175.00
175 watt HID Fixture to 40 watt Induction Fluorescent Fixture	$150.00
250 watt HID Fixture to 50-60 watt LED Fixture	$200.00
250 watt HID Fixture to 75-85 watt LED Fixture	$175.00
400 watt HID Fixture to125 watt approved LED	$275.00
400 watt HID Fixture to 250 watt Digital HID	$175.00
750 watt HID Fixture to 210-240 watt approved LED	$350.00
750 watt HID Fixture to 320-400 watt digital HID	$300.00
1000 watt HID Fixture to 400-470 watt approved LED	$475.00

[127] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.

[128] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.

[129] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

1000 watt HID Fixture to 450- 575 watt Digital HID Fixture	$400.00
20-30 watt Incandescent sign lighting to LED or Low-Wattage Equivalent	$10.00
20-60 watt Incandescent sign lighting to Cold Cathode	$10.00
Interior	
250 watt HID Fixture to 4-Lamp T8 Fixture HO or 2-Lamp T5HO 5-foot Fixture	$55.00
250 watt HID Fixture to 4-Lamp T8 Fixture HO or 2-Lamp T5HO 5-foot Fixture with OC Sensor	$90.00
400 watt HID Fixture to 4-Lamp T5 High-Output Fixture	$110.00
400 watt HID Fixture to 4-Lamp T5 High-Output Fixture with OC Sensor	$150.00
400 watt HID Fixture to 6-Lamp T8 High Performance Fixture (4-Foot Lamps)	$100.00
400 watt HID Fixture to 6-Lamp T8 High Performance Fixture (4-Foot Lamps) with OC Sensor	$140.00
400 watt HID Fixture to 8-Lamp T8 High Performance Fixture (4-Foot Lamps)	$120.00
400 watt HID Fixture to 8-Lamp T8 High Performance Fixture (4-Foot Lamps) with OC Sensor	$155.00
Over 100 Watt to 200 watt Incandescent to Compact Fluorescent Lamp or Fixture (40-55 watt)	$30.00
Over 200 watt Incandescent to Compact Fluorescent Lamp or Fixture (55-65 watt)	$40.00
60 watt or greater Incandescent to Dimmable Compact Fluorescent, LED or Cold Cathode**	$10.00
100 watt or greater incandescent flood to Ceramic Metal Halide (25 watt)	$20.00
150 watt or greater incandescent to New Linear High Performance T8 Fluorescent or LED Fixture	$40.00
90 watt or greater incandescent to 15 watt or less LED	$35.00
120 watt or greater incandescent to 30 watt or less LED	$45.00
Incandescent exit sign to new LED exit signs	$20.00
Fixture with no occupancy sensor to over 170 watts on occupancy sensor	$30.00

Activity

Portfolio acquisition and cost-effectiveness projections are closely related. The screening of measures and programs to exclude those that are not anticipated to be cost-effective on a net TRC basis (absent reasonable exceptions) clearly have an influence upon acquisition. Shifting cost-effectiveness is most frequently the result of changing technologies, the cost of those technologies, avoided costs, measure life and energy savings.

TRC cost-effectiveness results in the most recent business plan for the overall Prescriptive Commercial Lighting Incentive Program:

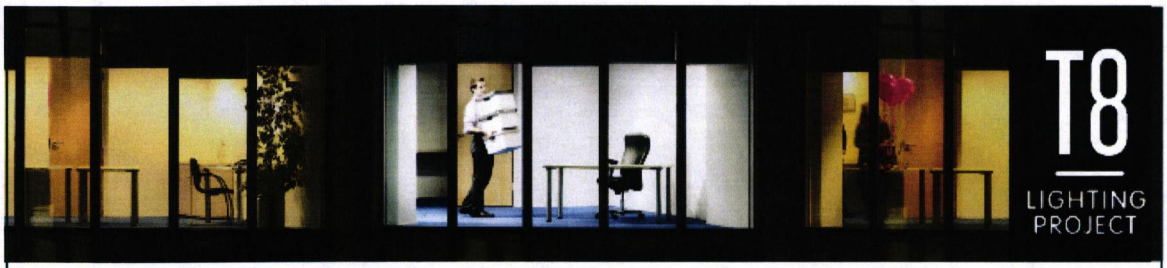
Measure package	*Overall portfolio gross sub-TRC w/o NIUC*	*Overall portfolio gross sub-TRC w NIUC*	*Overall portfolio net sub-TRC w NIUC*
PSC-Lighting	**5.33**	**4.19**	**4.06**

Program Changes

In December 2012, the T12 to T8 lighting conversion program ended. The non-T12 Prescriptive Commercial Lighting incentives offerings for both Exterior and Interior energy efficient lighting retrofits have been changed and expanded. To describe the numerous program changes, the T12 Prescriptive Commercial Lighting Incentives announcements for 2012 and 2013 have been included on the following pages.

Estimated Savings and Cost-effectiveness Components

No UES exists for the electric prescriptive lighting program. The estimated savings are calculated through the use of a prescriptive calculator. The estimated savings for this program are subject to annual evaluation. Non-energy benefits are specific to the project and are provided by the various customers where applicable. Avista uses an estimated useful life of 12 years for cost-effectiveness purposes.



COMMERCIAL LIGHTING INCENTIVES PROGRAM ANNOUNCEMENT

Act Now! Beginning January 1, 2012, for a limited time, there will be INCREASED INCENTIVES FOR MOST T12 FLUORESCENT CONVERSIONS

Avista is pleased to offer incentives for energy efficient lighting upgrades to our valued commercial customers. Incentives for T12 and other energy efficient lighting retrofits are undergoing changes. We now have two Commercial Lighting Incentive Agreement Forms (enclosed):

- T12 Fluorescent Conversions
- Interior and Exterior for Non T12 Lighting Conversions

Please note the lighting program changes listed below:

Program Change	Existing Light	Retrofit Light	Incentive	Notes:
Addition	1000 watt HID	400–575 watt Digital HID	$500	Exterior Retrofit
Addition	400 watt HID	250 watt Digital HID	$200	Exterior Retrofit
Addition	250 watt HID	75–85 watt LED*	$175	Exterior Retrofit
Addition	250 watt HID	50–60 watt LED*	$200	Exterior Retrofit
Addition	175 watt HID	20–26 watt LED*	$175	Exterior Retrofit
Addition	70–90 watt HID	10–15 watt LED*	$75	Exterior Retrofit
Addition	175 watt HID	40 watt Induction	$150	Exterior Retrofit
Addition	100 watt HID	20–25 watt Induction	$100	Exterior Retrofit
Discontinued	1000 watt HID	400 watt Induction	$0	Effective 2-15-12**
Discontinued	400 watt HID	200 watt Induction	$0	Effective 2-15-12**
Discontinued	100 watt or less incandescent	30 watt or less CFL	$0	Effective 2-15-12**
Now Custom or Site-Specific* **	8' T12 HO & VHO & exterior T12	Other	Varies	See Avista Account Executive before starting project
Temporary Incentive Increase	T12 (4' or 8') fixture	T8 (4' or 8') fixture Replace/retrofit	See Agreement	Ends 12-31-12****
Temporary Incentive Increase	T12 (4' or 8') fixture	T5 (4' or 5') fixture Replace/retrofit	See Agreement	Ends 12-31-12****
Temporary Incentive Increase	T12 (4' or 8') fixture	LED qualified* fixture	See Agreement	Ends 12-31-12****

* It is a requirement to use qualified LEDs. For more information and listing of qualified product go to: www.lightingdesignlab.com or www.designlights.org
** Discontinued incentives will be effective 2-15-12; however, incentive paperwork will be accepted until 5-15-12 for projects currently in progress.
*** For more information on Site-Specific programs, please see side 2 of this Announcement.
**** Energy efficiency upgrade documents must be completed and submitted to Avista by 12-31-2012; no extensions or exceptions.

COMMERCIAL LIGHTING INCENTIVES PROGRAM ANNOUNCEMENT

Avista is pleased to offer incentives for energy efficient lighting upgrades to our valued commercial customers. On December 31, 2012, prescriptive incentives forT12 conversions ended; however, please keep in mind that Avista offers a variety of prescriptive incentives for Non-T12 Lighting Retrofits. In 2013, Avista has expanded the interior and exterior incentive options which are now available on two separate Prescriptive Commercial Lighting Incentive Agreement Forms (enclosed):

- Commercial Lighting Incentive Agreement- Interior Lighting Program
- Commercial Lighting Incentive Agreement- Exterior Lighting Program

Please note the lighting program changes listed below. In order to qualify for the old incentive level where incentives have decreased, submit a Commercial Lighting Incentive - Interior and Exterior application by April 30, 2013. New measures or increased incentives are effective February 1, 2013.

