Appendix A: 2019 Program Plans

Appendix A

2019 Program Plans

Contents

I.	L	OW INCOME PORTFOLIO	2
a	. .	Low Income Program	2
II.	R	RESIDENTIAL PORTFOLIO	5
a		Residential ENERGY STAR Homes Program	5
b	١.	Residential HVAC Program	6
c		Residential Water Heat Program	7
d		Residential Shell Program	8
e	•	Simple Steps, Smart Savings	9
f.		Multifamily Hard to Reach Program – Direct Install	10
III.	N	NON-RESIDENTIAL PORTFOLIO	11
a		Non-Residential Prescriptive Lighting Program	11
b	١.	Non-Residential HVAC Program	12
c		Non-Residential Site-Specific Program	13
d	l .	Non-Residential Prescriptive Shell Program	14
e		Non-Residential Prescriptive HVAC VFD Program	14
f.		Non-Residential Food Services Program	15
g	, .	Non-Residential Green Motors Program	16
h	١.	Non-Residential AirGuardian Program	17
i.		Non-Residential Fleet Heat Program	18
j.	,	Non-Residential Grocer Program.	19
IV.	Т	able 1: Measure level summary of unit throughput, incentives and cost-effectiveness	20

I. LOW INCOME PORTFOLIO

a. Low Income Program

General Program Description:

The Company utilizes the infrastructure of six Community Action Partner (CAP) agencies and one Tribal Housing Authority to deliver low income energy efficiency programs (aka Weatherization). The CAPs have the ability to income-qualify, 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 \$2,350,000.

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 to be eligible for 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 flexibility in preserving the integration of the improvements that have been installed in the home.

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

2019 Low Income Funding by CAP Agency

CAP Agency	County	Funding
SNAP	Spokane	\$1,545,125
Rural Resources Community Action	Ferry, Lincoln, Pend Oreille, Stevens	\$227,950
Community Action Center	Whitman	\$171,550
Opportunities Industrialization Council	Adams, Grant	\$88,125
Spokane Indian Housing Authority	Stevens County	\$23,500
Washington Gorge Action Program	Klickitat, Skamania	\$11,750
Community Action Partnership	Asotin	\$282,000
_		Total \$2,350,000

The 2019 plan will have an increased budget to serve the income qualified home. This is as a result of a condition of a recent WUTC order that increased funds available for low income by \$350,000. 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 2019 Approved Measures can be found in the table below:

2019 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 rated doors	Energy Star rated doors
Electric to ductless heat pump	Energy Star window
Electric to air source heat pump	High efficiency furnace (95% AFUE)
Heat pump water heater (0-54 gal 1.8 EF)	High efficiency water heater <= 55 Gal (.82 EF)
LED's (6-Pack)	High efficiency boiler (96% AFUE)

New for 2019 is a High Efficiency Boiler measure. While the company has offered it in the past, for the 2019 plan it has been broken out from the furnace rebate as a standalone measure that will receive partial reimbursement for installation.

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 2019 Fully Funded and Qualified Rebate measures can be found in the table below:

2019 Rebates - Fully Funded and Rebated

Washington - LI Electric - 2019				
Measure Description	2019 Est	Est. Sub	Est. Sub	Status
	Units/(sq ft)	TRC	UCT	
				Fully Fund
E AIR INFILTRATION	20,000	1.71	1.45	
E ENERGY STAR RATED				Fully Fund
DOORS	20	1.40	0.77	
E ENERGY STAR				Fully Fund
REFRIGERATOR	20	1.04	0.07	
				Fully Fund
Windows	3,645	4.65	1.28	
E HE AIR HPUMP	10	0.17	1.00	Rebate

Washington - LI Electric - 2019				
Measure Description	2019 Est Units/(sq ft)	Est. Sub TRC	Est. Sub UCT	Status
				Fully Fund
E INS - CEIL/ATTIC	10,000	4.21	1.28	
				Fully Fund
E INS - DUCT	10,000	2.29	1.27	
				Fully Fund
E INS - FLOOR	25,000	1.81	0.43	
				Fully Fund
E INS - WALL	10,000	3.32	1.34	
				Fully Fund
Duct sealing	10	2.82	2.82	
Ductless Heat Pump w				Fully Fund
FAF	-	1.71	1.36	
Ductless Heat Pump				Fully Fund
(displace Zonal)	10	0.77	0.56	
				Fully Fund
Tier2-3 Anysize HPWH	10	1.20	1.20	
9 watt A19 bulbs - 60W				Fully Fund
replacement - (6 units)	50	2.22	1.04	
				Fully Fund
Elec Res> Heat Pump	5	1.29	1.24	-

Washington - LI - Gas 2019				
Measure Description	2019 Est Units	Sub TRC	Sub UCT	Status
G AIR INFILTRATION	75	0.07	0.07	Fully Fund
G ENERGY STAR DOORS	40	1.36	0.36	Fully Fund
G ENERGY STAR WINDOWS	1,800	0.93	0.28	Fully Fund
G HE FURNACE AFUE 95%	34	1.92	0.92	Fully Fund
G HE WH < 55 Gal	7	1.07	0.07	Fully Fund
G INS - CEIL/ATTIC (sq ft)	125,000	1.04	1.04	Fully Fund
G INS – DUCT (sq ft)	653	0.07	0.07	Fully Fund
G INS – FLOOR (sq ft)	33,570	0.42	0.42	Fully Fund
G INS – WALL (sq ft)	35,360	0.46	0.46	Fully Fund

Washington - LI - Gas 2019				
Measure Description	2019 Est Units	Sub TRC	Sub UCT	Status
G duct sealing	7	0.22	1.00	Rebate
Tankless Water Heater				
(<=55 Gal)	10	0.59	1.00	Rebate
HE Boiler AFUE 96%	1	1.31	1.00	Rebate

2019 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 2018 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 insulation for attic, floor, wall, air infiltration and LED lamps.

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 Certified Homes program helps homebuyers easily identify homes that are significantly more energy efficient than standard construction in the marketplace. As code requirements have become more rigorous and builder practices have become more efficient, EPA has periodically modified the guidelines to ensure that certified homes represent a meaningful improvement over non-labeled homes.

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.

Revised Rebates for 2019:

Measure Description	2018	2019
E STAR HOME - GAS ONLY	\$ 600	\$ 200
E ESTAR HOME - MANUF, ELEC/DF	\$ 1,000	\$ 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: Camille Martin

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. Energy Efficiency 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.

