Appendix A.

2017 Program Plans

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Appendix A, Table 1: Measure level summary of unit throughput, incentives and cost-effectiveness

Measure description	Program	WA Units	Incentive	Est. Sub TRC	Est. Sub UCT
E AIR INFILTRATION (per 1000 cfm50)*	Low Income	75	\$ 730.00	1.2	1.1
E ENERGY STAR DOORS	Low Income	20	\$ 374.00	0.4	0.9
E ENERGY STAR WINDOWS	Low Income	10	\$ 42.49	0.9	0.9
E INS - CEIL/ATTIC	Low Income	60	\$ 553.00	0.8	0.9
E INS - DUCT	Low Income	10	\$ 217.00	0.6	0.9
E INS - FLOOR	Low Income	75	\$ 2,313.00	0.8	0.9
E INS - WALL	Low Income	25	\$ 951.00	2.0	1.8
E Ductsealing	Low Income	25	\$ 1,132.85	0.4	0.9
E Ductless Heatpump *	Low Income	15	\$ 2,512.49	0.8	0.9
LEDs (Giveaway) *	Low Income	6105	\$ 8.76	1.9	1.1
Elec Res> Heat Pump *	Low Income	6	\$ 3,297.00	1.6	1.4
Estar Refrigerator	Low Income	7	\$ 201.00	0.4	0.9
E to G Furnace Conversion	Low Income	100	3231	2.4	1.8
E to G DHW Conversion	Low Income	100	1353.45	1.2	0.8
Estar Home - SF, Elec/DF	Residential	7	\$ 600.00	2.6	11.4
Storm Windows	Residential	5000	\$ 1.00	1.2	11.0
Web Tstat Elec DIY	Residential	4	\$ 75.00	2.6	6.4
Web Tstat Elec Contractor	Residential	20	\$ 100.00	1.5	4.8
DHP 9.0 and Above	Residential	20	\$ 450.00	0.8	4.9
DHP 9.0-11.0	Residential	20	\$ 450.00	0.8	4.9
DHP 11.1-12.5	Residential	20	\$ 450.00	0.8	5.1
DHP 12.6 and above	Residential	20	\$ 450.00	0.9	5.4
Variable Speed Motor	Residential	635	\$ 80.00	2.1	6.7
Elec Res> ASHP	Residential	60	\$ 700.00	1.3	5.0
Elec Res> Natural Gas Furnace	Residential	342	\$ 1,500.00	1.7	4.7
E DHW> NG DHW	Residential	270	\$ 750.00	0.9	2.0
Elec Res> NG Direct Vent Wall Heat	Residential	3	\$ 1,200.00	4.2	8.3
CFL - General Purpose and Dimmable - 1490- 2600 lumens	Simple Steps	4433	\$ 0.15	54.8	51.5
CFL - General Purpose and Dimmable - 250- 1049 lumens	Simple Steps	15491	\$ 0.55	9.0	7.7
CFL - General Purpose and Dimmable - 1050- 1489 lumens	Simple Steps	373	\$ 0.15	44.6	35.9
CFL - Decorative and Mini-Base - 1490- 2600 lumens	Simple Steps	2	\$ 0.22	13.9	2.5
CFL - Decorative and Mini-Base - 250- 1049 lumens	Simple Steps	75	\$ 0.31	21.8	19.5

