Appendix A

2018 Program Plans

Contents

I.	LOW INCOME PORTFOLIO	. 2
a	Low Income Program	2
II.	RESIDENTIAL PORTFOLIO	. 5
a	Residential ENERGY STAR Homes Program	5
b		
c.	Residential Shell Program	7
d	Residential Fuel Efficiency Program	8
e.	Simple Steps, Smart Savings	9
III.	NON-RESIDENTIAL PORTFOLIO	11
a	Non-Residential Prescriptive Lighting Program	11
b	Non-Residential HVAC Program	12
C.	Non-Residential Site-Specific Program	12
d	Non-Residential Prescriptive Shell Program	14
e.	Non-Residential Prescriptive VFD Program	15
f.	Non-Residential Food Service Equipment Program	15
g	Non-Residential Green Motors Program	16
h	Non-Residential AirGuardian Program	17
i.	Non-Residential Fleet Heat Program	17
j.	Non-Residential EnergySmart Grocer Program	18
IV.	Table 1: Measure level summary of unit throughput, incentives and cost-effectiveness.	19

I. LOW INCOME PORTFOLIO

a. Low Income Program

General Program Description:

The Company utilizes the infrastructure of seven Community Action Partner (CAP) agencies to deliver low income energy efficiency programs (aka Weatherization). The CAPs have the ability to incomequalify customers, generate referrals through their energy assistance efforts, and have access to a variety of weatherization funding sources which can be utilized to best meet the customer's home energy needs. The seven agencies serving Avista's entire Washington service territory receive an aggregate annual funding amount of \$2,000,000.

Program Implementation:

The agencies are allowed to spend their annual allocated funds on either electric or natural gas efficiency measures. The home must demonstrate a minimum level of electric or natural gas energy use for space heating use to be eligible to use the Avista funds. The agencies are authorized to use 15% of their funds for administration cost reimbursement. The Company also permits the agency to use up to 15% of their contract to fund health and safety improvements. Health and safety spend is at the agency's discretion and offers a bit of flexibility to help preserve the integrating of the improvements that have been installed in the home.

Below is the funding allocation by Agency and the county(ies) they serve:

2018 Low Income Funding by CAP Agency

CAP Agency	County	Funding
SNAP	Spokane	\$1,335,000
Rural Resources Community	Ferry, Lincoln, Pend Oreille,	\$194,000
Action	Stevens	
Community Action Center	Whitman	\$146,000
Opportunities Industrialization	Adams, Grant	\$75,000
Council		
Spokane Indian Housing	Stevens County	\$20,000
Authority		
Washington Gorge Action	Klickitat, Skamania	\$10,000
Program		
Community Action Partnership	Asotin	\$240,000
		Total \$2,000,000

Spokane Indian Housing Authority (SIHA) joined the agency mix in 2016 to serve Avista's Washington customers in Stevens County. This organization has been mentored and certified by the Department of Commerce and is part of the same rigor and oversight as other traditional "network" agencies. While portions of SIHA territory overlap with an existing network agency the Company is pleased that additional effort is available to serve homes in this hard-to-reach location. Over the years,

the total low income funding allotment may not be fully spent out due to a variety of circumstances. The 2018 plan will continue with a budget of \$2,000,000 to serve the income qualified home.

To guide the agency toward projects that are most beneficial and cost-effective for the Company's energy efficiency efforts, an "Approved" measure list is provided that in the majority of cases has a Total Resource Cost (TRC) of 1 or better for electric improvements or a Utility Cost Test (UCT) of 1 or better for natural gas improvements. The Approved list also includes measures that appear on the agency Priority List as contained in the Washington State Department of Commerce Weatherization Manual July 2017 Edition. The list of the 2018 Approved Measures can be found in the table below:

2018 Approved Measures - Washington

Electric Efficiency Measures	Natural Gas Efficiency Measures
Air infiltration	Air infiltration
Duct Sealing	Duct sealing
Attic insulation	Attic insulation
Duct insulation	Duct insulation
Floor insulation	Floor insulation
Wall insulation	Wall insulation
Energy Star Door	Energy Star door
Combo: Electric to gas furnace & water heater	Energy Star window
Electric to natural gas furnace	High efficiency furnace (90% AFUE)
Electric to ductless heat pump	High efficiency water heater (.82 EF)
Electric to air source heat pump	
Heat pump water heater(0-54 gal 1.8 EF)	
LED's	

For efficiency measures with a TRC or UCT less than 1 a "Rebate" that is equal to the Company's avoided cost of energy is provided as the reimbursement to the Agency. Often the rebate amount will not cover the full cost of the measure. The agencies may choose to utilize their Health and Safety allocation towards covering the full cost of the "Rebate" measure if they do not have other funding sources to fill in the difference. The list of the 2018 Qualified Rebates can be found in the table below:

2018 Qualified Rebates - Washington

Electric Efficiency Measures - Rebate
Energy Star Windows
Energy Star Refrigerator

2018 Rebates - Fully Funded and Rebated

Washington - LI Electric - 2018								
Measure Description	2018 Est Units	Total Incentive	Est. Sub TRC	Est. Sub UCT	Status			
E ENERGY STAR DOORS	70	\$1,013.40	1.62	1.00	fully fund			
E INS - CEIL/ATTIC	16,000	\$2.14	0.69	0.63	fully fund			
E INS - DUCT	50	\$6.70	2.97	2.97	fully fund			
E INS - FLOOR	50,000	\$2.14	2.47	2.41	fully fund			
E INS - WALL	15,000	\$2.20	2.07	2.07	fully fund			
E ENERGY STAR WINDOWS	70	\$8.55	1.44	1.11	fully fund			
E HE AIR HPUMP	70	\$4,172.89	1.10	1.10	fully fund			
Ductless HP	40	\$3,822.37	1.36	1.11	fully fund			
Tier1 0-55Gallon HPWH	40	\$854.23	1.40	0.82	fully fund			
E Energy Star Refrigerator	70	\$100.23	1.04	0.49	fully fund			
E AIR INFILTRATION	70	\$730.00	1.00	0.74	fully fund			
Duct sealing	50	\$608.58	2.84	2.84	fully fund			
9 watt A19 bulbs - 60W					fully fund			
replacement - (6 units)	60	\$16.92	3.38	3.38				
Elec Res> Heat Pump	1	\$3,297.00	1.34	1.34	fully fund			
E to G Furnace Conversion	22	\$5,196.30	1.10	0.81	fully fund			
E to G H2O Conversion	25	\$586.78	0.33	1.00	rebate			

Washington - LI - Gas 2018								
Measure Description	2018 Est Units	Total Incentive	Sub TRC	Sub UCT	Status			
G INS - CEIL/ATTIC	125,000	\$2.14	0.16	0.16	fully fund			
G INS - WALL	35,360	\$2.20	0.47	0.47	fully fund			
G INS - FLOOR	33,570	\$2.14	0.57	0.57	fully fund			
G ENERGY STAR WINDOWS	11,405	\$4.37	0.98	1.00	fully fund			
G INS - DUCT	653	\$6.70	0.94	0.94	fully fund			
G HE WH 50G	10	\$37.05	1.02	1.00	fully fund			
G PROG TSTAT NO AC	25	\$46.66	0.16	1.00	fully fund			
G PROG TSTAT W/AC	25	\$46.66	0.16	1.00	fully fund			
G ENERGY STAR DOORS	50	\$193.43	0.88	1.00	fully fund			
G AIR INFILTRATION	70	\$730.00	0.22	0.20	fully fund			
G duct sealing	25	\$429.85	0.71	1.00	fully fund			
G HE FURNACE	5	\$698.00	2.05	1.05	fully fund			

2018 Program Planning

The Energy efficiency measures for Washington low income programs will remain relatively the same with minor changes. The Company will continue in the same vein as 2017 implementation by reimbursing the Agencies the full cost of the measures that appear on the State Priority List as presented in the Washington State Department of Commerce Weatherization Manual, July 2017 edition. These measures apply to both electric and natural gas heated homes and include attic, floor, wall insulation, air infiltration and LED lamps.