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: Camille Martin

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 Water Heat Program

General Program Description:

Program Eligibility and incentives:

Washington electric customers (Schedule 1) who heat their homes with Avista electric or natural gas may be eligible for a rebate for the installation of a high efficiency Heat Pump Water Heater, Tankless Water Heater or Gas High Efficiency Water Heater.

Revised Rebates for 2019:

Measure Description	2018	2019
Heat Pump Water Heater (Any size Ave Tier 2/3)	\$ 200	\$ 215
G TANKLESS WH (0.82+)	\$ 200	\$ 215
G HE Water Heaters (<= 55)	NA	\$ 60

Efficiencies for space and water heating equipment are verified according to the contractor invoice or Air-Conditioning, Heating, and Refrigeration Institute (AHRI).

Avista Program Manager: Camille Martin

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 Shell Program

General Program Description:

The shell program encourages residential customers to improve their home's shell or exterior envelope with upgrades to windows, storm windows, and insulation. This prescriptive rebate approach issues payment to the customer after the measure has been installed. Energy Efficiency 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:

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 2019:

Measure Description	2018 (per sq ft)	2019 (per sq ft)
EIEC Storm Windows	\$ 1.00	\$2.00
Windows SP/MDP> <0.30 U	\$ 1.50	\$3.00
Wall Insulation R11->=R49	NA	\$0.40
Floor Insulation R0->=R19	NA	\$0.20
Attic Insulation R0->=R11	NA	\$0.45

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: Camille Martin

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. Simple Steps, Smart Savings

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.

<u>Program Implementation</u>:

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.

<u>Products included in program</u>:

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 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: \$0.50 - \$5.00

ENERGY STAR® LED Fixtures: \$0.50 - \$9.00

Showerhead: \$1.00 - \$6.00

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.

f. Multifamily Hard to Reach Program - Direct Install

General Program Description:

Through the Multifamily Direct Install Program, Avista provides free gas and electric direct-install measures to multifamily residences (of five units or more) and common areas in its service territory. This program targets the hard to reach market of customers who rent rather than own their property and the property managers/owners of the properties. This program offers direct install measures to owners of multifamily buildings in order to make energy efficient improvements. Products included in the program are listed below.

Products included in program:

- Site audit
- Various LED Lamps
- Energy Efficient Shower Heads
- Energy Efficient Faucet Aerators

• Vending Misers for Common Spaces

• Smart Power Strips

<u>Program Implementation: SBW Consulting is contracted by Avista Utilities to administer the direct</u> installation of energy efficiency measures at customer sites.

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.

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 011 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 reduces a customer's operating costs and saves 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.

<u>Program Implementation</u>:

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. The Avista Website is also used to communicate program requirements, incentives and forms.

Revised Rebates for 2019:

Measure Description	2018	2019
Gas Boiler <300kBtu .90+ AFUE AFUE	\$ 8.00	\$9.00
Singlestage Furnace <225 kBtu .9095 AFUE	\$ 4.50	\$8.50
Multistage Furnace <225 kBtu .9095 AFUE	\$ 6.00	\$11.00
Multistage Furnace <225 kBtu .95+ AFUE	\$ 7.50	\$13.00
Singlestage Furnace <225 kBtu .95+ AFUE	\$ 6.00	\$11.00

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 Washington and Idaho. 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 do not fit the prescriptive path, appliances, compressed air, HVAC, industrial process, motors, shell measures and natural gas multifamily market transformation. The site specific program is available to all non-residential retail electric and/or gas customers in Washington and Idaho. 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 of the customer incremental cost. The key drivers to delivering on the objectives of the program include; the direct incentives to encourage customer interest, marketing efforts, account executives whose input and assistance can 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.

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

<u>Measures, Incentives and Budget</u>: 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. 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 HVAC VFD Program

General Program Description:

This program is intended to prompt the customer to increase the energy efficiency of their HVAC 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. 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 Services 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 Avista 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. The Avista Website is also used to communicate program requirements, incentives and forms.

Revised Rebates for 2019:

Measure Description	2018	2019
Standard Efficiency Appliance to H.E. electric griddle, 70% effic. or better	\$ 505	\$ 250

Measure Description	2018	2019
High temp gas hot water dishwasher	\$ 350	\$ 300
Efficient Electric convection oven full size	\$ 225	\$ 200
High temp electric hot water dishwasher	\$ 650	\$ 750
Efficient hot food holding cabinet, 1/2 size	\$ 165	\$ 300
Low temp electric hot water dishwasher	\$ 600	\$ 750
H.E. gas griddle, 40% effic. or better	\$ 88	\$ 250
Efficient hot food holding cabinet, full size	\$ 165	\$ 575
Efficient natural gas convection oven full size	\$ 700	\$ 700
Gas rack oven	\$ 235	\$2,000
0.81 to 1.00 GPM electric pre-rinse sprayer	\$ 25	\$ 50
Efficient hot food holding cabinet, Double Size NEW	\$ -	\$1,000
Electric fryer (Large Vat Size)	\$ -	\$ 175
On-Demand Commercial Overwrapper	\$ -	\$ 300
0.81 to 1 GPM gas pre-rinse sprayer	\$ 25	\$ 50
3 pan electric steamer	\$ 70	\$1,300
4 pan electric steamer	\$ 100	\$1,700
5 pan electric steamer	\$ 135	\$2,200
6 pan electric steamer	\$ 160	\$2,600
10 or larger pan electric steamer	\$ 180	\$3,200

Avista Program Manager: Greta Zink

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

 $\underline{Evaluation,\,Measurement\,and\,Verification\,Plan}\text{:}\ As\ defined\ within\ the\ Company's\ EM\&V\ Plan\ contained\ within\ Appendix\ B.}$

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 industrial green motors rewind is eligible for this program. Incentives are paid as a credit off the invoice at the time of the rewind. A \$1 per HP incentive goes to the customer and a \$1 per HP incentive is paid to the service center.

Program Implementation:

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 Energy Efficiency 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 4 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 Energy Efficiency 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 customers fill out an order/rebate form with the specifics of their fleet vehicles. When that form is submitted to Avista, that information is recorded and passed on to the vendor for processing. Avista pays 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 Grocer Program

General Program Description:

For 2019, Avista's Grocer Program, previously EnergySmart Grocer, which has historically been administered through a third-party (ClearResult) will be offered in-house through its traditional prescriptive and site-specific channels.