CFL - Decorative and Mini-Base - 1050- 1489						
lumens	Simple Steps	7	\$	0.40	32.7	12.1
CFL - Globe - 1490- 2600 lumens	Simple Steps	0	\$	0.47	26.6	19.3
CFL - Globe - 250- 1049 lumens	Simple Steps	12	\$	2.00	5.9	3.6
CFL - Globe - 1050- 1489 lumens	Simple Steps	2	\$	0.10	34.5	6.4
CFL - Reflectors and Outdoor - 1490- 2600 lumens	Simple Steps	159	\$	0.12	25.7	19.0
CFL - Reflectors and Outdoor - 250- 1049 lumens	Simple Steps	294	\$	0.32	35.6	21.6
CFL - Reflectors and Outdoor - 1050- 1489 lumens	Simple Steps	40	\$	0.46	33.7	17.8
LED - Decorative and Mini-Base - 1490- 2600						
lumens	Simple Steps	42	\$	0.20	23.6	14.4
LED - Decorative and Mini-Base - 250 - 1049						
lumens	Simple Steps	21943	\$	2.00	5.6	9.1
LED - Decorative and Mini-Base - 1050- 1489						
lumens	Simple Steps	840	\$	0.15	156.4	103.0
LED - General Purpose and Dimmable - 1490-						
2600 lumens	Simple Steps	4751	\$	2.00	4.5	7.8
LED - General Purpose and Dimmable - 250- 1049						
lumens	Simple Steps	162094	\$	1.00	8.2	10.2
LED - General Purpose and Dimmable - 1050-						
1489 lumens	Simple Steps	25081	\$	3.00	4.3	5.9
LED - Globe - 1490 - 2600 lumens	Simple Steps	23	\$	3.00	10.4	7.8
LED - Globe - 250- 1049 lumens	Simple Steps	3236	\$	1.00	4.7	9.4
LED - Globe - 1050 - 1489 lumens	Simple Steps	23	\$	0.25	5.9	6.2
LED - Reflectors and Outdoor - 1490 - 2600						
lumens	Simple Steps	852	\$	2.00	3.7	8.2
LED - Reflectors and Outdoor - 250 - 1049 lumens	Simple Steps	109146	\$	2.00	24.3	13.7
LED - Reflectors and Outdoor - 1050 - 1489	Cincula Chana	4046	<u>,</u>	4.00	14.0	0.7
lumens	Simple Steps	4846	\$	4.00	14.8	8.7
Showerhead 2.0 GPM	Simple Steps	2189	\$	8.00	6.7	6.3
Showerhead 1.75 GPM	Simple Steps	61	\$	8.00	9.1	8.6
Showerhead 1.5 GPM	Simple Steps	19	\$	8.00	11.2	10.6
LED - Downlight (Retrofit Kit) Kit Fixture	Simple Steps	27013	\$	3.00	1.5	11.3
LED - Decorative Ceiling Flush Mount Fixture	Simple Steps	9081	\$	3.00	1.0	7.1
LED - Track Light Fixture	Simple Steps	560	\$	2.00	0.9	7.3
LED - Linear Shop Light Fixture	Simple Steps	280	\$	1.50	0.6	6.2
LED - Linear Flush Mount Fixture	Simple Steps	420	\$	1.50	0.5	6.6
LED - Exterior Porch Light Fixture	Simple Steps	2739	\$	5.00	2.3	8.2
LED - Exterior Security Fixture	Simple Steps	280	\$	10.00	5.1	12.3
400 watt HID to 100-175 watt LED 2X4 Troffers	NR Int Lighting	1800		L85.00	2.2	3.5
40-100 watt Incandescent to 6-20 watt LED lamp (Combine)	NR Int Lighting	4800	Ç	88.00	10.2	7.7
Over 150 watt Incandescent to 50-60W LED	NR Int Lighting	300	\$	55.00	2.4	3.4