In addition, the Company will reimburse agencies the full cost for the conversion of electric heated homes to a natural gas forced air furnace. When natural gas is not an option the Company will cover the conversion of a straight resistant electric heating system to either an air source or ductless heat pump system.

Measures that are not cost effective will be reimbursed at the amount of the Company's avoided cost of energy savings.

Agencies are encouraged to work with the Company when considering the installation of energy efficiency opportunities that are not found on either the Approved or the Rebate list.

Avista Program Manager: Renee Coelho

Measures and Incentives: As illustrated in Table 1 of Appendix A.

<u>Evaluation, Measurement and Verification Plan</u>: As defined within the Company's EM&V Plan contained within Appendix B.

II. RESIDENTIAL PORTFOLIO

a. Residential ENERGY STAR Homes Program

General Program Description:

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

Program Implementation:

The Energy Star Home program promotes to builders and homeowners a sustainable, low operating cost, environmentally friendly structure as an alternative to traditional home construction. In

Washington, Avista offers both electric and natural gas energy efficiency programs and as a result structures the program to account for homes where either a single fuel or both fuels are utilized for space and water heating needs. The Company continues to support the regional program to encourage sustainable building practices.

The current customer descriptions of the programs with primary program requirements are available on the ENERGY STAR®/ECO-Rated Homes Rebate form.

Program Eligibility and incentives:

Any Washington and Idaho residential electric customer (Schedule 1) with a certified Energy Star Home or Energy Star/ECO-Rated Manufactured Home that is all electric is eligible. Any Washington residential electric customer (Schedule 1) with a certified Energy Star Home that has Avista electric for lights and appliances and Avista residential natural gas (Schedule 101) for space and water heating is eligible. Note for 2018, stick built Energy star homes with electric heating did not pass the TRC cost effectives test and were removed for this biennia.

Revised Rebates for 2018:

Energy Star/ECORated Home, Manufactured \$1,000 Energy Star/ECORated Home, Natural Gas Only \$650

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

Avista Program Manager: David Schafer

Measures and Incentives: As illustrated in Table 1 of Appendix A.

<u>Evaluation, Measurement and Verification Plan</u>: As defined within the Company's EM&V Plan contained within Appendix B.

b. Residential HVAC Program

General Program Description:

The HVAC program encourages residential customers to select a high efficiency solution when making energy upgrades to their home. This prescriptive rebate approach issues payment to the customer after the measure has been installed. DSM marketing efforts build considerable awareness of opportunities in the home and drive customers to the website for rebate information. Vendors generate participants in the program as they use the rebate as a sales tool for their services. Utility website promotion, vendor training, retail location visits and presentations at various customer events throughout the year are some of the other communication methods that encourage program participation.

Overall, residential customers continue to respond well to the program. High efficiency natural gas furnace provides the largest portion of the gas savings for the residential portfolio.

Program Eligibility and incentives:

Washington electric customers (Schedule 1) who heat their homes with Avista electric may be eligible for a rebate for the installation of a variable speed motor on their forced air heating equipment or for converting their electric straight resistance space heat to an air source heat pump. Any Washington residential natural gas customers (Schedule 101) who heat their homes with natural gas may be eligible for a rebate for the installation of a high efficiency natural gas furnace or boiler.

Revised Rebates for 2018:

Variable speed motor \$80 Electric to Air Source Heat Pump \$700 Electric to Ductless Heat Pump \$500 High efficiency natural gas furnace \$300 High efficiency natural gas boiler \$300 Smart Thermostat \$75 (contractor install) Smart Thermostat \$60 (self-install)

Avista will review energy usage as part of the program eligibility requirements; customer must demonstrate a heating season electricity usage of 8,000 kWh and less than 340 therms for replacement of electric straight resistance to air source heat pump and ductless heat pump. High efficiency natural gas furnaces and boilers must have an Annual Fuel Utilization Efficiency (AFUE) of 90% or greater. Tankless water heaters must have an efficiency of .82 EF or higher. Ductless heat pumps must be 9.0 HSPF or greater. Heat pump water heaters must have an efficiency of 180% or higher. Supporting documentation required for participation includes but may not be limited to: copies of project invoices and AHRI certification.

Avista Program Manager: David Schafer

Measures and Incentives: As illustrated in Table 1 of Appendix A.

<u>Evaluation, Measurement and Verification Plan</u>: As defined within the Company's EM&V Plan contained within Appendix B.

c. Residential Shell Program

General Program Description:

The shell program encourages residential customers to improve their home's shell or exterior envelope with upgrades to windows and storm windows. This prescriptive rebate approach issues payment to the customer after the measure has been installed. DSM marketing efforts build considerable awareness of opportunities in the home and drive customers to the website for rebate information. Vendors generate participants in the program as they use the rebate as a sales tool for their services.

Utility website promotion, vendor training, retail location visits and presentations at various customer events throughout the year are some of the other communication methods that encourage program participation.

Program Implementation:

The estimates of unit throughput for 2018 remain consistent with throughput from 2017.

Program Eligibility and incentives:

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

Revised Rebates for 2018:

Storm Windows \$1.00/sq. ft Windows \$1.50/sq. ft

Storm windows (interior/exterior) must be new, the same size as existing window, not in direct contact with existing window, and exterior windows low-e coating must be facing the interior of the home. Glazing material emissivity must be less than .22 with a solar transmittance greater than .55.

Windows must have a u-factor rating of .30 or lower.

Avista will review energy usage as part of the program eligibility requirements. Customers in Washington and Idaho with electric heated homes must demonstrate a heating season usage of 8,000 kWh. Customers in Washington with natural gas heated homes must demonstrate a heating season usage of 340 therms.

Avista Program Manager: David Schafer

Measures and Incentives: As illustrated in Table 1 of Appendix A.

<u>Evaluation, Measurement and Verification Plan</u>: As defined within the Company's EM&V Plan contained within Appendix B.

d. Residential Fuel Efficiency Program

General Program Description:

The fuel efficiency rebate encourages customers to consider converting their resistive electric space and water heat to natural gas. The direct use of natural gas continues to be the most efficient fuel choice when available, and over time offers the most economic value in the operating costs of the equipment. Since the early 1990's the Company has offered a conversion rebate. While natural gas prices have fallen in recent years, the cost of infrastructure continues to rise, both for the utility and for the customer's installation cost for this particular measure. In the fall of 2014, the Company requested and received approval from both commissions to increase the rebate level available for fuel efficiency

projects by allowing these measures to receive the same cents/kWh as all other electric efficiency improvements under Tariff Schedule 90. For the 2018-2019 biennium, conversions to natural gas water heaters no longer have a stand alone rebate. For this biennium, the Company will incentivize water heaters as a combination rebate with conversions to natural gas furnaces.

Program Implementation:

This is a prescriptive rebate that is paid upon installation and receipt of all relevant documentation. Customer's minimum qualifications include using Avista electricity for electric straight resistance heating and/or water heating purposes which is verified by evaluating their energy use. DSM marketing efforts build considerable awareness of opportunities in the home and drive customers to the website for rebate information. Vendors generate participants in the program as they use the rebate as a sales tool for their services. Utility website promotion, vendor training, retail location visits and presentations at various customer events throughout the year are some of the other communication methods that encourage program participation.