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. This year we will be offering this program in two ways. We will offer measures with RTF deemed savings values on a prescriptive basis and measures that are not RTF approved on a Site Specific basis. 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. Any commercial (Schedule 11, 21, 25) Avista electric customer installing qualified equipment is eligible for this program.

Program Implementation:

Outreach efforts will occur through Avista Account Executives, industry contacts and contractor relationships. This program is available to all non-residential retail electric customers with refrigeration facilities. For prescriptive incentives, 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 Avista Commercial Grocer calculator to determine the savings. For site specific projects, the process will be followed just like any other site specific project. 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. The Avista Website is also used to communicate program requirements, incentives and forms.

Avista Program Manager: Greta Zink and Lorri Kirstein

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

The table below lists the programs in the following order:

- 1. Exterior Prescriptive Lighting
- 2. Fleet Heat
- 3. Food Services
- 4. Green Motors
- 5. Grocer
- 6. Interior Prescriptive Lighting
- 7. Multifamily Direct Install
- 8. Non-Residential HVAC
- 9. Non-Residential Shell
- 10. Prescriptive Shell
- 11. Residential Prescriptive
- 12. Simple Steps
- 13. Variable Frequency Drives
- 14. Washington Low-Income
- 15. Washington Air Guardian

Measure Description	Program	WA Units	Incentive	Est. Sub TRC	Est. Sub UCT
	Exterior Pres				
25 watt fixture	Lighting	178	\$60.00	3.20	3.18
	Exterior Pres				
30 watt fixture	Lighting	893	\$80.00	2.37	3.22
	Exterior Pres				
50 watt fixture	Lighting	289	\$125.00	2.62	3.05
	Exterior Pres				
100 watt fixture	Lighting	523	\$130.00	2.70	3.10
	Exterior Pres				
100 watt NC fixture	Lighting	110	\$130.00	4.07	3.47
	Exterior Pres				
140 watt fixture - Ext	Lighting	513	\$140.00	2.04	3.64
	Exterior Pres				
140 watt NC fixture	Lighting	5	\$140.00	1.59	3.59
	Exterior Pres				
160 watt fixture	Lighting	207	\$180.00	1.97	3.41
	Exterior Pres				
160 watt NC fixture	Lighting	22	\$250.00	1.91	2.21
	Exterior Pres				
175 watt fixture - Ext	Lighting	2,141	\$255.00	1.86	3.16
	Exterior Pres				
300 watt fixture - Ext	Lighting		\$450.00	2.22	2.96

Measure Description	Program	WA Units	Incentive	Est. Sub TRC	Est. Sub UCT
400 watt fixture - Ext	Exterior Pres Lighting	390	\$610.00	2.25	3.25
Sign Lighting	Exterior Pres Lighting	12,635	\$17.00	5.89	3.01
Washington Fleet Heat	Fleet Heat	50	\$520.50	8.33	8.33
0.81 to 1.00 GPM electric pre-rinse sprayer	Food Services	1	\$50.00	4.37	1.66
3 pan electric steamer	Food Services	1	\$1,300.00	56.20	2.44
4 pan electric steamer	Food Services	1	\$1,700.00	3.13	2.49
5 pan electric steamer	Food Services	1	\$2,200.00	3.12	2.39
6 pan electric steamer	Food Services	-	\$2,600.00	11.39	2.41
10 or larger pan electric steamer	Food Services	_	\$3,200.00	4.53	3.27
Efficient combination oven (>= 16	1000 301 11003		ψ3)200.00	1.55	3.27
pan and <= 20 pan) electric	Food Services	1	\$1,000.00	7.91	1.94
Efficient combination oven (>= 6 pan					
and <= 15 pan) electric	Food Services	1	\$1,000.00	5.37	1.79
Efficient Electric convection oven full	5 16 :	4	†200.00	0.04	4.07
Size	Food Services	1	\$200.00	0.81	1.97
Efficient hot food holding cabinet, 1/2 size	Food Services	_	\$300.00	3.63	3.39
Efficient hot food holding cabinet,	1 000 Sci vices		7300.00	3.03	3.33
full size	Food Services	-	\$575.00	3.03	3.15
Efficient hot food holding cabinet, Double Size NEW	Food Services	-	\$1,000.00	1.32	3.32
Electric fryer (Large Vat Size)	Food Services	1	\$175.00	1.67	2.44
Standard Efficiency Appliance to H.E.					
electric griddle, 70% effic. or better	Food Services	1	\$250.00	0.89	3.55
High temp electric hot water					
dishwasher	Food Services	3	\$750.00	5.27	2.97
Low temp electric hot water dishwasher	Food Somisos	3	\$750.00	6 96	2.75
Refrigerator - Glass Door, 15 to 29.9 cuft Federal Standard to ENERGY STAR Refrigerator - Glass Door, 15 to	Food Services	3		6.86	
29.9 cuft	Food Services	-	\$52.80	0.24	2.23
Refrigerator - Glass Door, 30 to 49.9 cuft Federal Standard to ENERGY STAR Refrigerator - Glass Door, 30 to					
49.9 cuft	Food Services	-	\$114.40	0.24	2.23
Refrigerator - Glass Door, 50 or greater cuft Federal Standard to ENERGY STAR Refrigerator - Glass			A		
Door, 50 or greater cuft	Food Services	-	\$118.00	0.15	2.23