Program Change	Existing Light	Retrofit Light	Old Incentive***	New Incentive****	Notes
Decreased Incentive Level	1000 watt HID	400-575 watt Digital HID	$500	$400	Exterior
Addition	1000 watt HID	400-470 watt LED*	N/A	$475	Exterior
Addition	750 watt HID	320-400 watt Digital HID	N/A	$300	Exterior
Addition	750 watt HID	210-240 watt LED*	N/A	$350	Exterior
Decreased Incentive Level	400 watt HID	250 watt Digital HID	$200	$150	Exterior
Addition	400 watt HID	125 watt LED*	N/A	$275	Exterior
Modified Eligibility	150-175 watt HID	20-30 watt LED* Wallpack	N/A	$175	Exterior
Modified Eligibility	70-90 watt HID	10-20 watt LED*	N/A	$75	Exterior
Increased Incentive Level	400 watt HID	4 lamp T5	$105	$110	Interior
Increased Incentive Level	400 watt HID	8 lamp High Performance T8**	$100	$120	Interior
Modified Eligibility	Interior HID	High Performance** T8 now required	N/A	Varies	Interior
Varied Incentive Level	Interior HID	T5 or High Performance** T8 with Occupancy Sensor	N/A	$35-45	Interior
Increased Incentive Level	Over 100-200 watt incandescent	40-55 watt CFL/Fixture	$15	$30	Interior
Increased Incentive Level	Over 200 watt incandescent	55-65 watt CFL/Fixture	$25	$40	Interior
Decreased Incentive Level	100 watt or over incandescent	25 watt Ceramic Metal Halide	$30	$20	Interior
Increased Incentive Level	90 watt or over incandescent	20 watt or less LED* Lamp or Fixture	$24	$35	Interior
Increased Incentive Level	120 or over watt fixture	30 watt or less LED* Fixture	$34	$45	Interior
Decreased Incentive Level	Incandescent Exit Sign	New LED Exit Sign	$25	$20	Interior
Modified Eligibility	No Occupancy Sensor	Over 170 watts on Occupancy Sensor	N/A	$30	Interior

* It is a requirement to use qualified LEDs. For more information and listing of qualified products go to: www.lightingdesignlab.com or www.designlights.org
** High Performance T8s are now required. For more information on qualified product, go to: www.cee1.org.
***In order to qualify for old incentive levels, please submit a Commercial Lighting Incentive - Interior and Exterior application by April 30, 2013.
****New incentives take effect February 1, 2013.

NONRESIDENTIAL –LED TRAFFIC SIGNALS ELECTRIC

	2012	2011	2010
Participants (rebates)	0	4	8
Energy Savings (kWh)	n/a	534,368	208,668
Energy Savings (Therms) – interactive	n/a	n/a	n/a
Non-energy Benefits	n/a	$1,109,728	$750,238
Total Resource Cost B/C ratio	n/a	14.47	13.65
Program Administrator Cost B/C ratio	n/a	2.92	3.85
Participant B/C ratio	n/a	49.72	24.00
Rate Impact Measure B/C ratio	n/a	0.67	0.87
Net-to-gross factor	67.4%[130]	67.4%[131]	87.0%[132]
Discount Rate	7.01%	6.80%	6.80%
Non-Incentive Expenses[133]	n/a	$14,896	$3,240
Incentive Expenses	n/a	$47,890	$208,668

Program Description

Rebates are available for the replacement of incandescent traffic signals with new LED signals. Incentives are paid for pedestrian signals, red, yellow and green traffic signals and traffic arrows. This program is available to traffic signal owners where the signal is operated with Avista electricity. A rebate is provided to the customer after proof of purchase and other appropriate documentation has been provided. Customers have 90 days from installation of the equipment to apply for an Avista rebate.

The measures and incentives are listed below:

LED Pedestrian 9 inch Signal	$35 Each
LED Pedestrian 12 inch Signal	$45 Each
LED Traffic Signal 8 inch Green Signal	$35 Each
LED Traffic Signal 8 inch Red Signal	$25 Each
LED Traffic Signal 8 inch Yellow Signal	$10 Each
LED Traffic Signal 12 inch Green Signal	$55 Each
LED Traffic Signal 12 inch Red Signal	$30 Each
LED Traffic Signal 12 inch Yellow Signal	$10 Each
LED Traffic Arrows 8 inch Green Arrow	$10 Each
L LED Traffic Arrows 8 inch Red Arrow	$25 Each
ED Traffic Arrows 8 inch Yellow Arrow	$10 Each
LED Traffic Arrows 12 inch Green Arrow	$30 Each

[130] Since net-to-Gross results on 2012 programs were not available at the time of this report, Avista used the net-to-gross factors from the most recent net-to-gross study.

[131] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.

[132] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.

[133] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

LED Traffic Arrows 12 inch Red Arrow $30 Each
LED Traffic Arrows 12 inch Yellow Arrow $30 Each

Program Activity

This program was discontinued in 2011.

Program Changes

The LED Traffic Signal program ran the same in 2010 and 2011. The program was discontinued in September of 2011 and customers had until December to submit paperwork for rebates.

Estimated Savings and Cost-effectiveness Components

No UES exists for the electric prescriptive LED traffic signals program. The estimated savings are calculated through the use of a prescriptive calculator. The estimated savings for this program are subject to annual evaluation. Avista uses an estimated useful life of 8 years for cost-effectiveness purposes.

NONRESIDENTIAL – PRESCRIPTIVE HVAC NATURAL GAS

	2012	2011	2010
Participants (rebates)	24	12	n/a
Energy Savings (kWh) – interactive	n/a	n/a	n/a
Energy Savings (Therms)	12,810	4,126	n/a
Non-energy Benefits	n/a	n/a	n/a
Total Resource Cost B/C ratio	1.17	2.07	n/a
Program Administrator Cost B/C ratio	1.68	3.94	n/a
Participant B/C ratio	5.32	3.97	n/a
Rate Impact Measure B/C ratio	0.50	0.86	n/a
Net-to-gross factor	67.4%[134]	67.4%[135]	87.0%[136]
Discount Rate	5.37%	4.17%	4.17%
Non-Incentive Expenses[137]	$23,372	$3,695	n/a
Incentive Expenses	$16,616	$6,246	n/a

Program Description

Rebates are available for the installation of qualifying new equipment in commercial facilities with retail natural gas service provided by Avista. A rebate is provided to the customer after proof of purchase and other appropriate documentation has been provided. Customers have 90 days from installation of the equipment to apply for an Avista rebate. The following are the measures that were eligible for natural gas rebates in 2012 in this category. Any differences from the 2012 program offering will be addressed by year later in this document.

Heating System	Incentive per Input kBtu
90%–94.9% AFUE NG Single Stage Furnace <225 kBtu/hr	$3.25
95% AFUE or greater NG Single Stage Furnace <225 kBtu/hr	$4.25
90%–94.9%AFUE or greater NG Multi Stage Furnace <225 kBtu/hr	$4.25
95% AFUE or greater NG Multi Stage Furnace <225 kBtu/hr	$5.25
85%–89.9% AFUE NG Boiler <300 kBtu/hr	$6.00
90% AFUE or greater NG Boiler <300 kBtu/hr	$7.25

Program Activity

All rebates related to natural gas were discontinued in November 2012. The Company's integrated resource plan for natural gas was evaluated in 2012 and identified a significant drop in avoided costs. As a result, natural gas rebate programs would not pass the cost effectiveness criteria. The Company filed a request to the Commission to "discontinue" natural gas rebate programs temporarily. In the event

[134] Since net-to-Gross results on 2012 programs were not available at the time of this report, Avista used net-to-gross factors from the most recent net-to-gross study.

[135] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.

[136] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.

[137] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

natural gas avoided costs start to rise, these programs will be re-evaluated cost effectiveness. This filing was approved and natural gas rebates were no longer available as of November 1, 2012.

Other 2012 activities included vendor meetings with vendors from a variety of sectors (HVAC, insulation, builders) to educate about Avista programs and protocols. In addition, mailings were sent to vendors and past participants to inform them of program changes.

Program Changes

The Commercial Natural Gas HVAC Program is on-going and changes are made on an as needed basis. This program was rolled out in January of 2011.

Listed below are the notable differences in the measures offered and the rebates available in those prior program years.

2012

A 90% or greater Thermal Efficiency NG Unit Heater offered at $5.00 per kBtu was offered as a market transformation measure when the program was first rolled out and removed from the program in March of 2012.

95% AFUE or greater NG Multi Stage Furnace <225 kBtu/hr offered at $5.25 per kBtu was added to the program in April of 2012.

2011

A 90% or greater Thermal Efficiency NG Unit Heater offered at $5.00 per kBtu was offered as a market transformation measure when the program was first rolled out.

In July of 2011 the incentives for natural gas boilers were reevaluated and increased due to incremental cost changes. We had processed one rebate at the old rate and we refigured that rebate at the new rate and sent the customer the difference. The original incentives were:

85%–89.9% AFUE NG Boiler <300 kBtu/hr	$1.25
90% AFUE or greater NG Boiler <300 kBtu/hr	$1.75

Estimated Savings and Cost-effectiveness Components

No UES exists for the natural gas prescriptive HVAC program. The estimated savings are calculated through the use of a prescriptive calculator. The estimated savings for this program are subject to annual evaluation. Avista uses an estimated useful life of 16 years for cost-effectiveness purposes.

NONRESIDENTIAL – PRESCRIPTIVE STEAM TRAP REPLACEMENTS NATURAL GAS

	2012	2011	2010
Participants (rebates)	n/a	n/a	1
Energy Savings (kWh) – interactive	n/a	n/a	n/a
Energy Savings (Therms)	n/a	n/a	42,088
Non-energy Benefits	n/a	n/a	n/a
Total Resource Cost B/C ratio	n/a	n/a	5.72
Program Administrator Cost B/C ratio	n/a	n/a	5.82
Participant B/C ratio	n/a	n/a	386.59
Rate Impact Measure B/C ratio	n/a	n/a	0.72
Net-to-gross factor	67.4%[138]	67.4%[139]	87.0%[140]
Discount Rate	5.37%	4.17%	4.17%
Non-Incentive Expenses[141]	n/a	n/a	$11,752
Incentive Expenses	n/a	n/a	$6,120

Program Description

Avista offered incentives for repair or replacement of failed steam traps. Steam systems with faulty steam traps can waste significant amounts of energy and maintenance on steam traps is often ignored. The steam trap incentive program is intended to increase awareness and incentivize customers and vendors to take action that previously had not been taken. Where steam traps are to be replaced, only new working valve traps are eligible and traps must have a strainer. A minimum of 95 percent of the steam generation must be provided by Avista retail natural gas. A rebate is provided to the customer after proof of purchase and other appropriate documentation has been provided. Customers have 90 days from installation of the equipment to apply for an Avista rebate. The incentives for this measure are below:

Pipe Size ½ inch	$120 Each
Pipe Size 3/4 inch	$140 Each
Pipe Size 1 inch	$165 Each
Pipe Size 1 ¼ inch	$200 Each
Pipe Size 1 ½ inch	$270 Each
Pipe Size 2 inch	$350 Each

Program Activity

There was no activity for this program in 2012, as the program was discontinued in 2011. In addition, there were no Idaho participants in 2011.