Program Eligibility and incentives:

Residential electric customers (Schedule 1) in Idaho and Washington who heat their homes or hot water with Avista electricity may be eligible for a rebate for the conversion to natural gas. The home's electric baseboard or furnace heat consumption must indicate a use of 8,000 kWh or more during the previous heating season (and less than 340 therms).

Revised Rebates for 2018:

Electric to Natural Gas furnace and Water Heater \$2,250 Electric to Natural Gas Direct Vent Wall Heat \$1,300

Avista Program Manager: David Schafer

Measures and Incentives: As illustrated in Table 1 of Appendix A.

<u>Evaluation, Measurement and Verification Plan</u>: As defined within the Company's EM&V Plan contained within Appendix B.

e. <u>Simple Steps, Smart Savings</u>

General Program Description:

Avista collaborates with BPA on Simple Step, Smart Savings, a regional program designed to increase the adoption of energy-efficient residential products. To achieve energy savings, residential consumers are encouraged to purchase and install high-quality, light emitting diode bulbs (LEDs), light fixtures, energy-saving showerheads as well as ENERGY STAR appliances.

Simple Steps continues to provide the region's best opportunity to collectively influence both retail stocking practices and consumer purchasing. There continues to be opportunities for efficient lighting

improvements in customer residences as many residential lighting sockets are still occupied by inefficient bulbs. Incentives also encourage customers to increase efficiency before burn-out of the existing less-efficient lighting. Energy savings claimed are based on Regional Technical Forum (RTF) deemed savings.

Program Implementation:

The key drivers to delivering on the objectives of this program are the incentives to encourage customer interest and marketing efforts to drive customers to using the program. The upstream model used for lighting and showerheads uses manufacturer partnership to buy-down costs of products and allow for greater flexibility on how money is used (markdowns and/or marketing).

CLEAResult is contracted by Avista Utilities to provide the manufacturer and retail coordination. They are responsible for coordinating program marketing efforts, performing outreach to retailers, ensuring that the proper program tracking is in place and coordinating all implementation aspects of the program. Big box retailers in addition to select regional and national mass-market chains are the primary recipient of the product and typically offer a variety of the Simple Steps products at their locations. These products are clearly identified with point of purchase tags indicating they are part of the program.

Products included in program:

LED Bulbs such as General Purpose, Dimmable, Decorative, Mini-Base, Globe, Reflectors, Outdoor and Three- Way ENERGY STAR® LED Fixtures, and Showerheads with 2.0 GPM, 1.75 GPM, 1.5 GPM ratings.

Program Eligibility and incentives:

The program is applicable to existing Washington and Idaho residential customers with electric rate schedule 1 and Washington residential customers with rate schedule 101 who heat their hot water with natural gas. Simple Steps Smart Savings is available at retail locations with allocations amongst participating utilities based on estimated percent of customers shopping at specific locations.

Key external stakeholders include homeowners, landlords (and renters), retailers and trade allies. Key internal stakeholders include the contact center, accounts payable and marketing department.

Average Incentive per unit:

LED Bulb: \$2.00 - \$1.50

ENERGY STAR® LED Fixtures: \$5.00

Showerhead: \$4.50

Avista Program Manager: Rachelle Humphrey

Measures and Incentives: As illustrated in Table 1 of Appendix A.

<u>Evaluation, Measurement and Verification Plan</u>: As defined within the Company's EM&V Plan contained within Appendix B.

III. NON-RESIDENTIAL PORTFOLIO

a. Non-Residential Prescriptive Lighting Program

General 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.

The prescriptive lighting program makes it easier for customers, especially smaller customers and vendors, to participate in the program. We have seen a substantial increase in the number of projects that have been completed since this approach was instituted. The measures included in the Prescriptive Lighting Program include T12/T8, HID, MR16 and incandescent retrofits to more energy efficient light sources including T5 and T8 LEDs.

Program Implementation:

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

Key to the success of this program is clear communication to lighting supply houses, distributors, electricians and customers on incentive requirements and forms. The Avista website is also a channel to communicate program requirements and highlight opportunities for customers. Avista's regionally based Account Executives (AEs) are a key part of delivering the Prescriptive Lighting Program to commercial and industrial customers. Any changes typically include advance notice of 90 days to submit under the old requirements and/or incentive levels. This usually includes at a minimum, direct mail communication to trade allies as well as internal forms and website updates.

Program Eligibility:

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

Avista Program Manager: Rachelle Humphrey

Key Avista Support Staff: Lorri Kirstein, Tom Lienhard, Colette Bottinelli

Measures and Incentives: As Illustrated in Table 1 of Appendix A

<u>Evaluation Measurement and Verification Plan</u>: As defined within Avista's EM&V Plan contained in Appendix B.

b. Non-Residential HVAC Program

General Program Description:

Installing energy efficient heating equipment will reduce a customer's operating costs and save energy. This program offers direct incentives for installing high efficient natural gas HVAC equipment. The HVAC program encourages customers to select a high efficiency solution when making energy upgrades to their businesses. This prescriptive rebate approach issues payment to the customer after the measure has been installed. Eligibility guidelines for participation include but may not be limited to: confirmation of natural gas space heating usage, copies of project invoices and AHRI documentation. This program is applicable to non-residential customers in Washington with Avista natural gas as their primary heat source who install qualified new natural gas equipment.

Program Implementation:

This is a prescriptive program with six measures being offered. Customers must return to Avista a completed rebate form, invoices and an AHRI certificate within 90 days after the installation has been completed. Avista will send an incentive check to the customer (or their designee) generally within six to eight weeks. Rebates will not exceed the total amount on the customer invoice. Each rebate will be qualified and processed with the current commercial natural gas HVAC calculator to determine the savings and incentive. The key drivers to delivering on the objectives of the program are the direct incentives to fuel customer interest, marketing efforts and account executives to drive customers to the program, and ongoing work with trade allies to ensure that customer demand can be met. The Avista Website is also used to communicate program requirements, incentives and forms.

Avista Program Manager: Greta Zink

Measures and Incentives: As illustrated in Table 1 of Appendix A.

<u>Evaluation, Measurement and Verification Plan</u>: As defined within the Company's EM&V Plan contained within Appendix B.

c. Non-Residential Site-Specific Program

General Program Description:

The site specific program is a major component in our commercial/industrial portfolio. Customers receive technical assistance and incentives in accordance with Schedule 90 and Schedule 190 in. Our program approach strives for a flexible response to energy efficiency projects that have demonstrable kWh/Therm savings within program criteria. The majority of site specific kWh/Therm savings are comprised of custom lighting projects that don't fit the prescriptive path, appliances, compressed air, HVAC, industrial process, motors, shell measures and natural gas multifamily market transformation.

This program is available to all non-residential retail electric customers in Washington and Idaho and natural gas customers in Washington. The site specific program typically brings in the largest portion of savings to the overall energy efficiency portfolio.

Program Implementation:

This program will offer an incentive for any qualifying electric or gas energy saving measure that has a simple payback under 15 years

The incentive is capped at seventy percent for all of the customer incremental cost. The key drivers to delivering on the objectives of the program are the direct incentives to encourage customer interest, marketing efforts and account executives to drive customers to the program, and ongoing work with trade allies to ensure that customer demand can be met. The Avista Website is also used to communicate program requirements, incentives and forms.

The Company initiated a market transformation program intended to increase the availability of natural gas space and water heating in multi-family residential developments. The focus is on new construction multi-family residential rentals, larger than a 5-plex. The goal of the program is to address the split incentive issue where developers are focused on first costs that drive poor, lost opportunity heating choices and tenants who have to pay those heating costs without sufficient choices in the rental market to demonstrate. Natural gas presents a preferred option with less expense and societal benefit of the direct use of natural gas. The program intends to create developer confidence in both the natural gas heating design for multi-family as well as understanding the added long term value. Similarly the program assists potential tenants who otherwise have no control and limited options in the market to influence their heating fuel and better manage their heating costs.