Measure Description	Program	WA Units	Incentive	Est. Sub TRC	Est. Sub UCT
Refrigerator - Glass Door,< 15 cuft					
Federal Standard to ENERGY STAR					
Refrigerator - Glass Door, < 15 cuft	Food Services	-	\$33.20	0.39	2.23
Refrigerator - Solid Door, < 15 cuft					
Federal Standard to ENERGY STAR					
Refrigerator - Solid Door,< 15 cuft	Food Services	-	\$46.20	0.49	2.23
Refrigerator - Solid Door, 15to 29.9					
cuft Federal Standard to ENERGY					
STAR Refrigerator - Solid Door, 15 to	- LO :		4=2.50		2.22
29.9 cuft	Food Services	-	\$53.60	0.25	2.23
Refrigerator - Solid Door, 30 to 49.9					
cuft Federal Standard to ENERGY					
STAR Refrigerator - Solid Door, 30 to	Food Comises		\$51.00	0.11	2 22
49.9 cuft Refrigerator - Solid Door, 50 or	Food Services	-	331.00	0.11	2.23
greater cuft Federal Standard to					
ENERGY STAR Refrigerator - Solid					
Door, 50 or greater cuft	Food Services	_	\$84.40	0.12	2.23
Freezer - Energy Star Glass Door - 15	1 000 301 11003		φσ το	0.12	2.23
to 29.9 cu.ft.	Food Services	_	\$125.20	0.44	2.23
Freezer - Energy Star Glass Door - 30				-	
to 49.9 cu.ft	Food Services	-	\$242.40	0.35	2.23
Freezer - Energy Star Glass Door - 50			•		
cu.ft. and greater	Food Services	-	\$319.60	0.33	2.23
Freezer - Energy Star Glass Door -					
Less than 15 cu.ft.	Food Services	-	\$89.20	0.55	2.23
Freezer - Energy Star Glass Door					
Chest Freezer	Food Services	-	\$62.00	0.25	2.23
Freezer - Energy Star Solid Door					
Chest Freezer	Food Services	-	\$46.60	0.10	2.23
Freezer - Solid Door, < 15 cuft					
Federal Standard to ENERGY STAR					
Freezer - Solid Door, < 15 cuft	Food Services	-	\$43.00	0.29	2.23
Freezer - Solid Door, 15-29.9 cuft					
Federal Standard to ENERGY STAR			4		
Freezer - Solid Door, 15-29.9 cuft	Food Services	-	\$72.00	0.29	2.23
Freezer - Solid Door, 30 ≤ V < 49.9					
cuft Federal Standard to ENERGY					
STAR Freezer - Solid Door, 30 ≤ V <	Fard Cambras		602.40	0.46	2.22
49.9 cuft	Food Services	-	\$92.40	0.16	2.23
Freezer - Solid Door, 50 ≤ cuft Federal Standard to ENERGY STAR					
Freezer - Solid Door, 50 ≤ cuft	Food Services	_	\$148.20	0.17	2.23
12 ft reach-in walk in case wo door	1 000 Jei vices	-	₹140.20	0.17	2.23
to new door wo case (hvac and					
refrigeration)	Food Services	_	\$2,440.40	_	2.23
remgeration)	I OUG JEI VICES		74,440.40	<u>-</u>	۷.۷3

Measure Description	Program	WA Units	Incentive	Est. Sub TRC	Est. Sub UCT
Standard Efficiency Appliance to Energy Star ice maker, air cooled, ice making head, 200 to 399 lbs./day			400.00		
capacity	Food Services	-	\$80.00	1.43	3.31
Standard Efficiency Appliance to Energy Star ice maker, air cooled, ice making head, 400 to 599 lbs./day			A		
capacity	Food Services	-	\$115.00	1.76	3.12
Standard Efficiency Appliance to Energy Star ice maker, air cooled, ice making head, 600 to 799 lbs./day					
capacity	Food Services	-	\$160.00	2.03	2.79
Standard Efficiency Appliance to Energy Star ice maker, air cooled, ice making head, 800 to 999 lbs./day capacity	Food Services	_	\$200.00	0.60	0.39
Standard Efficiency Appliance to			Ψ=00.00	0.00	0.00
Energy Star ice maker, air cooled, ice making head, under 200 lbs./day			4		
capacity	Food Services	-	\$35.00	1.32	12.00
0.81 to 1 GPM gas pre-rinse sprayer	Food Services	15	\$0.00	0.33	0.61
3 pan gas steamer	Food Services	1	\$1,300.00	1.21	1.73
4 pan gas steamer	Food Services	1	\$1,700.00	1.21	1.76
5 pan gas steamer	Food Services	1	\$2,200.00	1.20	1.70
6 pan gas steamer	Food Services	1	\$2,600.00	1.20	1.73
10 or larger pan gas steamer	Food Services	1	\$3,200.00	2.73	3.66
Efficient combination oven (>= 16 pan and <= 20 pan) gas Efficient combination oven (>= 6 pan	Food Services	2	\$1,000.00	0.37	2.13
and <= 15 pan) gas	Food Services	2	\$1,000.00	0.30	1.72
Efficient convection oven full size	Food Services	5	\$700.00	0.34	2.74
H.E. gas convection oven, 40% effic. or better	Food Services	2	\$700.00	2.35	2.35
Gas rack oven	Food Services	5	\$2,000.00	0.72	1.78
Energy Star 50% effic.gas fryer	Food Services	75	\$1,000.00	1.03	2.57
H.E. gas griddle, 40% effic. or better	Food Services	5	\$250.00	0.91	1.79
High temp gas hot water dishwasher	Food Services	5	\$300.00	0.69	1.75
Low temp gas hot water dishwasher	Food Services	5	\$300.00	0.96	2.38
15 HP Industrial	Green Motors	2	\$30.00	1.22	5.07
20 HP Ind	Green Motors	-	\$40.00	1.46	5.10
25 HP Ind	Green Motors	-	\$50.00	1.89	6.03
30 HP Ind	Green Motors		\$60.00	1.85	5.41