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[138] Since net-to-Gross results on 2012 programs were not available at the time of this report, Avista used net-to-gross factors from the most recent net-to-gross study.

[139] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.

[140] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.

[141] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

Program Changes

The Steam Trap Replacement program ran the same in 2010 and 2011. The program was discontinued in September of 2011 and customers had until December to submit paperwork for rebates.

Estimated Savings and Cost-effectiveness Components

No UES exists for the natural gas prescriptive HVAC program. The estimated savings are calculated through the use of a prescriptive calculator. The estimated savings for this program are subject to annual evaluation. Avista uses an estimated useful life of 5 years for cost-effectiveness purposes.

NONRESIDENTIAL – SITE SPECIFIC ELECTRIC

	2012	2011	2010
Participants (rebates)	122	139	204
Energy Savings (kWh)	5,860,004	6,208,953	6,968,310
Energy Savings (Therms) – interactive	-53,134	-22,873	-13,866
Non-energy Benefits	$59,163	$63,870	$160,472
Total Resource Cost B/C ratio	1.85	1.42	1.88
Program Administrator Cost B/C ratio	4.02	4.61	6.86
Participant B/C ratio	1.91	1.58	1.16
Rate Impact Measure B/C ratio	1.19	1.06	1.68
Net-to-gross factor	83.3%[142]	83.3%[143]	74.2%[144]
Discount Rate	7.01%	6.80%	6.80%
Non-Incentive Expenses[145]	$327,401	$174,810	$150,706
Incentive Expenses	$880,266	$715,810	$1,026,974

Program Description

The site specific program is available to all non-residential retail electric customers. This is the most comprehensive commercial/industrial program offerings and brings in the largest portion of energy savings to the overall energy efficiency portfolio. Commercial customers receive technical assistance and incentives in accordance with Schedule 90. The majority of site specific kilowatt hour savings are comprised of appliances, compressed air, HVAC, industrial process, motors (non-prescriptive), shell measures and custom lighting (non-prescriptive). The following is an outline of the 2012 program activity. Any differences in previous program years will be addressed, by year, later in this document.

Program Activity

Measures not covered by prescriptive program offers are evaluated under the site specific program. In accordance with Schedule 90 measures are eligible for incentives that show an energy efficiency savings of over a one year simple payback and under an eight year simple payback for lighting. Other measures must demonstrate over a one year simple payback and under a 13 year simple payback for incentive qualification.

The incentive is capped at fifty percent of the customer incremental cost of the efficiency investment. 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 and potentially an incentive. The Avista Utilities website is also used to communicate program requirements, incentives and provide forms. The Every Little Bit Campaign is a broad-based

[142] Since net-to-Gross results on 2012 programs were not available at the time of this report, Avista used the net-to-gross factors from the most recent net-to-gross study.
[143] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.
[144] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.
[145] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

approach about energy efficiency and may feature Avista's nonresidential customers with testimonials or case studies as to how energy efficiency has benefitted their business.

Program Changes

2011

The Site Specific Program operated in the same manner as outlined in 2012. In March 2011 the implementation of new incentive levels and simple pay-back criteria for electric efficiency measures went into effect. In November 2010, the Company filed with the Commission to reduce the incentive level and the simple payback criteria for eligible projects. Prior to this filing, the Company's approach to energy efficiency was to pursue all cost-effective kilowatt hours by offering financial incentives for most energy saving measures with a simple financial payback of over one year and to use the most effective "mechanism" to deliver energy efficiency services to customers. The revision to Schedule 90 incentive levels would no longer incentivize electric efficiency measures with a simple payback period of greater than 13 years. These projects may have longer periods of payback, and may not always be TRC cost-effective. The incentive level guidelines filed by the Company in November 2010 with implementation in March 2011 are still based upon the simple payback of the measure prior to the application of an incentive, and standardized measure cost(s).

2011 – Measures	*Simple Pay-Back*	*Incentive Level (cents/first year kWh savings)*
Electric Efficiency	*1 to under 2 years*	*$0.08*
	2 to under 4 years	*$0.12*
	4 to under 6 years	*$0.16*
	6 to under 8 years	*$0.20*
	*6 to under 13 years**	*$0.20*
	8 years and over+	*$0.00*
Fuel Efficiency	*1 to under 2 years*	*$0.01*
	2 to under 4 years	*$0.03*
	4 to under 6 years	*$0.05*
	6 to under 13 years	*$0.07*
	13 years and Over	*$0.00*

2010

The Site Specific Program operated in the same manner as outlined in 2011 with a notable exception. Incentives for electric efficiency measures were at a higher level in 2010 than in 2011. Prior to this filing, the Company's approach to energy efficiency was to pursue all cost-effective kilowatt hours by offering financial incentives for most energy saving measures with a simple financial payback of over one year and to use the most effective "mechanism" to deliver energy efficiency services to customers. The revision to Schedule 90 incentive levels would no longer incentivize electric efficiency measures with a simple payback period of greater than 13 years. These projects may have longer periods of payback, and may not always be TRC cost-effective. The incentive level guidelines have always been based upon the simple payback of the measure, prior to the application of an incentive, and standardized measure cost(s). Below find the incentive level available for program year 2010:

2010 – Measures	*Simple Pay-Back*	*Incentive Level (cents/first year kWh savings)*
Electric Efficiency	*1 to under 2 years*	*$0.08*
	2 to under 4 years	*$0.12*

	4 to under 6 years		*$0.16*
	6 to under 10 years		*$0.20*
	*Over 10 years**	*$0.20*	
	Over 10 years+	*$0.12*	
Fuel Efficiency	*1 to under 2 years*		*$0.01*
	2 to under 4 years		*$0.03*
	4 to under 6 years		*$0.05*
	Over 6 years		*$0.07*

Estimated Savings and Cost-effectiveness Components

No UES exists for the electric site-specific program. The estimated savings are calculated through the use of a prescriptive calculator. The estimated savings for this program are subject to annual evaluation. Avista uses various estimated useful lives depending on end-use and technology for cost-effectiveness purposes.

NONRESIDENTIAL – SITE SPECIFIC NATURAL GAS

	2012	2011	2010
Participants (rebates)	24	53	123
Energy Savings (kWh) – interactive	n/a	-16,978	-2,589
Energy Savings (Therms)	63,922	111,987	132,907
Non-energy Benefits	n/a	5,161	$91,899
Total Resource Cost B/C ratio	0.62	0.64	0.76
Program Administrator Cost B/C ratio	1.33	2.21	2.86
Participant B/C ratio	1.33	0.59	0.91
Rate Impact Measure B/C ratio	0.53	0.91	0.80
Net-to-gross factor	83.3%[146]	83.3%[147]	87.0%[148]
Discount Rate	5.37%	4.17%	4.17%
Non-Incentive Expenses[149]	$123,253	$234,994	$173,124
Incentive Expenses	$143,757	$332,932	$342,335

Program Description

The site specific program is available to all non-residential retail natural gas customers. This is the most comprehensive program in the commercial/industrial offers and brings in the largest portion of energy savings to the overall energy efficiency portfolio. Commercial customers receive technical assistance and incentives in accordance with Schedule 190. This approach allows a flexible response to any energy efficiency project that has demonstrable therm savings within allowable simple payback requirements. The majority of site specific therm savings are comprised of a variety of measures including but not limited to: appliances, HVAC, industrial process, and insulation. The following is an outline of the 2012 program activity. Any differences in previous program years will be addressed by year later in this document.

Program Activity

Measures not covered by prescriptive program offers are evaluated under the site specific program. In accordance with Schedule 190 measures are eligible for incentives that show an energy efficiency savings of over a one year but may not exceed 13 year simple payback. The incentive is capped at fifty percent of the customer incremental cost of the efficiency investment. Avista's Account Executives work with commercial customers to provide assistance in identifying energy efficiency opportunities. Customers receive technical assistance in determining potential energy and cost savings and potentially an incentive if the project is greater than a 1 year but less than a 13 year simple payback. The Avista Utilities website is also used to communicate program requirements, incentives and forms. The Every Little Bit Campaign is a broad-based approach about energy efficiency and may feature Avista's

[146] Since net-to-Gross results on 2012 programs were not available at the time of this report, Avista used net-to-gross factors from the most recent net-to-gross study.

[147] Per Net-to-Gross Evaluation of Avista's 2011 Demand-Side Management Programs dated June 12, 2012 as prepared by Cadmus.

[148] Per Net-to-Gross Evaluation of Avista's 2010 Demand-Side Management Programs dated April 19, 2011 as prepared by Cadmus.

[149] Incentives are directly charged while the non-incentive utility costs provided here are allocated based on avoided costs since the utility charges and tracks expenditures at the segment level rather than program level.

commercial customers with testimonials or case studies as to how energy efficiency has benefitted their business.

In November, 2012 all rebates related to natural gas buildings were discontinued. Avista's integrated resource plan (IRP) for natural gas was evaluated in 2012 and identified a significant drop in avoided costs. As a result, natural gas rebate programs would not pass the cost effectiveness criteria. The Company filed a request to the Commission to "discontinue" natural gas rebate programs temporarily. In the event natural gas avoided costs start to rise, these programs will be re-evaluated cost effectiveness. This filing was approved and natural gas rebates were no longer available as of November 1, 2012.

Program Changes

2011

The Site Specific Program operated in the same manner as outlined in 2012. In March 2011 the implementation of new incentive levels and simple pay-back criteria for natural gas efficiency measures went into effect. In November 2010, the Company filed with the Commission to reduce the incentive level and the simple payback criteria for eligible projects. Prior to this filing, the Company's approach to energy efficiency was to pursue all cost-effective therms by offering financial incentives for most energy saving measures with a simple financial payback of over one year and to use the most effective "mechanism" to deliver energy efficiency services to customers. The revision to Schedule 190 incentive levels would no longer incentivize natural gas efficiency measures with a simple payback period of greater than 13 years. These projects may have longer periods of payback, and may not always be TRC cost-effective. The incentive level guidelines filed by the Company in November 2010 with implementation in March 2011 are still based upon the simple payback of the measure prior to the application of an incentive, and standardized measure cost(s).