The launch of this program several years ago coincided with a substantial reduction in multi-family new construction starts due to the failing economy. While the Company has had success with a couple of local builders, the majority indicate the incremental costs continue to remain higher than the \$2,000 incentive offered. Initial incremental costs were primarily focused on estimates of the difference in natural gas equipment compared to electric baseboard along with estimates for additional equipment, timing/coordination, labor and carrying costs associated with penetrating building envelopes. In multifamily construction natural gas related installations and inspections can add up to 25% to the build time. Builders have also expressed concern with the possibility of the program not being available after the expense has been made to convert their designs to natural gas.

With construction activity revitalized in the past year the program has been modified and continues to be offered for a minimum of two years at a higher incentive amount of \$3,500. Builders will continue to have two years to complete the construction of the project once contracted and will continue to provide documentation of their plans and incremental costs associated with installing natural gas over the electric straight resistance baseline. The program will be monitored for activity based on the number of units contracted through 2017 with the incentive amount to be evaluated for reduction or discontinuation.

In summary the new market transformation incentive levels for installing natural gas equipment over baseline electric straight resistance would be up to \$3,500 per unit for installation of natural gas space and/or water heating improvements.

<u>Avista Program Manager</u>: Lorri Kirstein, Tom Lienhard, site-specific engineering, Renee Coelho, multifamily market transformation.

Measures, Incentives and Budget: As illustrated in Table 1 of Appendix A.

<u>Evaluation, Measurement and Verification Plan</u>: As defined within the Company's EM&V Plan contained within Appendix B.

d. Non-Residential Prescriptive Shell Program

General Program Description:

The Commercial Insulation program encourages non-residential customers to improve the envelope of their building by adding insulation. This may make a business more energy efficient and comfortable. This prescriptive rebate approach issues payments to the customer after the measure has been installed. Eligibility guidelines for participation include, but may not be limited to: confirmation of electric or natural gas heating usage, invoices and insulation certificate. Pre and/or post inspection for insulation may occur as necessary throughout the year. The program offers incentives to non-residential (Schedule 11, 21, 25) customers who have an electric primary heat source or a non-residential (Schedule 101, 111 121) natural gas primary heat source provided by Avista in Washington who install qualified insulation measures in their business are eligible to apply for this program.

Program Implementation:

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

Avista Program Manager: Greta Zink

Measures and Incentives: As illustrated in Table 1 of Appendix A.

<u>Evaluation, Measurement and Verification Plan</u>: As defined within the Company's EM&V Plan contained within Appendix B.

e. Non-Residential Prescriptive VFD Program

General Program Description:

This program is intended to prompt the customer to increase the energy efficiency of their fan or pump applications with variable frequency drives through direct financial incentives. This prescriptive rebate approach issues payments to the customer after the measure has been installed. Eligibility guidelines for participation include, but may not be limited to: confirmation of electric usage, invoices and verification of HP of motor. Any non-residential (Schedule 11, 21, 25) Avista electric customer installing qualified equipment is eligible for this program.

Program Implementation:

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

Avista Program Manager: Greta Zink

Measures and Incentives: As illustrated in Table 1 of Appendix A.

<u>Evaluation, Measurement and Verification Plan</u>: As defined within the Company's EM&V Plan contained within Appendix B.

f. Non-Residential Food Service Equipment Program

General Program Description:

This program offers incentives for commercial customers who purchase or replace food service equipment with Energy Star or higher equipment. This equipment helps them save money on energy costs. This prescriptive rebate approach issues payments to the customer after the measure has been installed. Eligibility guidelines for participation include, but may not be limited to: confirmation of electric or natural gas usage, invoices and equipment data. Any non-residential (Schedule 11, 21, 25) Avista electric customer and any non-residential (Schedule 101,111, 121) Avista natural gas customer in Washington installing qualifying equipment is eligible for this program.

Program Implementation:

All customer-facing aspects of this program are prescriptively based. Customers must return to Avista a completed rebate form within 90 days after the installation has been completed. Avista will send an incentive check to the customer (or their designee) generally within six to eight weeks. Rebates will not exceed the total amount on the customer invoice. Each rebate will be qualified and processed with

the current EnergyStar Commercial Kitchen calculator to determine the savings. The key drivers to delivering on the objectives of the program are the direct incentives to fuel customer interest, marketing efforts and account executives to drive customers to the program, and ongoing work with trade allies to ensure that customer demand can be met. The Avista Website is also used to communicate program requirements, incentives and forms.

Avista Program Manager: Greta Zink

Measures and Incentives: As illustrated in Table 1 of Appendix A.

<u>Evaluation, Measurement and Verification Plan</u>: As defined within the Company's EM&V Plan contained within Appendix B.

g. Non-Residential Green Motors Program

General Program Description:

The Green Motors Initiative is to organize, identify, educate, and promote member motor service centers to commit to energy saving shop rewind practices, continuous energy improvement and motor driven system efficiency. Green Motors Program Group launched the Green Motors Initiative in 2008 to work with northwest regional utilities and other sponsoring organizations to provide incentives, through GMPG's member motor centers, for qualifying motors meeting the GMPG's standards. Avista joined this effort in offering the program to electric customers who participate in the green rewind program from 15 HP (horsepower) to 5,000 HP industrial motors. This program provides an opportunity for Avista customers to participate in a regional effort. Without this program, this market is difficult for us to reach as a local utility. Any commercial (Schedule 11, 21, 25, 31) Avista electric customer that does a qualified green motors rewind is eligible for this program. Incentives are paid as a credit off the invoice at the time of the rewind. A \$1 per HP incentive goes to the customer and a \$1 per HP incentive is paid to the service center.

<u>Program Implementation:</u>

The Green Motors Initiative is a third party program that handles the measures from inception to rebate payment. There is an admin fee based on the kWh savings for Green Motors Partners. The incentive is split between the service center and the customer. The customer receives their incentive as an immediate discount off their bill. The DSM Program Management team oversees the contract, monitors the program and does input for savings and incentive information. The Avista Website is also used to communicate program requirements, incentives and forms.

Avista Program Manager: Greta Zink

Measures and Incentives: As illustrated in Table 1 of Appendix A.

<u>Evaluation, Measurement and Verification Plan</u>: As defined within the Company's EM&V Plan contained within Appendix B.

h. Non-Residential AirGuardian Program

General Program Description:

The AirGuardian program is a third party delivered turnkey program for direct install compressed air and facility efficiency. The program will target compressed air users in Avista's Washington service territory. The direct install will be a compressed air leak reduction device which will generate energy savings by reducing the impact of compressed air leaks during off hour periods. While on site, a leak detection audit will also be conducted. Any commercial (Schedule 11, 21, 25) Avista electric customer installing qualified equipment is eligible for this program.

Program Implementation:

The AirGuardian program will be turnkey delivered by Sight Energy Group LLC. The target market for the direct installation of AirGuardian devices are small and medium sized businesses using rotary screw compressors of at least 15 HP. We anticipate participants to be machine shops, tire and auto body shops, small manufacturers and others using compressed air for production and tools. These facilities represent a prime opportunity for implementation of other energy efficiency measures too. The account executives are also providing customer referrals with permission from the customers. This program is available to all non-residential retail electric customers with compressed air. The DSM Program Management team monitors the contract, inputs the monthly results and runs analysis on program measures. Account executives drive customers to the program. The Avista Website is also used to communicate program requirements, incentives and forms.