Measure Description	Program	WA Units	Incentive	Est. Sub TRC	Est. Sub UCT
40 HP Ind	Green Motors	1	\$80.00	1.77	4.73
50 HP Ind	Green Motors	1	\$100.00	1.72	4.07
60 HP Ind	Green Motors	-	\$120.00	1.53	3.57
75 HP Ind	Green Motors	3	\$150.00	1.46	2.94
100 HP Ind	Green Motors	4	\$200.00	1.55	2.91
125 HP Ind	Green Motors	1	\$250.00	1.80	2.69
150 HP Ind	Green Motors	2	\$300.00	1.92	2.66
200 HP Ind	Green Motors	-	\$400.00	2.12	2.65
250 HP Ind	Green Motors	2	\$500.00	1.99	2.56
300 HP Ind	Green Motors	-	\$600.00	2.35	2.55
350 HP Ind	Green Motors	-	\$700.00	2.62	2.55
400 HP Ind	Green Motors	1	\$800.00	2.66	2.53
450 HP Ind	Green Motors	-	\$900.00	2.73	2.52
500 HP Ind	Green Motors	1	\$1,000.00	2.81	2.53
600 HP Ind	Green Motors	1	\$1,200.00	2.53	2.85
700 HP Ind	Green Motors	-	\$1,400.00	2.69	2.84
800 HP Ind	Green Motors	-	\$1,600.00	2.77	2.83
900 HP Ind	Green Motors	-	\$1,800.00	2.82	2.83
1000 HP Ind	Green Motors	-	\$2,000.00	2.89	2.82
1250 HP Ind	Green Motors	-	\$2,500.00	2.95	2.74
1500 HP Ind	Green Motors	-	\$3,000.00	3.08	2.74
1750 HP Ind	Green Motors	-	\$3,500.00	3.14	2.72
2000 HP Ind	Green Motors	-	\$4,000.00	3.18	2.71
2250 HP Ind	Green Motors	-	\$4,500.00	3.27	2.70
2500 HP Ind	Green Motors	-	\$5,000.00	3.31	2.69
3000 HP Ind	Green Motors	-	\$6,000.00	3.38	2.67
3500 HP Ind	Green Motors	-	\$7,000.00	3.56	2.67
4000 HP Ind	Green Motors	-	\$8,000.00	3.64	2.67
4500 HP Ind	Green Motors	-	\$9,000.00	3.79	2.66
5000 HP Ind	Green Motors	-	\$10,000.00	3.94	2.66
On-Demand Commercial Overwrapper	Grocer	5	\$300.00	2.31	2.36
LT Case: T12 to LP LED Inside Lamp	Grocer	100	\$10.00	2.08	3.12
MT Case: T12 to LP LED Inside Lamp	Grocer	100	\$10.00	1.70	2.55
MT Case: T8 to LED Inside Lamp	Grocer	400	\$10.00	1.22	1.83
LT Case: T8 to LP LED Inside Lamp	Grocer	100	\$10.00	1.22	1.83

Measure Description	Program	WA Units	Incentive	Est. Sub TRC	Est. Sub UCT
T12 to LP LED Outside Lamp	Grocer	200	\$7.00	1.46	3.13
T8 to LP LED Outside Lamp	Grocer	200	\$7.00	0.86	1.84
MT Case: 2 T8 to 1 High Power LED					
Inside Lamp	Grocer	1	\$18.00	1.40	1.88
MT Case: 2 T12 to 1 High Power LED	•		440.00	2.25	2.05
Inside Lamp	Grocer	1	\$18.00	2.26	3.05
LT Case: 2 T8 to 1 High Power LED Inside Lamp	Grocer	1	\$18.00	1.69	2.29
LT Case: 2 T12 to 1 High Power LED	Grocer		Ţ10.00	1.05	2.23
Inside Lamp	Grocer	1	\$18.00	2.76	3.72
MT Case: 2 T8 to 1 High Power LED			,		
Outside Lamp	Grocer	1	\$10.00	1.19	2.88
MT Case: 2 T12 to 1 High Power LED					
Outside Lamp	Grocer	1	\$10.00	1.93	4.68
Anti-Sweat Heater Controls - Low					
Temp	Grocer	50	\$40.00	3.45	4.13
Anti-Sweat Heater Controls - Med	•	=-0	440.00	2.46	204
Temp	Grocer	50	\$40.00	2.46	2.94
Gaskets for Low Temp Reach-in Glass Doors	Grocer	10	\$40.00	0.32	0.88
Gaskets for Medium Temp Reach-in	Grocei	10	\$40.00	0.32	0.66
Glass Doors	Grocer	10	\$25.00	0.40	1.44
Gaskets for Walk-in Freezer - Main			7-0100	0.10	
Door	Grocer	10	\$65.00	0.40	0.78
Gaskets for Walk-in Cooler - Main	Grocer	10	\$25.00	0.35	1.19
Evap motors: shaded pole to ECM in	<u> </u>		Ψ=0.00	0.00	2125
Walk-in - Greater than 23 watts	Grocer	10	\$140.00	3.33	6.55
Evap motors: shaded pole to ECM in					
Walk-in - less than 23 watts	Grocer	10	\$140.00	1.43	2.82
Evap motors: shaded pole to ECM in					
Display Case	Grocer	10	\$55.00	4.91	8.43
Floating Head Pressure for Single					
Compressor Systems, LT Condensing	Crosor		¢100.00	1.00	F 70
Unit Floating Head Pressure for Single	Grocer	-	\$100.00	1.89	5.79
Compressor Systems, LT Remote					
Condenser	Grocer	_	\$100.00	2.84	4.64
Floating Head Pressure for Single			,		
Compressor Systems, MT					
Condensing Unit	Grocer	-	\$100.00	1.27	5.13
Floating Head Pressure for Single					
Compressor Systems, MT Remote	_		4		
Condenser	Grocer	-	\$100.00	1.49	3.20
Evaporated Fan - Walk-In ECM					
Controller - Low Temp - 1/10-1/20 HP	Grocer	_	\$35.00	0.70	3.60
пг	grocer	1 -	γ33.UU	0.70	3.00