2011 – Measures	*Simple Pay-Back*	*Incentive Level (dollars/first year therm savings)*
Natural Gas Efficiency	*1 to under 2 years*	*$2.00*
	2 to under 4 years	*$2.50*
	4 to under 6 years	*$3.00*
	6 to under 13 years	*$3.50*
	13 years and over	*$0*

2010

The Site Specific Program operated in the same manner as outlined in 2011 with a notable exception. Incentives for natural gas measures were at a higher level in 2010 than in 2011. The revision to Schedule 190 incentive levels would no longer incentivize natural gas efficiency measures with a simple payback period of greater than 13 years. These projects may have longer periods of payback, and may not always be TRC cost-effective. The incentive level guidelines have always been based upon the simple payback of the measure, prior to the application of an incentive, and standardized measure cost(s). Below find the incentive level available for program year 2010:

2010 – Measures	*Simple Pay-Back*	*Incentive Level (dollars/first year therm savings)*
Natural Gas Efficiency	*1 to 2 years*	*$2.00*
	2 to 4 years	*$2.50*
	4 to 6 years	*$3.00*
	Over 6 years	*$3.50*

Estimated Savings and Cost-effectiveness Components

No UES exists for the natural gas site specific program. The estimated savings are calculated through the use of a prescriptive calculator. The estimated savings for this program are subject to annual evaluation. Avista uses various estimated useful lives depending on end-use and technology for cost-effectiveness purposes.

CADMUS

MEMORANDUM

To:	Lori Hermanson, Avista
From:	Danielle Kolp and Hope Lobkowicz, Cadmus
Subject:	2012 Process Evaluation Memorandum
Date:	August 2, 2013

Cadmus' 2012 process evaluation activities for the Avista nonresidential portfolio included the following:

- A *Best Practice Comparative Review* (memo delivered in February 2013)
- In-person interviews with program stakeholders
- Database and realization rate review

Because Cadmus is not developing a formal process evaluation report for Avista until 2014, this memo presents the findings of the staff interviews and database and realization rate review conducted for the 2012 program year. Our objective is to provide key personnel at Avista with findings now to assist them in improving program processes in real-time.

Key Findings

Interview Findings: Large Project Review Challenges and Changes

In August 2011, Avista instated a new internal system to independently review site-specific projects with incentives greater than $50,000. This review stemmed from a recommendation in the 2010 Moss Adams process report, pursuant to the 2010 Washington Utilities and Transportation Commission (UTC) rate case settlement terms. The objective of the independent review was to examine project evaluation reports prior to entering into contract with the customer, to ensure that:

- All supporting documentation was in place,
- Savings calculations were reasonable and well supported, and
- The project complied with tariff rules.

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Avista staff who participated in the review process experienced multiple challenges, which are discussed in more detail below. By the end of 2012, staff concluded that the review process was not functioning efficiently, nor did it align with the intention of the Moss Adams report recommendation. Avista suspended the review process on January 1, 2013. In 2013, Avista intends to implement a new approach for reviewing site-specific projects, with the goal of balancing customer service and expediency with a sound review. In June 2013, Avista demand-side management (DSM) staff were finalizing this new approach.

Review Process Challenges Identified by Avista

Cadmus interviewed five Avista DSM staff who were involved in the review process. During the interviews, we discussed several core areas of concern with the process and determined that the intended protocol was not being followed. The process dictated that the Planning, Policy, and Analysis (PPA) team independently review the energy savings and proposed incentive levels of all site-specific projects with incentives greater than $50,000, to ensure these impacts were calculated reasonably. In 2012, only one-third of projects that met the criterion were sent to PPA for review.

When Cadmus asked staff about the challenges with this review process, the following four main issues surfaced:

1. ***Different focused attention across teams.*** One staff person reported that the key personnel within the DSM department involved in the review had different focused attention, which in some cases translated to varying objectives for reviewing and approving projects. This is a problem across many organizations and is, by no means, limited to Avista. While implementation teams are most concerned with customer satisfaction and speedy and efficient delivery, planning and evaluation teams are most concerned with compliance. At Avista, the Implementation team was focused heavily on the customer relationship, while PPA was focused on ensuring compliance with the tariff, minimizing the risk of uncertainty associated with claimed savings, and navigating relationships with regulatory bodies and stakeholders. This is not to say that neither team was unconcerned with the other's objectives. While staff agreed that their roles support the comprehensive functions and *all* overarching goals of Avista's DSM programs, specific daily priorities added to misunderstandings about the value of the review and, in some cases, differing opinions on how and when to resolve issues.
2. ***Transparency.*** Some staff who were heavily involved in Avista's site-specific projects reported not understanding the purpose, actions, or outcomes of the review. Without program-stakeholder buy-in at all levels of the process, successful implementation was challenging. One particular concern was a lack of information regarding how long the review would take to complete for each project; this made it difficult to communicate accurate information to customers on the status of their projects and the expected timeline.
3. ***Time lag and time commitment***. A common obstacle cited by all staff interviewed by Cadmus was that the review process took too long to complete for each project. Often, the issues identified during the review required further discussion to understand the assumptions behind the savings estimation, new data or information requests from the customer, or new analysis,

which caused delays. Another challenge was the volume of the projects and limited staff resources. Having only one engineer dedicated to reviewing the large projects was problematic and often caused bottlenecks.

4. ***Linking review with concrete actions.*** The review process lacked a formal follow through procedure for problems uncovered during the review. This caused frustration as, at times, findings and recommendations were not implemented. Interviews and documentation of the review process indicated that the extent to which the issues were resolved varied. For enhanced delivery of DSM services, there needs to be an agreement regarding the best path forward for calculating savings.

Issues Identified Through the Large Project Review

One of the major findings of the review was the overall reliance on customer-supplied data and the need for a reliable and replicable approach to source that data. Avista staff were in agreement that increasing the clarity and transparency about where engineering assumptions and inputs were coming from was a needed improvement and a successful outcome of the review process.

Cadmus reviewed the communication logs for 22 projects that underwent the internal review. In addition to the above issue of reliance on customer-supplied data or assumptions (which was inaccurate in some cases), the following issues were documented for these projects:

- Interactive effects were accounted for incorrectly
- Projects had missing documentation, such as invoices
- Engineering errors resulted in incorrect claimed savings and incentive amounts (the significance of these errors varied in size)

Planned Process Improvements

In 2013, Avista staff worked together to design a new system to address the challenges cited and issues discovered with the 2012 review process. The staff is currently implementing a two-step review process for all site-specific projects that entails a technical review by the engineering team and an administrative review by program staff.

- ***Technical Review:*** Ensures that savings and incentive calculations in a project's *Evaluation Report* are well-supported, and calculated according to tariff terms and Dual Fuel Incentive Calculator policy. The new system includes a checklist with questions that guide the review, along with instructions and policy guidelines. The Technical Review will be completed before the evaluation report is sent to the customer, which contains estimated energy savings and the corresponding incentive level.
- ***Administrative Review:*** Ensures that minimum requirements are met before a contract is issued with a customer and before an incentive is paid.

In the new process, PPA conducts random spot-checks to QA/QC projects, and ensures that the review process is smooth and effective. A main distinction between the 2012 and 2013 process is that this random spot-check is intended to happen after the project has entered contract, or, in some cases, after

the incentive has been paid. According to implementation staff, this will help overcome bottleneck challenges.

Both checklists (the Technical Review and Administrative Review) will be formalized documents known as Top Sheets, which will be attached to project documentation through the life of the project. Avista intends to synchronize the Top Sheet information with Tracker, the engineering database, and with SalesLogix, the customer information system that houses nonresidential rebate and incentive information. In June 2013, the Implementation team began using Top Sheets for all projects.

2011-2012 Database and Realization Rate Review

As part of the 2012 process evaluation, Cadmus reviewed Avista's 2012 nonresidential project database and the 2011 and 2012 realization rates for the nonresidential portfolio. The documents that were part of each effort and our associated research questions are listed in Table 1.

Table 1. Database and Realization Rate Review Activities

Review Activity	Documents Reviewed	Research Questions
Database Review	2012 SalesLogix Database Extract	Are data being tracked accurately and consistently?
		Are contracts issued in accordance with Avista policy?
		Do incentives comply with tariff rules for Washington and Idaho?
Realization Rate Review	2011 and 2012 Impact Evaluation Sample	Why do some projects have a very low or very high realization rate?
		Are there opportunities for Avista to improve the process of calculating reported savings to improve the realization rates?

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Database Review

Tariff Schedules 90 and 190 govern how Avista can spend funds from the Energy Efficiency Rider Adjustment paid by Washington and Idaho ratepayers.[1] To assess compliance with these Tariff Schedules, we examined two main indicators:

1. Project incentive amount: electric and natural gas project incentives should not exceed 50% of the incremental cost of the project (pp. 3 of Schedule 90; pp. 2 of Schedule 190).
2. Project simple payback
   a. For lighting measures, the simple payback period must be a minimum of one year and should not exceed eight years. (pp. 2 of Schedule 90)
   b. For non-lighting electric and natural gas measures, the simple payback period must be a minimum of one year and should not exceed 13 years. (pp. 2 of Schedule 90; pp. 2 of Schedule 190)

The tariff rules make exceptions for the following programs or projects (pp. 3 of Schedule 90; pp. 2 of Schedule 190):

- DSM programs delivered by community action agencies contracted by Avista to serve limited income or vulnerable customer segments, including agency administrative fees and health and human safety measures;
- Low-cost electric/natural gas efficiency measures with demonstrable energy savings (e.g., compact fluorescent lamps); and
- Programs or services supporting or enhancing local, regional, or national electric/natural gas efficiency market transformation efforts. (In 2012, Avista considered new construction fuel conversions in multifamily building projects and T12 to T8 commercial lighting conversion projects as market transformation efforts.)