Avista Program Manager: Greta Zink

Measures and Incentives: As illustrated in Table 1 of Appendix A.

<u>Evaluation, Measurement and Verification Plan</u>: As defined within the Company's EM&V Plan contained within Appendix B.

i. Non-Residential Fleet Heat Program

General Program Description:

Vehicle fleet operators use heating devices to heat vehicle engine blocks in cold weather. Maintaining the block temperature eases starting, reduces internal wear, and minimizes fuel consumption due to idle warm up time. Typically block heaters use 110 Volt single phase resistive elements, with no onboard controls. Heating operation is dependent solely on either the driver or fleet maintenance staff to energize the heaters as needed. In the Inland Northwest it appears many fleet operators energize vehicle heaters between October 31st and April 1st whenever the vehicle is off-shift. This 24 hour 7 day a week operation prevents freeze up and hard starting conditions, but may incur extra energy consumption and costs heating the engine block in conditions when heating is not needed. There is currently a technology available that adds logic and sensor points to control heater operation. This technology, called a thermocord, adds the ability to sense and measure block coolant temperature and ambient Outside Air Temperature (OAT). With this information the heater will only be energized when the OAT drops below a temperature set-point and the engine mounted thermostat is calling for heat.

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

Program Implementation:

The process for the program is that Avista will have customers fill out an order/rebate form with the specifics of their fleet vehicles. When that form is submitted to Avista, we will record that information and pass the form on to the vendor for processing. Avista will pay the vendor for the cost of the thermocord and the vendor will deliver the product directly to the customer. The customer will be responsible for installation. The vendor will notify Avista when the product has been delivered and Avista will perform an installation verification within 30 days of install. The key drivers to delivering on the objectives of the program are the direct incentives to fuel customer interest, marketing efforts and account executives to drive customers to the program, and ongoing work with trade allies to ensure that customer demand can be met. The Avista Website is also used to communicate program requirements, incentives and forms.

Avista Program Manager: Greta Zink

Measures and Incentives: As illustrated in Table 1 of Appendix A.

<u>Evaluation, Measurement and Verification Plan</u>: As defined within the Company's EM&V Plan contained within Appendix B.

j. Non-Residential EnergySmart Grocer Program

General Program Description:

This program is intended to prompt the customer to increase the energy efficiency of their refrigerated cases and related grocery equipment through direct financial incentives. The EnergySmart Program was launched in late 2007 and is delivered by a 3rd party contractor, facilitated through CLEAResult. A Field Energy Analyst with expertise in commercial refrigeration provides customers with a no cost audit of the refrigeration in their facility. The customer receives a detailed energy savings report regarding potential savings and is guided through the process from inception through the payment of incentives for qualifying equipment. CLEAResult utilizes a modeling program called Grocer Smart to determine savings. In addition to the potential savings that will be achieved through the measures implemented, customers receive technical assistance and comprehensive audits at no charge. Refrigeration often represents the primary electricity expense in a grocery store or supermarket. Although the potential for savings is high, it is often overlooked because of the technical aspect of the equipment. This program provides a concentrated effort to assist customers through the technical aspects of their refrigeration systems while providing a clear view of what savings can be achieved. Measures are continually looked at to make sure they are cost effective and new measures are considered as they become available. Any commercial (Schedule 11, 21, 25) Avista electric customer installing qualified equipment is eligible for this program.

Program Implementation:

CLEAResult is handling the outreach effort through industry contacts, cold calling and contractor relationships. The account executives are also providing customer referrals with permission from the customers. This program is available to all non-residential retail electric customers with refrigeration facilities. Incentives are offered as a result of the facility audit report for potential savings. CLEAResult guides this process from inception through the payment of the incentives. The DSM Program Management team monitors the contract, program, evaluates new and existing measures, inputs the monthly results and runs analysis on program measures. Account executives drive customers to the program. The Avista Website is also used to communicate program requirements, incentives and forms.

Avista Program Manager: Greta Zink

Measures and Incentives: As illustrated in Table 1 of Appendix A.

<u>Evaluation, Measurement and Verification Plan</u>: As defined within the Company's EM&V Plan contained within Appendix B.

IV. Table 1: Measure level summary of unit throughput, incentives and cost-effectiveness

Measure Description	Program	WA Units	Incentive	Est. Sub TRC	Est. Sub UCT
Washington Air Guardian	Air Guardian	7	\$ 1,440.00	1.90	1.90
LT Case: T12 to LP LED Inside Lamp	Energy Smart Grocer	77	\$ 10.00	2.66	3.99
MT Case: T12 to LP LED Inside Lamp	Energy Smart Grocer	77	\$ 10.00	1.92	2.89
MT Case: T8 to LED Inside Lamp	Energy Smart Grocer	700	\$ 10.00	1.14	1.71
LT Case: T8 to LP LED Inside Lamp	Energy Smart Grocer	105	\$ 10.00	1.57	2.35
T12 to LP LED Outside Lamp	Energy Smart Grocer	350	\$ 7.00	1.40	3.00
T8 to LP LED Outside Lamp	Energy Smart Grocer	1,400	\$ 7.00	0.83	1.78
Anti-Sweat Heater Controls - Low Temp	Energy Smart Grocer	263	\$ 40.00	3.48	4.17
Anti-Sweat Heater Controls - Med Temp	Energy Smart Grocer	350	\$ 40.00	2.48	2.96
Gaskets for Low Temp Reach-in Glass Doors	Energy Smart Grocer	70	\$ 40.00	0.35	0.96
Gaskets for Medium Temp Reach-in Glass Doors	Energy Smart Grocer	25	\$ 25.00	0.44	1.57
Gaskets for Walk-in Freezer - Main Door	Energy Smart Grocer	18	\$ 65.00	0.44	0.84
Gaskets for Walk-in Cooler - Main	Energy Smart Grocer	18	\$ 25.00	0.38	1.29

Measure Description	Program	WA Units	Incentive		\ Units Inc		Est. Sub TRC	Est. Sub UCT
Evap motors: shaded pole to ECM in Walk-in - Greater than 23 watts	Energy Smart Grocer	263	\$	140.00	3.44	7.07		
Evap motors: shaded pole to ECM in Walk-in - less than 23 watts	Energy Smart Grocer	35	\$	140.00	1.40	2.87		
Evap motors: shaded pole to ECM in Display Case	Energy Smart Grocer	88	\$	55.00	1.40	7.31		
Floating Head Pressure for Single Compressor Systems, LT Condensing Unit	Energy Smart Grocer	-	\$	100.00	1.89	5.80		
Floating Head Pressure for Single Compressor Systems, LT Remote Condenser	Energy Smart Grocer	-	\$	100.00	2.85	4.65		
Floating Head Pressure for Single Compressor Systems, MT Condensing Unit	Energy Smart Grocer	-	\$	100.00	1.27	5.14		
Floating Head Pressure for Single Compressor Systems, MT Remote Condenser	Energy Smart Grocer	-	\$	100.00	1.50	3.21		
Evaporated Fan - Walk-In ECM Controller - Low Temp - 1/10-1/20 HP	Energy Smart Grocer	-	\$	35.00	0.93	4.32		
Evaporated Fan - Walk-In ECM Controller - Medium Temp - 1/10-1/20 HP	Energy Smart Grocer	-	\$	35.00	0.78	5.51		
Strip Curtains for Convenience Store Walk-in Freezers	Energy Smart Grocer	-	\$	5.00	0.17	0.35		
Strip Curtains for Restaurant Walk-in Freezers	Energy Smart Grocer	-	\$	5.00	0.73	1.48		
Strip Curtains for Supermarket Walk-in Coolers Strip Curtains for Supermarket Walk-in	Energy Smart Grocer	245	\$	5.00	0.69	1.41		
Freezers	Energy Smart Grocer	210	\$	5.00	3.02	6.12		
Add doors to Open Medium Temp Cases Cases - Low Temp Coffin to High Efficiency	Energy Smart Grocer	298	\$	253.60	2.24	3.40		
Reach-in	Energy Smart Grocer	-	\$	214.80	8.68	3.39		
Cases - Low Temp Open to Reach-in Cases - Low Temp Reach-in to High Efficiency	Energy Smart Grocer	-	\$	334.80	4.02	3.39		
Reach-in	Energy Smart Grocer	70	\$	192.60	2.31	3.39		
Cases - Medium Temp Open Case to New High Efficiency Open Case	Energy Smart Grocer	1	\$	44.40	1.70	3.39		
Cases - Medium Temp Open Case to New Reach In	Energy Smart Grocer	140	\$	117.00	4.49	3.39		
Special Doors with Low/No ASH for Low Temperature Reach-in	Energy Smart Grocer	-	\$	340.00	13.05	3.39		
Advanced Floating Controls: Floating Head and Suction Pressure with Balanced Port Valves	Energy Smart Grocer	-	\$	47.68	0.40	3.39		