Measure Description	Program	WA Units	Incentive	Est. Sub TRC	Est. Sub UCT
Evaporated Fan - Walk-In ECM					
Controller - Medium Temp - 1/10-					
1/20 HP	Grocer	-	\$35.00	0.57	4.53
Strip Curtains for Convenience Store					
Walk-in Freezers	Grocer	-	\$5.00	0.17	0.35
Strip Curtains for Restaurant Walk-in					
Freezers	Grocer	-	\$5.00	0.73	1.48
Strip Curtains for Supermarket Walk-					
in Coolers	Grocer	10	\$5.00	0.69	1.41
Strip Curtains for Supermarket Walk-					
in Freezers	Grocer	10	\$5.00	3.02	6.12
Add doors to Open Medium Temp					
Cases	Grocer	50	\$253.60	2.58	3.92
Cases - Low Temp Coffin to High	_		4		
Efficiency Reach-in	Grocer	-	\$214.80	8.66	3.39
Cases - Low Temp Open to Reach-in	Grocer	-	\$334.80	4.01	3.39
Cases - Low Temp Reach-in to High					
Efficiency Reach-in	Grocer	50	\$192.60	2.31	3.39
Cases - Medium Temp Open Case to					
New High Efficiency Open Case	Grocer	-	\$44.40	1.70	3.39
Cases - Medium Temp Open Case to					
New Reach In	Grocer	50	\$117.00	4.48	3.39
Special Doors with Low/No ASH for					
Low Temperature Reach-in	Grocer	-	\$340.00	13.01	3.39
Advanced Floating Controls: Floating					
Head and Suction Pressure with					
Balanced Port Valves	Grocer	-	\$47.68	0.40	3.39
Advanced Floating Controls: Floating					
Head and Suction Pressure with					
Electronic Expansion Valves (EEXVs)	Grocer	-	\$135.36	1.13	3.39
Advanced Floating Controls: Increase					
Suction Temperature with Electronic					
Expansion Valves (EEXVs)	Grocer	-	\$40.72	0.34	3.39
Efficient Compressors - Low					
Temperature	Grocer	-	\$159.60	1.88	3.39
Floating Head Pressure Control - Air	_		4		
Cooled	Grocer	5	\$66.40	4.33	3.39
Floating Head Pressure Control -	_			_	
Evap Cooled	Grocer	5	\$141.60	9.24	3.39
Floating Head Pressure Control w/	_	_	4. :		
VFD- Air Cooled	Grocer	5	\$183.00	3.10	3.39
Multiplex - Compressors - Air-cooled	_		4	_	
Condenser	Grocer	-	\$393.60	2.58	3.39
Multiplex - Compressors -	_		4		
Evaporative Condenser	Grocer	-	\$393.60	2.58	3.39

Measure Description	Program	WA Units	Incentive	Est. Sub TRC	Est. Sub UCT
Multiplex - Controls - Floating					
suction pressure - air cooled					
condenser	Grocer	-	\$45.40	1.44	3.39
Multiplex - Controls - Floating					
suction pressure - evaporative	6		¢46.20	4.46	2.20
condenser	Grocer	-	\$46.20	1.46	3.39
Multiplex - Efficient/oversized Air- cooled Condenser for Multiplex	Grocer		\$412.20	13.06	3.39
Multiplex - Efficient/oversized	diocei		Ş412.20	13.00	3.33
Water-cooled Condenser for					
Multiplex	Grocer	_	\$310.00	9.82	3.39
VFD - Condenser Fan Motors - Air	0.000.		7020100		
Cooled	Grocer	20	\$186.00	3.29	3.39
VFD - Condenser Fan Motors - Evap					
Cooled	Grocer	20	\$186.00	3.29	3.39
	Interior Pres				
6-9 watt LED lamp	Lighting	2,707	\$8.00	3.60	3.32
	Interior Pres				
10-13 watt LED lamp	Lighting	1,776	\$8.00	4.11	4.93
	Interior Pres				
14-20 watt LED lamp	Lighting	603	\$8.00	5.43	6.77
40.00	Interior Pres	706	422.22		2.02
12-20 watt LED Fixture Retrofit	Lighting	786	\$20.00	2.07	3.83
50-60 watt LED fixture	Interior Pres	93	\$55.00	1.71	2.14
50-60 Wall LED lixture	Lighting Interior Pres	95	\$55.00	1./1	2.14
140 watt fixture/Lamp - Int	Lighting	306	\$155.00	0.98	1.84
140 Watt Hatare/ Lamp Int	Interior Pres	300	Ş133.00	0.50	1.04
175 watt fixture/Lamp - Int	Lighting	1,953	\$205.00	1.60	2.27
	Interior Pres	_,	720000		
400 watt fixture/Lamp - Int	Lighting	149	\$460.00	2.95	2.89
	Interior Pres				
5-6 watt MR16	Lighting	88	\$10.00	1.68	1.40
	Interior Pres				
7-9 watt MR16 lamp	Lighting	380	\$10.00	3.54	2.62
	Interior Pres				
Occ Sensors	Lighting	145	\$40.00	1.24	1.75
	Interior Pres	4.5.100	A4=	0.15	0.00
T5HO TLED	Lighting	45,190	\$15.00	2.12	2.22
T0 T1 FD	Interior Pres	151 612	¢6.50	1.42	2.02
T8 TLED	Lighting	151,613	\$6.50	1.43	2.82
U-Bend	Interior Pres Lighting	1,284	\$8.00	1.38	2.90
O-Bellu	Interior Pres	1,204	30.00	1.30	2.50
2x2 fixtures	Lighting	642	\$30.00	0.77	1.55
2.12 1.3.001.00	Interior Pres	0.12	700.00	5.,,	2.55
2x4 fixtures	Lighting	642	\$45.00	1.13	2.26

Measure Description	Program	WA Units	Incentive	Est. Sub TRC	Est. Sub UCT
	Interior Pres				
8' T8 TLED	Lighting	-	\$13.00	1.92	4.03
	Multifamily Direct				
Direct Install - Elec	Install	3,437	\$322.00	2.25	2.25
	Multifamily Direct		4		
Supplemental Lighting	Install	1,750	\$80.00	1.88	1.88
Direct Install - Gas	Multifamily Direct Install	133	\$257.37	2.64	2.64
			•		
Gas Boiler <300kBtu .8589 AFUE	NR HVAC	800	\$5.00	1.01	2.48
Gas Boiler <300kBtu .90+ AFUE AFUE	NR HVAC	2,000	\$8.50	1.36	2.37
Multistage Furnace <225 kBtu .90-		200	444.00		2.04
.95 AFUE	NR HVAC	300	\$11.00	2.99	2.34
Multistage Furnace <225 kBtu .95+ AFUE	NR HVAC	1,000	\$12.50	2.75	2.37
Singlestage Furnace <225 kBtu .90-	MITTVAC	1,000	\$12.50	2.73	2.37
.95 AFUE	NR HVAC	2,500	\$8.50	3.02	2.37
Singlestage Furnace <225 kBtu .95+		,			
AFUE	NR HVAC	2,500	\$11.00	2.99	2.34
Less than R11 attic insulation (E/G)					
to R30-R44 Attic Insulation	NR SHELL	5,000	\$0.20	0.17	2.05
Less than R11 attic insulation (E/G)					
to R45+ Attic Insulation	NR SHELL	4,000	\$0.25	0.15	1.78
Less than R11 roof insulation (E/G) to R30+ Roof Insulation	NR SHELL	10.000	¢o ae	0.16	1 01
Less than R4 wall insulation (E/G) to	INK SHELL	10,000	\$0.25	0.10	1.91
R11-R18 Wall Insulation	NR SHELL	15,000	\$0.40	0.13	1.52
Less than R4 wall insulation (E/G) to					
R19+ Wall Insulation	NR SHELL	15,000	\$0.45	0.10	1.15
Less than R11 attic insulation (E/E)					
to R30-R44 Attic Insulation	Prescriptive Shell	300	\$0.20	1.87	7.09
Less than R11 attic insulation (E/E)		200	ćo 25	2.25	7.70
to R45+ Attic Insulation	Prescriptive Shell	300	\$0.25	2.25	7.73
Less than R11 roof insulation (E/E) to R30+ Roof Insulation	Prescriptive Shell	1,000	\$0.25	3.05	7.56
Less than R4 wall insulation (E/E) to	Trescriptive stren	1,000	ψ0. 2 3	3.03	7.50
R11-R18 Wall Insulation	Prescriptive Shell	1,000	\$0.40	6.43	9.80
Less than R4 wall insulation (E/E) to	·				
R19+ Wall Insulation	Prescriptive Shell	1,000	\$0.45	8.79	12.70
	Residential				
Web Tstat Elec DIY	Prescriptive	60	\$60.00	2.86	11.45
	Residential		4== 05	2.01	6.15
Web Tstat Elec Cont	Prescriptive	44	\$75.00	2.34	9.16
ELEC RESISTANCE TO ASHP	Residential Prescriptive	54	\$700.00	1.55	9.42
LLEC RESISTANCE TO ASTIP	Residential	34	\$700.00	1.33	3.42
VARIABLE SPEED MOTOR ASHP	Prescriptive	411	\$80.00	1.91	6.57