Applicability of Tariff to Prescriptive Projects

At the time of this memo, Avista's tariff was undergoing revisions and a new tariff was filed on June 26, 2013.

Avista uses the tariff provisions to: 1) design prescriptive measure offerings and incentive amounts and 2) evaluate the eligibility of site-specific projects on a project-by-project basis to ensure compliance before approving them. Cadmus does not believe the tariff language was clear enough on the topic of compliance to conclude whether individual *prescriptive* projects should be subject to the simple payback period and incentive cap restrictions at the time of rebate application approval. Internally, Avista staff also expressed disagreement on this matter.

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[1] Schedule 90: Electric Energy Efficiency Programs, Washington. Available at: http://www.avistautilities.com/services/energypricing/wa/elect/Documents/WA_090.pdf; Schedule 190: Natural Gas Energy Efficiency Programs, Washington. Available at: http://www.avistautilities.com/services/energypricing/wa/gas/Documents/WA_190.pdf; and Schedule 90: Electric Energy Efficiency Programs, Idaho. Available at: http://www.avistautilities.com/services/energypricing/id/elect/Documents/ID_090.pdf

For purposes of this review, Cadmus evaluated both prescriptive and site-specific projects against the provisions of the tariff described above, to allow Avista to review the findings and incorporate them into their planning. It should be clear that by presenting the prescriptive findings below, Cadmus is simply suggesting that better clarity is needed and not necessarily that these projects were out of compliance.

Avista's proposed tariff clarifies that moving forward, site-specific projects are subject to the incentive cap and simple payback periods at the time of project approval, while these parameters will be used in the planning process for prescriptive measure offerings and incentive amounts.

Simple Payback Findings

The majority of projects were in compliance with simple payback rules. Cadmus found that all site-specific projects met the 13-year and eight-year payback periods, with the exception of some legacy projects that were initiated before the new tariff rules took effect on January 1, 2011.

Less than 10% of prescriptive projects exceeded tariff simple payback periods. Table 2 summarizes our findings.

Table 2. 2012 Projects Exceeding Simple Payback Periods

Measure Type	Projects Exceeding Tariff Payback Period		Savings Impact		Cost Impact (incentive payments)	
	Frequency	%	Amount	%	Amount	%
Site-Specific Projects	0	0	n/a	n/a	n/a	n/a
Prescriptive Lighting (includes market transformation and T12 projects)*	281	9%	4,438,942 kWh	13%	$855,535	10%
Prescriptive Non-Lighting (excludes multifamily)	39	6%	113,398 kWh	2%	$72,131	7%
			7,810 therms	7%		
Total	**320**	**8%**	**4,552,340 kWh**	**12%**	**$927,666**	**10%**
			7,810 therms	**7%**		

* Avista's database extract does not denote which projects involved T12-T8 lighting conversions.

Upon reviewing a sample of 10 prescriptive lighting projects that exceeded the eight-year simple payback period, Avista found that five projects involved a T12 to T8 conversion and three projects contained database errors that inflated the simple payback period. In these cases, what should have been entered as months were assumed to be years, and multiplied by 12.

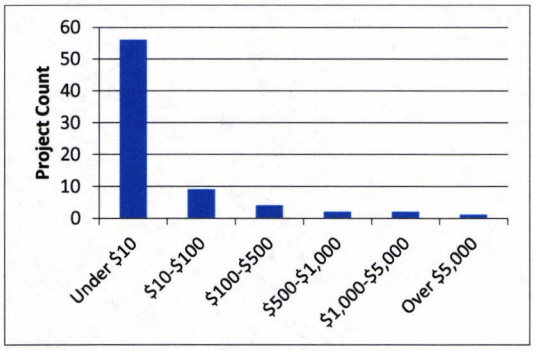
The sample size for this manual review was not large enough to extrapolate findings to the full population. However, based on the review findings, it is probable that a large proportion of the projects included in Table 2 involved T12 to T8 conversions and/or experienced database errors, thus significantly lowering the impact on energy savings and incentive costs.

Project Incentive Findings

Site Specific

The vast majority of site-specific projects had incentive costs that were compliant with the tariff rule not to exceed 50% of the incremental project cost. Initially, Cadmus found 74 site-specific projects (19%) that exceeded this cap. Upon reviewing these projects, however, we found that nearly half experienced a rounding error from Avista's Dual Fuel Incentive Calculator that put them over the 50% limit by just $0.25 (see Figure 1). Avista staff reviewed the remaining projects to understand why they exceeded the incentive cap, and found that the majority were incorrectly entered in SalesLogix. Avista reported that these projects had been calculated and processed as prescriptive projects, but incorrectly entered into the database as site-specific.

Figure 1. Range of Incentive Amounts Exceeding 50% of Incremental Costs, 2012 Site-Specific Projects



Prescriptive

Significantly more prescriptive projects (74%) exceeded the 50% cap. As noted above, this finding was expected because Avista's program design and delivery strategy did not consider prescriptive payments as being subject to the tariff rules, and the lighting market transformation effort exceeded 50% by design. Table 3 outlines the incentive payment and energy savings impacts from projects that exceeded the 50% incentive cap.

Table 3. 2012 Prescriptive Projects Exceeding 50% Incentive Cap

Measure Type	Projects Exceeding 50% cap		Savings Impact		Cost Impact (incentive payments)*	
	Frequency	%	Amount	%	Amount	%
Prescriptive Lighting (includes market transformation and T12 projects)**	2,574	80%	26,747,965 kWh	81%	$2,290,031	28%
Prescriptive Non-Lighting (excludes multifamily)	349	50%	3,220,704 kWh	58%	$475,437	45%
			16,684 therms	14%		
Total Prescriptive	**2,923**	**74%**	**29,968,669 kWh**	**77%**	**$2,765,468**	**30%**
			16,684 therms	**14%**		

* Cost impact represents the aggregate amount exceeding 50% of the incremental cost.

** Avista's database extract does not denote which projects involved T12-T8 lighting conversions.

Again, Avista manually reviewed 10 lighting projects that were over the 50% cap, and found that eight were T12 to T8 conversion projects, considered market transformation. Based on these findings, it is probable that a large proportion of the lighting projects listed in Table 3 involved T12 to T8 conversions, which would greatly reduce the cost impacts and energy saving impacts of from lighting projects over the 50% cap.

Data Entry and Data Tracking

In addition to assessing policy conformance, Cadmus reviewed the 2012 database for data accuracy and completeness. We found that:

- 8 projects were recorded as paid before construction was completed (most of these were entry errors)
- 12% of all projects were missing Construction Complete dates
- 44 projects (1% of all projects) were missing incremental cost data
- 18% of site-specific projects were missing contract date fields in SalesLogix
- 44% of site-specific projects were missing post-verification dates (and it is Avista's policy to conduct post-installation inspections of all site-specific projects)

Avista reviewed 20 prescriptive lighting projects to determine whether they were market-transformation projects (as noted above). They also uncovered several data errors with these specific projects. In all 20 projects, at least one of the following issues was found:

- Simple payback periods were entered in the database in years instead of months,
- Simple payback periods were entered incorrectly (SalesLogix data fields were not consistent with calculations),
- Prescriptive projects were entered as site-specific projects,

- Information from invoices regarding quantity and type of light fixtures was not transferred to prescriptive incentive forms and SalesLogix correctly,
- Ineligible measures were rebated, and
- Incentives were calculated incorrectly.

Realization Rate Review

Cadmus' impact evaluation methodology consisted of validating the reported savings for a sample of projects by conducting independent metering, simulation, or regression analysis and by visiting the project sites to verify that equipment was installed and operating as intended. The result of our project-level measurement and verification tasks is a verified, or *ex post,* savings value for each project in the sample. The ratio of verified savings to reported savings is the project's *realization rate*. A realization rate of 100% indicates that no adjustments were made to the reported savings value.

In 2011, Cadmus' nonresidential impact evaluation sample consisted of 179 electric and gas projects.[2] Of those , the majority (n=112) required a saving adjustment by more than 10%. That is, 63% of projects had realization rates of either 110% or greater, or 90% or lower. Specifically, just 35% of electric projects and 42% of gas project realization rates ranged between 90% and 110%. This changed in 2012, when the majority of projects (64 of 101)[3] experienced realization rates between 90% and 110% (see Figures 4 and 5 below).

Cadmus analyzed how frequently the evaluation resulted in an upward or downward adjustment of reported savings, by how much, and the reasons behind the discrepancy between reported and evaluated savings. The purpose of this review is to provide Avista with information to assist in improving the reliability of the reported savings in the future, thereby improving realization rates for the nonresidential portfolio.

Direction, Frequency, and Magnitude of Verified Savings Adjustments

Cadmus determined that when savings needed to be adjusted by more than 10%, they were more likely to decrease than increase. In other words, most reported savings for projects in this group were being overestimated, and the verification process resulted in a downward adjustment. This was true for all 2011 projects, and for all 2012 electric projects. In 2012, gas projects required more upward adjustments.