Measure Description	Program	WA Units	Incentive	Est. Sub TRC	Est. Sub UCT
Advanced Floating Controls: Floating Head and Suction Pressure with Electronic Expansion Valves (EEXVs)	Energy Smart Grocer	-	\$ 135.36	1.14	3.39
Advanced Floating Controls: Increase Suction Temperature with Electronic Expansion Valves (EEXVs)	Energy Smart Grocer	-	\$ 40.72	0.34	3.39
Efficient Compressors - Low Temperature	Energy Smart Grocer	-	\$ 159.60	1.88	3.39
Floating Head Pressure Control - Air Cooled	Energy Smart Grocer	7	\$ 66.40	4.35	3.39
Floating Head Pressure Control - Evap Cooled	Energy Smart Grocer	7	\$ 141.60	9.27	3.39
Floating Head Pressure Control w/ VFD- Air Cooled	Energy Smart Grocer	7	\$ 183.00	3.11	3.39
Multiplex - Compressors - Air-cooled Condenser	Energy Smart Grocer	-	\$ 393.60	2.59	3.39
Multiplex - Compressors - Evaporative Condenser	Energy Smart Grocer	-	\$ 393.60	2.59	3.39
Multiplex - Controls - Floating suction pressure - air cooled condenser	Energy Smart Grocer	-	\$ 45.40	1.44	3.39
Multiplex - Controls - Floating suction pressure - evaporative condenser	Energy Smart Grocer	-	\$ 46.20	1.47	3.39
Multiplex - Efficient/oversized Air-cooled Condenser for Multiplex	Energy Smart Grocer		\$ 412.20	13.10	3.39
Multiplex - Efficient/oversized Water-cooled Condenser for Multiplex	Energy Smart Grocer		\$ 310.00	9.85	3.39
VFD - Condenser Fan Motors - Air Cooled	Energy Smart Grocer	35	\$ 186.00	3.30	3.39
VFD - Condenser Fan Motors - Evap Cooled	Energy Smart Grocer	35	\$ 186.00	3.30	3.39
70-89 watt HID Fixture =< 25 watt LED Fixture	Exterior Lighting	61	\$ 60.00	1.49	3.11
90 - 100 W HID to 25-30W LED Fixture	Exterior Lighting	61	\$ 80.00	1.65	3.02
150 W HID to 30-50W LED Fixture	Exterior Lighting	92	\$ 125.00	2.16	2.98
175 W HID to 30-79W LED Fixture	Exterior Lighting	183	\$ 130.00	2.28	2.97
250 W HID to 80-140W LED Fixture	Exterior Lighting	92	\$ 140.00	1.29	2.95
320 W HID to 100-160W LED Fixture	Exterior Lighting	31	\$ 180.00	1.40	2.89
400 W HID to 100-175W LED Fixture	Exterior Lighting	305	\$ 255.00	1.84	2.92
250 watt HID New Construction Fixture =< 99 watt LED Fixture	Exterior Lighting	92	\$ 140.00	1.29	2.95
175 watt HID New Construction Fixture to =< 79 watt LED Fixture	Exterior Lighting	31	\$ 130.00	3.62	2.97

Measure Description	Program	WA Units	Incentive	Est. Sub TRC	Est. Sub UCT
320 & 400 watt HID New Construction Fixture =< 175 watt LED Fixture	Exterior Lighting	175	\$ 250.00	1.84	2.98
1000W HID to 300W-400W LED	Exterior Lighting	183	\$ 610.00	1.57	2.91
Sign Lighting LED	Exterior Lighting	7,500	\$ 17.00	11.77	3.49
Washington Fleet Heat	Fleet Heat	4	\$ 520.50	8.40	8.40
0.61 to 0.80 GPM electric pre-rinse sprayer	Food	1	\$ 25.00	7.98	5.64
3 pan electric steamer	Food	1	\$ 70.00	24.88	124.03
4 pan electric steamer	Food	1	\$ 100.00	76.38	115.51
5 pan electric steamer	Food	1	\$ 135.00	81.84	106.82
6 pan electric steamer	Food	0	\$ 160.00	88.23	108.06
10 or larger pan electric steamer	Food	-	\$ 180.00	10.20	160.26
Efficient combination oven (>= 16 pan and <= 20 pan) electric	Food	2	\$ 1,000.00	5.94	8.08
Efficient combination oven (>= 6 pan and <= 15 pan) electric	Food	2	\$ 1,000.00	20.86	5.87
Efficient convection oven full size	Food	3	\$ 225.00	0.96	3.34
Efficient convection oven half size	Food	3	\$ 225.00	0.76	3.38
Efficient hot food holding cabinet, 1/2 size	Food	1	\$ 165.00	0.73	1.42
Efficient hot food holding cabinet, full size	Food	1	\$ 165.00	0.92	4.60
Electric fryer	Food	1	\$ 300.00	1.15	2.91
Standard Efficiency Appliance to H.E. electric griddle, 70% effic. or better	Food	1	\$ 505.00	0.89	1.77
High temp electric hot water dishwasher	Food	1	\$ 650.00	5.28	3.46
Low temp electric hot water dishwasher	Food	1	\$ 600.00	6.87	3.46
0.61 to 0.80 GPM gas pre-rinse sprayer	Food	-	\$ 25.00	0.37	1.39
H.E. gas griddle, 40% effic. or better	Food	-	\$ 88.00	0.88	4.91
High temp gas hot water dishwasher	Food	1	\$ 350.00	0.69	1.44
Low temp gas hot water dishwasher	Food	1	\$ 300.00	0.94	2.29
H.E. gas convection oven, 40% effic. or better	Food	-	\$ 700.00	-	2.27