Measure Description	Program	WA Units	Incentive	Est. Sub TRC	Est. Sub UCT
	Residential				
ELEC WINDOWS SP/MDP> <0.30 U	Prescriptive	22,494	\$3.00	1.78	12.00
	Residential				
VARIABLE SPEED MOTOR FURNACE	Prescriptive	411	\$80.00	1.88	6.47
	Residential				
E ESTAR HOME - MANUF, ELEC/DF	Prescriptive	14	\$650.00	2.42	7.75
	Residential				
EIEC Storm Windows	Prescriptive	2,244	\$2.00	1.49	6.44
	Residential				
Ductless Heat Pump (displace zonal)	Prescriptive	59	\$500.00	0.73	4.31
Heat Pump Water Heater (Anysize	Residential				
Ave Tier 2/3)	Prescriptive	56	\$215.00	1.20	3.50
	Residential				
Wall Insulation R11->=R49	Prescriptive	30,000	\$0.40	3.32	11.80
	Residential				
Floor Insulation RO->=R19	Prescriptive	30,000	\$0.20	1.81	11.80
	Residential				
Attic Insulation RO->=R11	Prescriptive	30,000	\$0.45	4.21	9.44
G Windows Single Pane <0.30 U-	Residential				
value	Prescriptive	40,000	\$3.00	0.40	2.97
	Residential				
G Web Tstat Gas DIY	Prescriptive	600	\$60.00	0.68	2.74
	Residential				
G Web Tstat Gas Cont	Prescriptive	1,190	\$75.00	0.56	2.19
	Residential				
NG FURNACE/BOILER 90% AFUE	Prescriptive	3,145	\$300.00	1.29	2.93
	Residential				
G TANKLESS WH (0.82+)	Prescriptive	760	\$215.00	0.62	2.99
	Residential				
NG Storm Windows	Prescriptive	250	\$2.00	0.52	2.58
	Residential				
E STAR HOME - GAS ONLY	Prescriptive	2	\$200.97	0.66	3.48
	Residential				
G HE Water Heaters (<= 55)	Prescriptive	250	\$60.00	0.36	1.92
	Residential				
G Wall Insulation	Prescriptive	30,000	\$0.40	0.75	2.59
	Residential				
G Floor Insulation	Prescriptive	30,000	\$0.20	0.68	4.45
	Residential				
G Attic Insulation	Prescriptive	30,000	\$0.45	1.71	4.94
LED - Decorative and Mini-Base -					
1490- 2600 lumens	Simple Steps	-	\$0.00	0.07	3.65
LED - Decorative and Mini-Base -					
250- 1049 lumens	Simple Steps	36,494	\$1.00	5.64	10.67
LED - Decorative and Mini-Base -					
1050 - 1489 lumens	Simple Steps	-	\$0.00	0.07	3.65

Measure Description	Program	WA Units	Incentive	Est. Sub TRC	Est. Sub UCT
LED - General Purpose and	_				
Dimmable - 1490 - 2600 lumens	Simple Steps	40,887	\$0.75	4.29	9.39
LED - General Purpose and	Cincolo Chana	457.044	ć0.75	12.40	12.16
Dimmable - 250- 1049 lumens	Simple Steps	457,014	\$0.75	12.49	12.16
LED - General Purpose and Dimmable - 1050 - 1489 lumens	Simple Steps	10,416	\$0.75	5.04	28.05
LED - Globe - 1490 - 2600 lumens		10,410	\$0.75		19.57
	Simple Steps	-		2.33	
LED - Globe - 250- 1049 lumens	Simple Steps	21,393	\$0.50	5.69	21.95
LED - Globe - 1050 - 1489 lumens	Simple Steps	-	\$0.50	9.30	49.46
LED - Reflectors and Outdoor - 1490- 2600 lumens	Simple Steps	69	\$2.00	10.46	21.76
LED - Reflectors and Outdoor - 250 - 1049 lumens	Simple Steps	13,701	\$0.75	25.08	8.36
LED - Reflectors and Outdoor - 1050 - 1489 lumens	Simple Steps	2,816	\$1.00	12.18	7.55
Showerhead 1.75 GPM – E	Simple Steps	351	\$6.00	3.95	4.68
Showerhead 1.5 GPM - E	Simple Steps	23	\$5.00	116.16	8.60
LED - Decorative Ceiling Flush Mount Fixture - 500-1999 lumens	Simple Steps	15,228	\$1.50	6.17	10.95
LED - Decorative Ceiling Flush Mount Fixture 2000-7999 lumens	Simple Steps	5,209	\$5.00	3.56	11.72
LED - Decorative Ceiling Flush Mount	Simple Steps	3,203	ψ3.00	3.50	11.72
Fixture 0-499 lumens	Simple Steps	-	\$0.25	1.02	18.90
LED - Track Light Fixture 0-499 Lumens	Simple Steps	_	\$1.00	9.45	7.18
LED - Track Light Fixture 2000-7999	Simple Steps		Ψ1.00	3.43	7.10
Lumens	Simple Steps	-	\$5.00	9.56	17.84
LED - Track Light Fixture 500-1999	a: 1 a:		44.05	0.50	20.00
lumens	Simple Steps	-	\$1.25	9.62	20.00
LED - Linear Flush Mount Fixture 0- 499 lumens	Simple Steps	5	\$0.25	0.02	0.05
LED - Linear Flush Mount Fixture 2000-7999 lumens	Simple Steps	-	\$5.00	0.00	0.00
LED - Linear Flush Mount Fixture					
500-1999 lumens	Simple Steps	1	\$3.00	0.01	0.00
LED - Exterior Porch Light Fixture 0 -					
499 Lumens	Simple Steps	307	\$1.00	15.10	12.23
LED - Exterior Porch Light Fixture	Cinemia Chara		ć0.00	15 44	16.07
2000 -7999 Lumens LED - Exterior Porch Light Fixture	Simple Steps	-	\$9.00	15.11	16.87
500-1999 Lumens	Simple Steps	7,693	\$3.00	15.12	14.18
LED - Exterior Security Fixture 0-499	Jilipie Jieps	7,055	75.00	15.12	14.10
Lumens	Simple Steps	-	\$0.50	2.81	15.83
LED - Exterior Security Fixture 2000-					
7999 Lumens	Simple Steps	1,194	\$7.00	9.89	14.04