2011 Projects

Figure 2 illustrates the distribution of realization rates in increments for 2011 projects. In 2011, 51 electric projects had a realization rate below 90% (42%), while 27 electric projects had a realization rate

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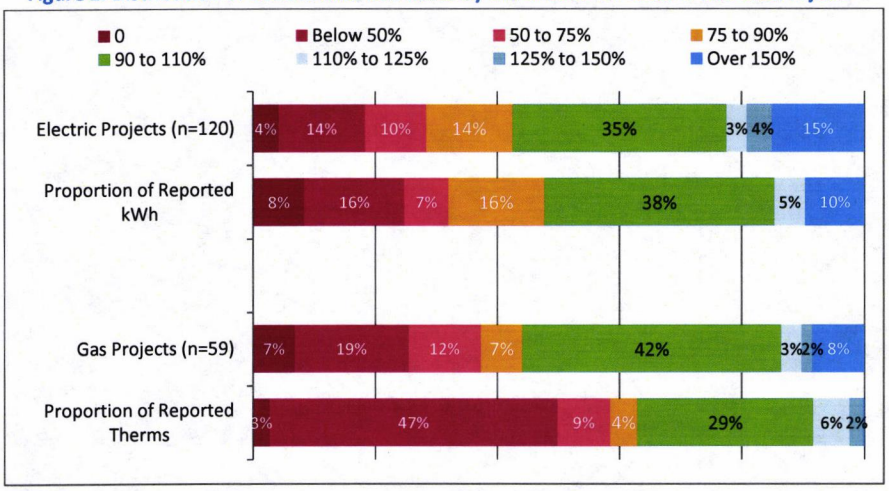
[2] This number reflects projects with gas savings and electric savings. We actually evaluated 157 unique projects, some of which achieved dual-fuel savings. For the purpose of the realization rate review, we treated gas savings separately from electric savings.

[3] The full 2012 impact evaluation sample contained 109 projects. We excluded eight projects from our analysis that still had measurement and verification activities occurring at the time of writing this report.

above 110% (23%). Gas projects exhibited a similar pattern, with 26 projects having a realization rate below 90% (44%) and eight having a realization rate above 110% (14%).

Figure 2. Distribution of 2011 Realization Rates by Increments for Electric and Gas Projects*



*Note: Percentages may not match above text exactly due to rounding

For electric projects, the relative proportion of reported kWh savings in each increment was relatively consistent with the number of projects in that increment. However, for gas projects, the relative proportion of reported therm savings in each increment did not accurately represent the corresponding number of projects. For example, while just 19% of gas projects experienced a realization rate of below 50% (but more than 0%), these projects represented 47% of reported savings.

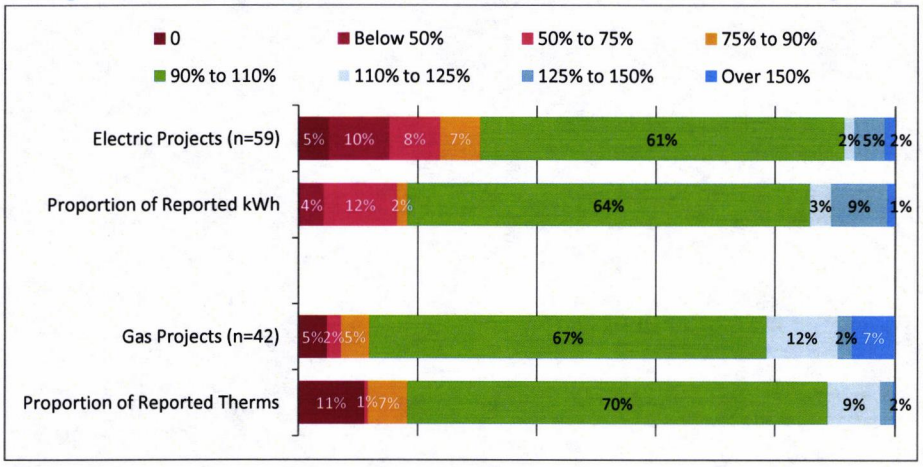
Dividing the projects by increments revealed that a large portion of the projects with realization rates below 90% were in fact below 50%, and most of the projects with realization rates over 110% were actually over 150%. This indicates that not only was the range of realization rates large, but a significant portion of reported savings values were *substantially* different from verified savings, requiring an adjustment of 50% or greater.

2012 Projects

In 2012, realization rates improved. Rates were less variable, and projects required smaller reported savings adjustments than those in 2011. For example, 61% of electric projects and 67% of gas projects had a realization rate between 90% and 110%, leaving only approximately one-third of projects that required an adjustment over 10% (see Figure 3).

Of the 2012 electric projects that required an adjustment over 10%, most required a downward adjustment (18 projects; 31%). This is consistent with 2011 results. Of those 2012 gas projects that required an adjustment over 10%, the direction was upward (eight projects; 19%).

Figure 3. Distribution of 2012 Realization Rates by Increments for Electric and Gas Projects



*Note: Percentages may not match above text exactly due to rounding

Cataloging Projects with High and Low Realization Rates

To understand more about the projects that had severe adjustment factors (very high or very low realization rates), we conducted a desk review of the project files and engineering analyses for a sample of projects from 2011 and 2012. Specifically, this sample entailed projects with electric savings that had been adjusted by over 25% in either direction (a realization rate below 75% or above 125%).

The original sample size was 75 projects; 57 from 2011 and just 18 from 2012. Upon reviewing the 2011 project files, we found that seven projects did not have sufficient reported savings documentation to accurately conclude the reason for the savings adjustment. Therefore, the final 2011 sample size was 50, leading to an overall sample size of 68.

Based on our review, Cadmus concluded that there were nine main reasons for the savings adjustments; these are outlined in Table 4.

Table 4. Reason Categories for Variable Realization Rates

Reason for Savings Adjustment	Description
1. Participant Operator Error	Savings required adjustment due to customer actions, such as installing or operating equipment incorrectly
2. Calculation Error in Reported Savings	Reported savings calculations or assumptions were incorrect
3. ENERGY STAR® Appliances Deemed Savings Update	Cadmus used updated deemed savings values for ENERGY STAR clothes washers, dishwashers, freezers, and refrigerators to verify savings, requiring an adjustment from the reported values, which relied on older deemed savings estimates
4. Cadmus Metering Results vs. Avista Simulation or Analysis	Cadmus used metering results to inform verified savings, while Avista used other tools to generate reported savings estimates
5. Cadmus Metering Results vs. Avista Metering Results	Both Cadmus and Avista used metering results to inform savings values; however, the companies' parameters or timing differed
6. Database Error	Some values in the database extract were erroneous due to a database error, not a human error, and savings needed adjustment to reflect the accurate value
7. Cadmus Calculation Methodology vs. Avista Calculation Methodology	Cadmus and Avista used different methodologies to calculate savings (i.e., regression analysis versus simulation), creating different results
8. Inaccurate Lighting Hours-of-Use (HOU) Estimates	The reported savings for some lighting projects were based on incorrect HOU assumptions
9. Equipment Verification	The on-site equipment parameters (size and efficiency) differed from the assumptions used in the original savings estimate

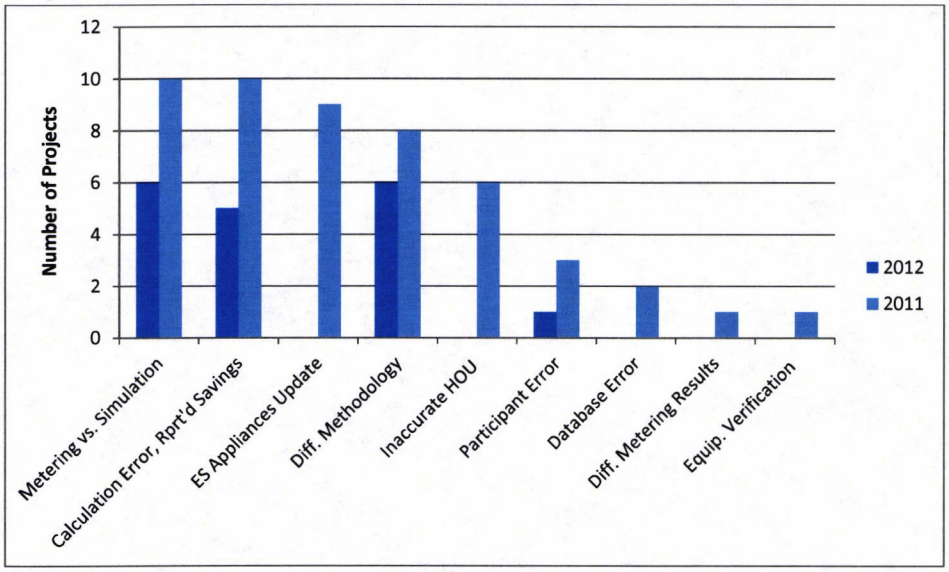
In 2011, the most frequent reasons for savings adjustments of 25% or greater were due to metering results being over the original estimates formed using simulation or analysis (n=10) and calculation or assumption errors in the reported savings values (n=10). Other top reasons included ENERGY STAR deemed savings updates (n=9) and differences in Cadmus' and Avista's calculation methodology (n=8). In 2012, there were far fewer projects with adjustment factors of 25% or greater. The top reason categories in 2012 stayed relatively consistent with those in 2011, excluding the ENERGY STAR deemed savings updates.

Figure 4 illustrates the number of projects in each of the reason categories outlined in Table 4, across both years. Appendix A

Table 8 catalogues the projects requiring a savings adjustment of 25% or greater.

Table 8, at the end of the memo, lists the specific projects included in the review and a description of each project's specific savings adjustment.

Figure 4. Number of Projects with Savings Adjustments of 25% or Greater by Category, 2011-2012



Impact on Gross Savings

While the majority of savings adjustments in 2011 resulted in decreased savings, certain reason categories experienced realization rates higher than 100%, on average. For example, three reason categories (Cadmus Metering Results vs. Avista Simulation or Analysis, ENERGY STAR Appliances Deemed Savings Update, and Equipment Verification) resulted in increased savings. In other words, the projects in these groups experienced realization rates higher than 100%, on average.

In 2012, just one reason category (Cadmus Metering Results vs. Avista Simulation or Analysis) resulted in increased savings. Projects in the other 2012 reason categories (Calculation Error in Reported Savings, Cadmus Calculation Methodology vs. Avista Calculation Methodology, and Participant Operator Error) resulted in decreased savings.

The aggregate kWh impact for each 2011 reason category is listed in Table 5. The aggregate kWh impact for each 2012 reason category is listed in Table 6.