20 watt MR16 (GU10 Base) to MR16 LED 2-4 watt	NR Int Lighting	75	\$10.00	11.2	3.8
35 watt MR16 (GU10 Base) to MR16 LED 4-6 watt	NR Int Lighting	75	\$10.00	19.6	2.9
50 watt MR16 (GU10 Base) to MR16 LED 6-9 watt	NR Int Lighting	1000	\$10.00	30.4	9.6
75-100 watt Incandescent to LED* 12-20 watt Fixture	NR Int Lighting	250	\$20.00	8.1	7.2
Occupancy sensors built in with relays (not switch sensors)	NR Int Lighting	100	\$40.00	3.6	4.6
4-Lamp T12/T8 Fixture to 2-Lamp LED (50-75 Watt)	NR Int Lighting	5500	\$35.00	1.2	3.6
4-Lamp T12/T8 Fixture to 2-Lamp HP T8 Fixture/Retrofit	NR Int Lighting	75	\$35.00	1.9	3.8
3-Lamp T12/T8 Fixture to LED Qualified 2x4 Fixture (40-60 Watt)	NR Int Lighting	1500	\$29.00	1.3	3.2
3-Lamp T12/T8 Fixture to 2-Lamp HP T8 Fixture/Retrofit	NR Int Lighting	60	\$25.00	1.1	3.0
2-Lamp T12/T8 Fixture to 1-Lamp HP T8 Fixture/Retrofit	NR Int Lighting	60	\$18.00	2.5	3.2
250 watt HID to 85-140 LED (60 hour/week)	NR Int Lighting	1000	\$120.00	1.3	3.2
1000 watt HID to 300-400 wattLED	NR Int Lighting	500	\$460.00	2.0	3.3
4': 1-Lamp LED 22-28 watt T5HO Retro Tube Lamp	NR Int Lighting	2000	\$15.00	2.1	4.0
4': 1-Lamp LED 8-23 watt T8 RetroTube Lamp	NR Int Lighting	20000	\$6.50	2.4	3.4
70-89 watt HID Fixture to 15-25 watt LED Fixture	NR Ext Lighting	100	\$60.00	2.6	3.9
90 - 100 W HID to 25-30W LED	NR Ext Lighting	100	\$80.00	2.8	3.8
150 W HID to 30-50W LED	NR Ext Lighting	50	\$125.00	3.7	3.7
175 W HID to 35-85W LED	NR Ext Lighting	150	\$130.00	3.8	3.7
250 W HID to 85-140W LED	NR Ext Lighting	75	\$140.00	1.8	3.7
320 W HID to 118-160W LED	NR Ext Lighting	100	\$180.00	2.1	3.6
400 W HID to 118 -175W LED	NR Ext Lighting	150	\$255.00	2.2	3.6
250 watt HID Canopy Fixture to 85-140 watt LED Canopy Fixture	NR Ext Lighting	0	\$160.00	2.0	3.6
320 watt HID Canopy Fixture to 118-160 watt LED Canopy Fixture	NR Ext Lighting	0	\$200.00	2.7	3.7
400 watt HID Canopy Fixture to 118-175 watt LED Canopy Fixture	NR Ext Lighting	0	\$250.00	2.4	3.7
175 watt HID Fixture to 35-85 watt LED Fixture	NR Ext Lighting	50	\$130.00	6.1	3.7
250 watt HID Fixture to 85-118 watt LED Fixture	NR Ext Lighting	100	\$140.00	2.4	3.7
320 & 400 watt HID Fixture to 118-175 watt LED Fixture	NR Ext Lighting	150	\$175.00	2.8	3.7
1000W HID to 300W-400W LED	NR Ext Lighting	200	\$610.00	2.6	3.6
Sign Lighting LED	NR Ext Lighting	6000	\$17.00	4.2	5.3