Measure Description	Program	WA Units	Incentive	Est. Sub TRC	Est. Sub UCT
LED - Exterior Security Fixture 500 - 1999 Lumens	Simple Steps	-	\$2.00	9.89	13.77
LED Retro-Fit Fixture 0-499 Lumens	Simple Steps	-	\$0.25	3.74	15.92
LED Retro-Fit Fixture 2000 -7999 Lumens	Simple Steps	-	\$5.00	3.75	9.88
LED Retro-Fit Fixture 500-1999 Lumens	Simple Steps	20,754	\$1.25	3.75	11.08
LED Bathroom Vanity 0-499 Lumens	Simple Steps	-	\$0.25	0.92	13.97
LED Bathroom Vanity 2000 -7999 Lumens	Simple Steps	119	\$5.00	6.77	8.66
LED Bathroom Vanity 500-1999 Lumens	Simple Steps	77	\$1.50	1.95	7.45
LED TLED 1000-1999 Lumens	Simple Steps	-	\$0.50	0.32	6.51
LED TLED 2000-3999 Lumens	Simple Steps	-	\$0.50	0.30	8.85
Clothing Washer	Simple Steps	1,435	\$25.00	1.06	2.32
Showerhead 2.0 GPM – G	Simple Steps	5,000	\$1.50	2.29	25.58
Showerhead 1.75 GPM – G	Simple Steps	100	\$5.00	2.85	8.52
Showerhead 1.5 GPM - G	Simple Steps	5	\$7.00	5.93	13.38
Prescriptive VFDs - HVAC Cooling Pump	Variable Frequency Drives	150	\$130.00	3.95	6.07
Prescriptive VFDs - HVAC Fan	Variable Frequency Drives	130	\$130.00	3.70	5.69
Prescriptive VFDS - HVAC Heating Pump or combo	Variable Frequency Drives	250	\$130.00	6.35	9.77
E AIR INFILTRATION	WA Low-Income	20,000	\$1.72	1.71	1.45
E ENERGY STAR RATED DOORS	WA Low-Income	20	\$1,016.00	1.40	0.77
E ENERGY STAR REFRIGERATOR	WA Low-Income	20	\$654.35	1.04	0.07
Windows	WA Low-Income	3,645	\$28.14	4.65	1.28
E HE AIR HPUMP	WA Low-Income	10	\$940.31	0.17	1.00
E INS - CEIL/ATTIC	WA Low-Income	10,000	\$3.33	4.21	1.28
E INS - DUCT	WA Low-Income	10,000	\$12.07	2.29	1.27
E INS - FLOOR	WA Low-Income	25,000	\$5.51	1.81	0.43
E INS - WALL	WA Low-Income	10,000	\$3.52	3.32	1.34
Duct sealing	WA Low-Income	10	\$608.58	2.82	2.82
Ductless Heat Pump w FAF	WA Low-Income	-	\$8.00	1.71	1.36
Ductless Heat Pump (displace Zonal)	WA Low-Income	10	\$0.00	0.77	0.56
Tier2-3 Anysize HPWH	WA Low-Income	10	\$4.00	1.20	1.20
9 watt A19 bulbs - 60W replacement - (6 units)	WA Low-Income	50	\$6.00	2.22	1.04
Elec Res> Heat Pump	WA Low-Income	5	\$3.00	1.29	1.24

Measure Description	Program	WA Units	Incentive	Est. Sub TRC	Est. Sub UCT
G AIR INFILTRATION	WA Low-Income	75	\$1,509.36	0.07	0.07
G ENERGY STAR DOORS	WA Low-Income	40	\$516.29	1.36	0.36
G ENERGY STAR WINDOWS	WA Low-Income	1,800	\$28.14	0.93	0.28
G HE FURNACE AFUE 95%	WA Low-Income	34	\$823.10	1.92	0.92
G HE WH < 55 Gal	WA Low-Income	7	\$529.00	1.07	0.07
G INS - CEIL/ATTIC	WA Low-Income	125,000	\$2.14	1.04	1.04
G INS - DUCT	WA Low-Income	653	\$6.70	0.07	0.07
G INS - FLOOR	WA Low-Income	33,570	\$2.14	0.42	0.42
G INS - WALL	WA Low-Income	35,360	\$2.20	0.46	0.46
G duct sealing	WA Low-Income	7	\$173.67	0.22	1.00
Tankless Water Heater (<=55 Gal)	WA Low-Income	10	\$572.59	0.59	1.00
HE Boiler AFUE 96%	WA Low-Income	1	\$894.11	1.31	1.00
Washington Air Guardian	Washington Air Guardian	7	\$1,440.00	1.87	1.87