Measure Description	Program	WA Units	Incentive	Est. Sub TRC	Est. Sub UCT
Efficient combination oven (>= 6 pan and <= 15 pan) gas	Food	-	\$ 1,000.00	0.30	1.70
Efficient convection oven full size	Food	12	\$ 700.00	0.33	2.71
Efficient combination oven (>= 16 pan and <= 20 pan) gas	Food	-	\$ 1,000.00	0.37	2.11
Energy Star 50% effic.gas fryer	Food	74	\$ 1,000.00	0.99	2.48
3 pan gas steamer	Food	1	\$ 1,300.00	1.22	1.75
4 pan gas steamer	Food	1	\$ 1,700.00	1.22	1.78
5 pan gas steamer	Food	1	\$ 2,200.00	1.21	1.72
Gas rack oven	Food	-	\$ 235.00	0.74	15.51
6 pan gas steamer	Food	1	\$ 2,600.00	1.21	1.74
10 or larger pan gas steamer	Food	1	\$ 3,200.00	2.75	3.69
15 HP Industrial	Green Motor	-	\$ 30.00	1.39	6.88
20 HP Ind	Green Motor	-	\$ 40.00	1.67	6.90
25 HP Ind	Green Motor	1	\$ 50.00	1.91	7.23
30 HP Ind	Green Motor	2	\$ 60.00	1.87	6.49
40 HP Ind	Green Motor	-	\$ 80.00	1.78	5.66
50 HP Ind	Green Motor	-	\$ 100.00	1.73	4.87
60 HP Ind	Green Motor	-	\$ 120.00	1.73	4.80
75 HP Ind	Green Motor	2	\$ 150.00	1.65	3.95
100 HP Ind	Green Motor	3	\$ 200.00	1.76	3.91
125 HP Ind	Green Motor	-	\$ 250.00	1.79	3.57
150 HP Ind	Green Motor	2	\$ 300.00	1.91	3.54
200 HP Ind	Green Motor	4	\$ 400.00	2.09	3.51
250 HP Ind	Green Motor	2	\$ 500.00	2.25	3.88
300 HP Ind	Green Motor	-	\$ 600.00	2.66	3.86
350 HP Ind	Green Motor	-	\$ 700.00	2.96	3.86
400 HP Ind	Green Motor	-	\$ 800.00	3.00	3.83

Measure Description	Program	WA Units	Incentive	Est. Sub TRC	Est. Sub UCT
450 HP Ind	Green Motor	-	\$ 900.00	3.08	3.82
4500 HP Ind	Green Motor	-	\$ 9,000.00	3.80	3.49
500 HP Ind	Green Motor	-	\$ 1,000.00	3.18	3.82
600 HP Ind	Green Motor	-	\$ 1,200.00	2.48	3.67
700 HP Ind	Green Motor	2	\$ 1,400.00	2.65	3.66
800 HP Ind	Green Motor	-	\$ 1,600.00	2.72	3.65
900 HP Ind	Green Motor	-	\$ 1,800.00	2.77	3.64
1000 HP Ind	Green Motor	-	\$ 2,000.00	2.84	3.63
1250 HP Ind	Green Motor	-	\$ 2,500.00	2.95	3.60
1500 HP Ind	Green Motor	-	\$ 3,000.00	3.08	3.59
1750 HP Ind	Green Motor	-	\$ 3,500.00	3.14	3.57
2000 HP Ind	Green Motor	-	\$ 4,000.00	3.19	3.56
2250 HP Ind	Green Motor	-	\$ 4,500.00	3.27	3.54
2500 HP Ind	Green Motor	-	\$ 5,000.00	3.31	3.53
3000 HP Ind	Green Motor	-	\$ 6,000.00	3.38	3.51
3500 HP Ind	Green Motor	-	\$ 7,000.00	3.56	3.50
4000 HP Ind	Green Motor	-	\$ 8,000.00	3.64	3.50
5000 HP Ind	Green Motor	-	\$ 10,000.00	3.94	3.49
Gas Boiler <300kBtu .8589 AFUE	HVAC	881	\$ 5.00	1.08	2.67
Gas Boiler <300kBtu .90+ AFUE AFUE	HVAC	2,206	\$ 8.00	1.46	2.70
Singlestage Furnace <225 kBtu .9095 AFUE	HVAC	2,573	\$ 4.50	3.25	4.80
Multistage Furnace <225 kBtu .9095 AFUE	HVAC	342	\$ 6.00	3.21	4.61
Singlestage Furnace <225 kBtu .95+ AFUE	HVAC	2,736	\$ 6.00	3.21	4.61
Multistage Furnace <225 kBtu .95+ AFUE	HVAC	1,320	\$ 7.50	2.95	4.24
1000 watt HID =< 400 watt LED	Interior Lighting	511	\$ 460.00	1.45	3.14
250 watt HID to =< 140 LED	Interior Lighting	937	\$ 155.00	1.03	3.02

Measure Description	Program	WA Units	Incentive	Est. Sub TRC	Est. Sub UCT
Over 150 watt Incandescent to 50-60W LED	Interior Lighting	145	\$ 55.00	2.37	3.58
4-Lamp T12/T8 Fixture to 2-Lamp LED	Interior Lighting	2,469	\$ 35.00	1.13	3.74
75-100 watt Incandescent to LED* 12-20 watt Fixture	Interior Lighting	230	\$ 20.00	7.17	6.43
Occupancy sensors built in with relays for room control (not switch sensors)	Interior Lighting	94	\$ 40.00	3.07	4.31
50 watt MR16 (GU10 Base) to MR16 LED 6-9 watt	Interior Lighting	230	\$ 10.00	29.53	8.57
75-100 watt Incandescent to 12-20 watt LED lamp	Interior Lighting	1,703	\$ 8.00	12.20	9.00
T5HO - T5 TLED	Interior Lighting	16,177	\$ 15.00	1.40	3.34
3-Lamp T12/T8 Fixture to LED Qualified 2x4 Fixture	Interior Lighting	1,447	\$ 29.00	1.08	3.39
40 watt Incandescent to 6-10 watt LED lamp	Interior Lighting	1,618	\$ 8.00	9.75	6.43
60 watt Incandescent to 9-13 watt LED lamp	Interior Lighting	1,618	\$ 8.00	11.60	6.43
20 watt MR16 (GU10 Base) to MR16 LED 2-4 watt	Interior Lighting	77	\$ 10.00	11.22	3.43
T12/T8 to 8-20 W TLED	Interior Lighting	13,622	\$ 6.50	1.22	2.27
35 watt MR16 (GU10 Base) to MR16 LED 4-6 watt	Interior Lighting	77	\$ 10.00	19.53	2.57
400 watt HID =< 75 watt LED	Interior Lighting	1,447	\$ 185.00	2.56	4.72
E ENERGY STAR DOORS	Low-Income	70	\$ 1,013.40	1.62	1.00
E INS - CEIL/ATTIC	Low-Income	16,000	\$ 2.14	0.69	0.63
E INS - DUCT	Low-Income	50	\$ 6.70	2.97	2.97
E INS - FLOOR	Low-Income	50,000	\$ 2.14	2.47	2.41
E INS - WALL	Low-Income	15,000	\$ 2.20	2.07	2.07
E ENERGY STAR WINDOWS	Low-Income	70	\$ 8.55	1.44	1.11
E HE AIR HPUMP	Low-Income	70	\$ 4,172.89	1.10	1.10
Ductless HP (Average RTF of HZ2 & CZ 1-3)	Low-Income	40	\$ 3,822.37	1.36	1.11
Tier1 0-55Gallon HPWH	Low-Income	40	\$ 854.23	1.40	0.82
E ENERGY STAR REFRIGERATOR	Low-Income	70	\$ 100.23	1.04	0.49
E AIR INFILTRATION	Low-Income	70	\$ 730.00	1.00	0.74
Duct sealing	Low-Income	50	\$ 608.58	2.84	2.84