Table 5. 2011 Reported and Verified Savings Associated with Reason Categories for Projects with Savings Adjustments of 25% or Greater

Reason	Count	Reported Savings	Verified Savings	kWh Loss	Percent of Verified Savings	kWh Gain	Percent of Verified Savings	Net Impact (kWh)	Percent of Verified Savings*
Cadmus Metering Results vs. Avista Simulation or Analysis	10	1,563,768	3,189,989	-326,768	3%	1,952,989	16%	1,626,221	13%
Calculation Error in Reported Savings	10	1,377,230	547,131	-859,210	7%	29,111	0.2%	-830,099	7%
ENERGY STAR Appliances Deemed Savings Update	9	892	2,043	-55	0%	1,206	0%	1,151	0%
Cadmus Calculation Methodology vs. Avista Calculation Methodology	8	151,231	143,709	-57,262	0%	49,740	0.4%	-7,522	0%
Inaccurate Lighting HOU Estimates	6	394,977	128,449	-267,472	2%	944	0%	-266,528	2%
Participant Operator Error	3	788,713	0	-788,713	7%	-	0%	-788,713	7%
Database Error	2	186,832	111,571	-75,261	1%	-	0%	-75,261	1%
Cadmus Metering Results vs. Avista Metering Results	1	637,534	477,180	-160,354	1%	-	0%	-160,354	1%
Equipment Verification	1	869	1,111	-	0%	242	0%	242	0%
Total	**50**	**5,102,046**	**4,601,183**	**-2,535,095**	**21%**	**2,034,232**	**17%**	**-500,863**	**4%**

* This is the net difference as a percent of the total verified savings in the impact evaluation sample.

Exhibit No. 3

Case Nos. AVU-E-13- AVU-G-13-
L. Hermanson, Avista
Schedule 4

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Table 6. 2012 Reported and Verified Savings Associated with Reason Categories for Projects with Savings Adjustments of 25% or Greater

Reason	Count	Reported Savings	Verified savings	kWh Loss	Percent of Verified Savings	kWh Gain	Percent of Verified Savings	Net Impact	Percent of Verified Savings*
Cadmus Metering Results vs. Avista Simulation or Analysis	6	1,544,211	1,768,173	-243,923	2%	499,241	4%	**255,318**	**2%**
Cadmus Calculation Methodology vs. Avista Calculation Methodology	6	1,491,355	968,424	-534,120	4%	24,777	0%	**-509,343**	**4%**
Calculation Error in Reported Savings	5	420,208	340,768	-173,092	1%	93,652	1%	**-79,440**	**1%**
Participant Operator Error	1	21,000	-	-21,000	0%	-	-	**-21,000**	**0%**
Total	**18**	**3,476,774**	**3,077,365**	**-972,135**	**8%**	**617,670**	**5%**	**-354,465**	**3%**

* This is the net difference as a percent of the total verified savings in the impact evaluation sample.

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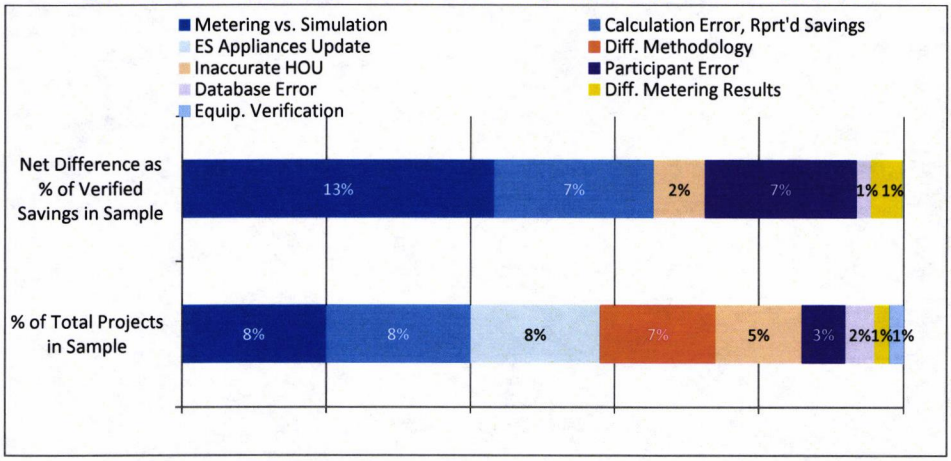
Figure 5 illustrates 2011 projects in each reason category as a percentage of the total sample compared to the percentage of each categories' net kWh impact. While the ENERGY STAR Appliances Deemed Savings Update category contained nine projects (representing about 8% of the total sample), the net difference in *ex ante* and *ex post* savings was actually minimal: a gain of 1,151 kWh (see Table 5), less than 0.07% of savings in the impact evaluation sample. The Cadmus Calculation Methodology vs. Avista Calculation Methodology category had similarly minimal savings despite containing a relatively large number of projects (eight). On the other hand, the Cadmus Metering Results vs. Avista Simulation or Analysis and Participant Operator Error categories represented 8% and 3% of projects, respectively, but the net differences in *ex ante* and *ex post* savings represented 13% and 7% of the total verified savings in the impact sample, respectively.

Figure 5. Relative Proportions of Projects and Savings Impacts by Reason Category, 2011



In 2012, the percentage of projects in each category was higher than the respective percentage of kWh savings in each category (see **Error! Not a valid bookmark self-reference.**). For example, the Cadmus Metering Results vs. Avista Simulation or Analysis and the Cadmus Calculation Methodology vs. Avista Calculation Methodology categories both represented 10% of all projects in the evaluation sample, but their net differences in *ex ante* and *ex post* savings were relatively small, representing only 2% and 4% of the total verified savings in the sample, respectively.

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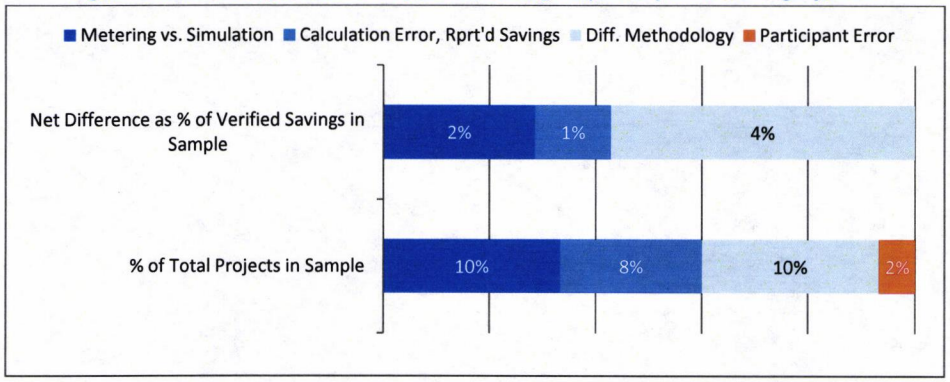
Figure 6. Relative Proportions of Projects and Savings Impacts by Reason Category, 2012



Conclusions and Recommendations

Based on the above findings, we offer the following conclusions and encourage Avista consider the recommendations listed below to improve their internal processes.

Large Project Review Process

Conclusion: Avista's 2011 Large Project Review process was not implemented successfully due to a series of communication issues and the absence of a mechanism to address concerns about project parameters and correct mistakes. In the first half of 2013, Avista has been designing a new process for all site-specific projects. While this process is underway, we have several recommendations may assist Avista with successful implementation and an effective process.

Recommendations:

- ***Effectively communicate the new project review process to all key team members.*** Many of the issues identified through Avista staff interviews regarding the prior review process centered on communication challenges. When implementing the new process, ensure that all stakeholders have a clear understanding of the review goals and correct protocol.
- ***Ensure there are clear protocols in place for addressing issues identified during the review and the spot-check.*** To ensure that Avista and its customers are benefiting from the time and resources dedicated to this process, consider implementing some check-points and policies to clarify how and when to alter project savings and incentive levels if issues arise during the review. This may include designating a senior-level point person to serve as the decision-maker for questions or disagreements regarding a project or its calculation methodology. Consider identifying methods to ensure that all issues are discussed and resolved before incentive amounts are communicated to the customer.
- ***Establish a goal for the number or percentage of projects that should undergo a random spot-check***. Avista's new process dictates that the PPA team will independently review a sample of

projects, in addition to the peer review process. We suggest establishing a clear metric for the number or percentage of projects this sample will include, such as five projects or 10% of all projects.

- ***Establish a reasonable goal for how long the review process should take.*** A core challenge with the prior review process was the time lag. Keeping in mind that any process aimed at improving the quality and accuracy of incentive payments and claimed savings will add time to existing procedures, Avista should internally discuss the amount of delay that is reasonable. It may be beneficial to create objectives for how long various steps of the process should reasonably take. For example, Avista could establish one goal to complete the first Top Sheet review within a certain timeframe, then establish another goal to guide how long it should take to resolve any issues, if identified.
- ***Consider adopting a tiered approach to the review so that larger, high-risk projects receive more scrutiny before contracts are issued and incentives are paid.*** Under the planned approach, all site-specific projects will undergo peer review. Often, utilities employ a risk-mitigation approach to ensure that the largest and most expensive projects receive the most rigorous review before they are approved. Avista might explore adjusting their review process to focus the most time and resources on larger projects. An example of this type of approach is provided in Table 7.

Table 7. Example of Tiered Approach to Large Project Review

Level of Review	Description
Peer Review	All projects
Second Engineering Review	Projects above $50,000
Third Engineering Review	Projects above $75,000
PPA Review	Projects above $100,000
Pre-Installation Visits	Projects above $100,000, plus others as needed
Random Audit (spot-check)	5 projects or 10% of all projects

- ***Consider structuring random spot-checks, or "audits," to occur at various times of the process.*** The current review structure plans to have some projects receive independent review after the project evaluation report is complete or after the project is paid, so that any mistakes can be corrected for future projects. However, it may be beneficial to stagger projects so that a random portion also receives independent audits before incentive information is communicated to the customer.