Measure Description	Program	WA Units	Incentive		Est. Sub TRC	Est. Sub UCT
9 watt A19 bulbs - 60W replacement - (6 units)	Low-Income	60	\$:	16.92	3.38	3.38
Elec Res> Heat Pump	Low-Income	1	\$ 3,29	97.00	1.34	1.34
G INS - CEIL/ATTIC	Low-Income	125,000	\$	2.14	0.16	0.16
G INS - WALL	Low-Income	35,360	\$	2.20	0.47	0.47
G INS - FLOOR	Low-Income	33,570	\$	2.14	0.57	0.57
G ENERGY STAR WINDOWS	Low-Income	11,405	\$	4.37	0.98	1.00
G INS - DUCT	Low-Income	653	\$	6.70	0.94	0.94
G HE WH 50G	Low-Income	10	\$ 3	37.05	1.02	1.00
G PROG TSTAT NO AC	Low-Income	25	\$ 4	46.66	0.16	1.00
G PROG TSTAT W/AC	Low-Income	25	\$ 4	16.66	0.16	1.00
G ENERGY STAR DOORS	Low-Income	50	\$ 19	93.43	0.88	1.00
G AIR INFILTRATION	Low-Income	70	\$ 73	30.00	0.22	0.20
G duct sealing	Low-Income	25	\$ 42	29.85	0.71	1.00
G HE FURNACE	Low-Income	5	\$ 69	98.00	2.05	1.05
Multifamily NG Market Transformation (per unit)	MFMT	542	\$ 3,50	00.00	1.01	1.23
ELEC WINDOWS SP/MDP> <0.30 U	Residential	3,400	\$	1.44	1.89	26.76
EIEC Storm Windows	Residential	1,000	\$	1.00	1.10	10.71
Web Tstat Elec DIY	Residential	20	\$ (50.00	2.87	11.49
Web Tstat Elec Cont	Residential	40	\$ -	75.00	2.34	9.19
ELEC RESISTANCE TO ASHP	Residential	57	\$ 70	00.00	1.61	9.58
VARIABLE SPEED MOTOR ASHP	Residential	200	\$ 8	30.00	1.93	6.62
VARIABLE SPEED MOTOR FURNACE	Residential	500	\$ 8	30.00	1.90	6.52
E ESTAR HOME - MANUF, ELEC/DF	Residential	8	\$ 1,00	00.00	2.45	5.34
Tier2 0-55Gallon HPWH	Residential	17	\$ 20	00.00	1.06	4.94
Tier3 0-55Gallon HPWH	Residential	17	\$ 20	00.00	1.12	5.23
Tier1 0-55Gallon HPWH	Residential	17	\$ 20	00.00	0.87	3.68

Measure Description	Program	WA Units	Incentive		Est. Sub TRC	Est. Sub UCT
Ductless Heat Pump	Residential	80	\$	500.00	1.36	8.52
NG Storm Windows	Residential	7,500	\$	1.00	0.31	3.11
G Windows Single Pane <0.30 U-value	Residential	80,000	\$	1.50	1.44	19.65
Web Tstat Gas DIY	Residential	300	\$	60.00	0.64	2.57
Web Tstat Gas Cont	Residential	600	\$	75.00	0.52	2.06
TANKLESS WH (0.82+)	Residential	150	\$	200.00	1.15	2.59
NG FURNACE/BOILER 90% AFUE	Residential	2,800	\$	300.00	1.37	3.11
E STAR HOME - GAS ONLY	Residential Residential	18	\$	600.00	0.74	3.72
E> NG Space and DHW	Conversions	793	\$	2,250.00	1.36	4.06
E> NG DIRECT VENT WALL HEAT	Residential Conversions	29	\$	1,300.00	2.04	7.02
ELEC RES> CENTRAL NG	Residential Conversions	433	\$	1,500.00	1.45	4.25
Less than R11 attic insulation (E/G) to R30-R44 Attic Insulation	Shell	10,000	\$	0.20	1.27	4.81
Less than R11 roof insulation (E/G) to R30+ Roof Insulation	Shell	17,500	\$	0.25	2.08	5.16
Less than R11 attic insulation (E/G) to R45+ Attic Insulation	Shell	10,000	\$	0.25	1.62	5.56
Less than R4 wall insulation (E/G) to R11-R18 Wall Insulation	Shell	27,500	\$	0.40	4.24	6.47
Less than R4 wall insulation (E/G) to R19+ Wall Insulation	Shell	27,500	\$	0.45	5.95	8.60
LED - Decorative and Mini-Base - 250- 1049 lumens	Simple Steps	38,764	\$	1.50	3.38	6.36
LED - General Purpose and Dimmable - 1490 - 2600 lumens	Simple Steps	35,163	\$	1.00	2.17	8.07
LED - General Purpose and Dimmable - 250- 1049 lumens	Simple Steps	431,764	\$	1.00	6.22	7.34
LED - General Purpose and Dimmable - 1050 - 1489 lumens	Simple Steps	9,164	\$	1.00	3.06	13.21
LED - Globe - 250- 1049 lumens	Simple Steps	9,356	\$	1.00	3.30	8.80
LED - Reflectors and Outdoor - 1490- 2600 lumens	Simple Steps	801	\$	2.00	10.08	26.41
LED - Reflectors and Outdoor - 250 - 1049 lumens	Simple Steps	205,818	\$	2.00	16.93	8.80
LED - Reflectors and Outdoor - 1050 - 1489 lumens	Simple Steps	12,987	\$	2.00	4.52	7.70
LED - Decorative Ceiling Flush Mount Fixture - 500-1999 lumens	Simple Steps	4,172	\$	1.50	8.37	11.13

Measure Description	Program	WA Units	Incentive		Est. Sub TRC	Est. Sub UCT
LED - Decorative Ceiling Flush Mount Fixture 2000-7999 lumens	Simple Steps	80	\$	1.50	8.34	39.52
LED - Track Light Fixture 0-499 Lumens	Simple Steps	16,553	\$	0.50	3.46	18.42
LED - Track Light Fixture 2000-7999 Lumens	Simple Steps	669	\$	5.00	7.24	23.83
LED - Track Light Fixture 500-1999 lumens	Simple Steps	4,500	\$	2.00	7.23	16.69
LED - Linear Flush Mount Fixture 0-499 lumens	Simple Steps	108	\$	0.50	0.76	1.15
LED - Linear Flush Mount Fixture 500-1999 lumens	Simple Steps	61	\$	2.00	1.33	1.73
LED - Exterior Porch Light Fixture 0 -499 Lumens	Simple Steps	68	\$	0.50	15.35	18.42
LED - Exterior Porch Light Fixture 500-1999 Lumens	Simple Steps	133	\$	3.00	15.93	11.13
LED - Exterior Security Fixture 500 -1999 Lumens	Simple Steps	18	\$	2.00	14.72	20.72
LED Retro-Fit Fixture 2000 -7999 Lumens	Simple Steps	18	\$	1.00	5.79	57.60
LED Retro-Fit Fixture 500-1999 Lumens	Simple Steps	18	\$	1.00	5.79	16.14
LED Bathroom Vanity 2000 -7999 Lumens	Simple Steps	9,000	\$	3.00	3.67	16.11
LED Bathroom Vanity 500-1999 Lumens	Simple Steps	19,779	\$	1.00	3.74	13.81
Showerhead 2.0 GPM	Simple Steps	4,635	\$	1.50	10.37	12.91
Showerhead 1.75 GPM	Simple Steps	89	\$	5.00	8.64	8.50
Showerhead 1.5 GPM	Simple Steps	1	\$	7.00	-	8.96
Clothing Washer	Simple Steps	1,435	\$	25.00	1.07	2.35
Prescriptive VFDs - HVAC Cooling Pump	VFD	91	\$	130.00	3.96	6.09
Prescriptive VFDs - HVAC Fan	VFD	91	\$	130.00	3.71	5.70
Prescriptive VFDS - HVAC Heating Pump or combo	VFD	148	\$	130.00	6.37	9.80
E TO G FURNACE CONVERSION	WA Low-Income Conversions	22	\$	5,196.30	1.10	0.81
E TO G H2O CONVERSION	WA Low-Income Conversions	25	\$	586.78	0.33	1.00