Database and Realization Rate Review

Conclusion: The accuracy of Avista's claimed savings, measured by realization rates, improved significantly from 2011 to 2012. Three of the four main reasons for large savings adjustments in 2012 are largely outside Avista's control. However, Avista can still improve the reliability of claimed savings estimates falling into the reason category of Calculation Error in Reported Savings.

Recommendation:

- Continue to move forward implementing the new review process to identify and resolve savings calculation errors.

Conclusion: Most of the nonresidential projects were compliant with the 2012 tariff rules, but disagreement among DSM staff on tariff interpretation makes it difficult to draw conclusions about prescriptive projects. Avista has already begun updating the tariff to address this concern and create a more coherent policy. There are several improvements Avista can make to data tracking activities to clarify policy compliance on a project-by-project basis and improve data collection overall.

Recommendations:

- ***Clearly document legacy projects or market transformation projects in SalesLogix.*** Avista's tracking system specifies measure type, but lacks detailed information such as whether the project involved a T12 to T8 lighting conversion. This makes it challenging to understand which projects are considered market transformation. Further, legacy projects are not specified. To streamline internal tracking, auditing, and evaluation, consider adding a field to denote which projects are eligible for transition policy (legacy projects) and which projects are considered market transformation, as well as any other project characteristics that warrant exception to tariff rules under Avista's new policy.
- ***Continue to improve data entry in SalesLogix to reduce missing or incorrect fields and enhance the comprehensive dataset.***

Appendix A

Table 8 catalogues the projects requiring a savings adjustment of 25% or greater.

Table 8. Projects Included in Realization Rate Review Cataloging

Year	Project ID	State	Account	Measure Description	Reported kWh	Verified kWh	Realization Rate	Project Category
2011	36888	WA	[redacted]	Industrial Process	59,728	105,220	176%	Diff. Methodology
2011	34681	ID	[redacted]	Shell	1,957	2,699	138%	Diff. Methodology
2011	34682	ID	[redacted]	Shell	983	198	20%	Diff. Methodology
2011	35372	ID	[redacted]	Shell	48,950	5,988	12%	Diff. Methodology
2011	36974	WA	[redacted]	Appliances	211	20	9%	Diff. Methodology
2011	33651	WA	[redacted]	HVAC Combined	4,015	6,660	166%	Diff. Methodology
2011	35820	WA	[redacted]	Appliances	32,760	19,436	59%	Diff. Methodology
2011	35838	ID	[redacted]	Prescriptive Lighting Interior	2,627	3,488	133%	Diff. Methodology
2011	36170	ID	[redacted]	Prescriptive LED Traffic Signals	53,784	27,973	52%	Calculation Error, Rprt'd Savings
2011	30481	WA	[redacted]	Industrial Process	283,902	117,823	42%	Calculation Error, Rprt'd Savings
2011	29129	WA	[redacted]	Industrial Process	571,750	283,747	50%	Calculation Error, Rprt'd Savings
2011	34262	ID	[redacted]	Shell	209	26	12%	Calculation Error, Rprt'd Savings
2011	36341	WA	[redacted]	Prescriptive Commercial Shell	2,411	10,682	443%	Calculation Error, Rprt'd Savings
2011	36628	WA	[redacted]	Prescriptive Commercial Shell	1,124	0	0%	Calculation Error, Rprt'd Savings
2011	36315	WA	[redacted]	Prescriptive Motors	438	274	63%	Calculation Error, Rprt'd Savings
2011	23335	WA	[redacted]	Industrial Process	308,652	0	0%	Calculation Error, Rprt'd Savings

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Year	Project ID	State	Account	Measure Description	Reported kWh	Verified kWh	Realization Rate	Project Category
2011	35540	ID	[redacted]	Prescriptive Lighting Exterior	20,417	41,257	202%	Calculation Error, Rprt'd Savings
2011	32654	WA	[redacted]	HVAC Combined	134,543	65,349	49%	Calculation Error, Rprt'd Savings
2011	37395	WA	[redacted]	HVAC Combined	32,570	16,285	50%	Database Error
2011	37396	WA	[redacted]	Lighting Interior	154,262	95,286	62%	Database Error
2011	37074	WA	[redacted]	Energy Star Clothes Washer	14	322	2301%	ES Appliances Update
2011	37075	WA	[redacted]	Energy Star Dishwasher	36	22	62%	ES Appliances Update
2011	37070	WA	[redacted]	Energy Star Clothes Washer	240	494	206%	ES Appliances Update
2011	37385	WA	[redacted]	Energy Star Clothes Washer	240	322	134%	ES Appliances Update
2011	36616	WA	[redacted]	Energy Star Dishwasher	36	22	62%	ES Appliances Update
2011	35371	Idaho	[redacted]	Energy Star Dishwasher	36	22	62%	ES Appliances Update
2011	35841	ID	[redacted]	Energy Star Dishwasher	36	22	62%	ES Appliances Update
2011	37089	WA	[redacted]	Energy Star Clothes Washer	14	322	2301%	ES Appliances Update
2011	37025	WA	[redacted]	Energy Star Clothes Washer	240	494	206%	ES Appliances Update
2011	36894	WA	[redacted]	Prescriptive Comm Clothes Washer	869	1,111	128%	Equip. Verification
2011	36140	ID	[redacted]	Industrial Process	637,534	477,180	75%	Diff. Metering Results
2011	33889	WA	[redacted]	HVAC Combined	230,543	58,277	25%	Metering vs. Simulation
2011	33510	WA	[redacted]	HVAC Cooling	188,879	34,377	18%	Metering vs. Simulation
2011	34653	WA	[redacted]	Motor Controls HVAC	25,550	73,193	286%	Metering vs. Simulation
2011	33334	WA	[redacted]	Motor Controls	81,760	234,219	286%	Metering vs.

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Year	Project ID	State	Account	Measure Description	Reported kWh	Verified kWh	Realization Rate	Project Category
			[redacted]	HVAC				Simulation
2011	33424	ID	[redacted]	HVAC Combined	16,414	25,557	156%	Metering vs. Simulation
2011	33432	ID	[redacted]	HVAC Combined	10,644	32,997	310%	Metering vs. Simulation
2011	37477	ID	[redacted]	Motor Controls HVAC	168,630	483,076	286%	Metering vs. Simulation
2011	37471	ID	[redacted]	Motor Controls HVAC	296,380	849,042	286%	Metering vs. Simulation
2011	37478	ID	[redacted]	Motor Controls HVAC	419,020	1,200,370	286%	Metering vs. Simulation
2011	29646	WA	[redacted]	HVAC Cooling	125,948	198,881	158%	Metering vs. Simulation
2011	36137	WA	[redacted]	Lighting Interior	20,207	3,160	16%	Inaccurate HOU
2011	36470	WA	[redacted]	Prescriptive Lighting Interior	5,676	1,765	31%	Inaccurate HOU
2011	36559	WA	[redacted]	Prescriptive Lighting Interior	353,228	113,298	32%	Inaccurate HOU
2011	37187	ID	[redacted]	Prescriptive Lighting Interior	9,108	3,803	42%	Inaccurate HOU
2011	36016	WA	[redacted]	Lighting Interior	4,218	2,939	70%	Inaccurate HOU
2011	36017	WA	[redacted]	Prescriptive Lighting Interior	2,540	3,484	137%	Inaccurate HOU
2011	31378	ID	[redacted]	HVAC Heating	48,173	0	0%	Participant Error
2011	21278	ID	[redacted]	Compressed Air	648,560	0	0%	Participant Error
2011	35430	WA	[redacted]	Motor Controls HVAC	91,980	0	0%	Participant Error
2012	37981	WA	[redacted]	SS Multifamily	692,700	448,232	65%	Diff. Methodology
2012	35602	WA	[redacted]	SS Multifamily	692,700	448,232	65%	Diff. Methodology
2012	33914	WA	[redacted]	HVAC Combined	59,549	24,472	41%	Diff. Methodology

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Year	Project ID	State	Account	Measure Description	Reported kWh	Verified kWh	Realization Rate	Project Category
2012	39533	WA	[redacted]	SS HVAC Heating	7,986	0	0%	Diff. Methodology
2012	38992	WA	[redacted]	PSC EnergySmart-Case Lighting	3,720	2,236	60%	Diff. Methodology
2012	38397	WA	[redacted]	PSC EnergySmart-Industrial Proc	34,700	45,252	130%	Diff. Methodology
2012	40766	WA	[redacted]	SS HVAC Combined	53,250	7,650	14%	Calculation Error, Rprt'd Savings
2012	34998	WA	[redacted]	SS Appliances	91,823	38,934	42%	Calculation Error, Rprt'd Savings
2012	39118	WA	[redacted]	SS Compressed Air	8,413	0	0%	Calculation Error, Rprt'd Savings
2012	35000	WA	[redacted]	Lighting Interior	165,141	258,793	157%	Calculation Error, Rprt'd Savings
2012	39794	WA	[redacted]	SS Shell	101,581	35,391	35%	Calculation Error, Rprt'd Savings
2012	35972	ID	[redacted]	SS Industrial Process	1,047,737	1,406,904	134%	Metering vs. Simulation
2012	39969	WA	[redacted]	SS Industrial Process	115,911	165,636	143%	Metering vs. Simulation
2012	38236	WA	[redacted]	SS Lighting Interior	177,934	103,425	58%	Metering vs. Simulation
2012	38276	WA	[redacted]	SS Lighting Interior	185,688	86,794	47%	Metering vs. Simulation
2012	39750	WA	[redacted]	PSC Lighting Interior	6,318	3,953	63%	Metering vs. Simulation
2012	39411	WA	[redacted]	PSC Lighting Interior	10,623	1,461	14%	Metering vs. Simulation
2012	32376	ID	[redacted]	PSC PC Network Controls	21,000	0	0%	Participant Error

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