Less than R11 attic insulation (E/E) to R30-R44	ND Shall	350	¢ 0.20	2.1	7.2
Attic Insulation	NR Shell	250	\$ 0.20	2.1	7.3
Less than R11 attic insulation (E/E) to R45+ Attic Insulation	NR Shell	250	\$ 0.25	2.5	8.0
Less than R11 roof insulation (E/E) to R30+ Roof Insulation	NR Shell	6000	\$ 0.25	3.5	7.8
Less than R4 wall insulation (E/E) to R11-R18 Wall Insulation	NR Shell	1800	\$ 0.40	7.3	10.1
Less than R4 wall insulation (E/E) to R19+ Wall Insulation	NR Shell	1800	\$ 0.45	10.0	13.1
Prescriptive VFDs - HVAC Cooling Pump	NR VFD	500	\$ 130.00	4.7	6.5
Prescriptive VFDs - HVAC Fan	NR VFD	500	\$ 130.00	4.4	6.1
Tresemplifie tras Titrorum		300	Ψ 130.00		0.1
Prescriptive VFDS - HVAC Heating Pump or combo	NR VFD	750	\$ 130.00	7.5	10.5
0.61 to 0.80 GPM electric pre-rinse sprayer	NR Food Service	1	\$70	1.5	2.1
0.61 to 0.80 GPM gas pre-rinse sprayer	NR Food Service	0	\$39	0.4	1.0
0.81 to 1.00 GPM electric pre-rinse sprayer	NR Food Service	0	\$65	0.9	1.4
0.81 to 1.00 GPM gas pre-rinse sprayer	NR Food Service	0	\$ 2	0.1	3.2
3 pan electric steamer	NR Food Service	0	\$ 70	31.5	128.7
3 pan gas steamer	NR Food Service	0	\$ 934	1.3	2.4
4 pan electric steamer	NR Food Service	0	\$ 100	109.6	119.9
4 pan gas steamer	NR Food Service	0	\$ 1,245	1.3	2.4
5 pan electric steamer	NR Food Service	0	\$ 135	69.9	110.9
5 pan gas steamer	NR Food Service	0	\$ 1,556	1.3	2.4
6 pan electric steamer	NR Food Service	0	\$ 160	37.8	112.2
6 pan gas steamer	NR Food Service	0	\$ 1,867	1.3	2.4
10 or larger pan electric steamer	NR Food Service	0	\$ 180	9.2	166.3
10 or larger pan gas steamer	NR Food Service	0	\$ 2,144	3.0	5.5
Efficient combination oven (>= 16 pan and <= 20 pan) electric	NR Food Service	1	\$ 1,000.00	23.6	8.4
Efficient combination oven (>= 16 pan and <= 20 pan) gas	NR Food Service	0	\$ 1,150.00	0.4	1.9
Efficient combination oven (>= 6 pan and <= 15 pan) electric	NR Food Service	0	\$ 995.00	4.7	6.1
Efficient combination oven (>= 6 pan and <= 15					
pan) gas	NR Food Service	0	\$ 927.00	0.3	1.9
Efficient convection oven full size	NR Food Service	0	\$ 330.00	0.9	2.4
Efficient convection oven half size	NR Food Service	1	\$ 270.00	1.2	2.9
H.E. gas convection oven, 40% effic. or better	NR Food Service	0	\$ 743.00	0.9	2.2
Gas rack oven	NR Food Service	0	\$ 2,378.00	0.8	1.5
Efficient hot food holding cabinet, full size	NR Food Service	0	\$ 165.00	1.2	4.9
Electric fryer	NR Food Service	1	\$ 295.00	1.5	3.1

Energy Star 50% effic.gas fryer	NR Food Service	0	\$ 1,162.00	1.1	2.2
H.E. gas griddle, 40% effic. or better	NR Food Service	0	\$ 200.00	1.0	2.2
Standard Efficiency Appliance to H.E. electric					
griddle, 70% effic. or better	NR Food Service	1	\$ 325.00	1.1	2.9
High temp electric hot water dishwasher	NR Food Service	0	\$ 820.00	1.6	2.9
High temp gas hot water dishwasher	NR Food Service	0	\$ 236.00	1.2	6.4
Low temp electric hot water dishwasher	NR Food Service	0	\$ 760.00	1.7	2.9
Low temp gas hot water dishwasher	NR Food Service	1	\$ 322.00	1.1	3.1
Standard Efficiency Appliance to Energy Star 65% effic. or greater 3-pan electric steam cooker	NR Food Service	1	\$ 70.00	4.6	7.4
Standard Efficiency Appliance to Energy Star 65% effic. or greater 4-pan electric steam cooker	NR Food Service	1	\$ 70.00	4.6	7.4
Standard Efficiency Appliance to Energy Star 65% effic. or greater 5-pan electric steam cooker	NR Food Service	0	\$ 135.00	5.3	7.2
Standard Efficiency Appliance to Energy Star 65% effic. or greater 6-pan electric steam cooker	NR Food Service	0	\$ 135.00	6.7	8.7
Standard Efficiency Appliance to Energy Star electric hot food holding cabinet, between 12 & 20 cu.ft. (CEE tier 2)	NR Food Service	0	\$ 210.00	1.3	3.7
Standard Efficiency Appliance to Energy Star electric hot food holding cabinet, less than 12 cu.ft. (CEE tier 2)	NR Food Service	0	\$ 175.00	0.8	2.9
Standard Efficiency Appliance to Energy Star electric hot food holding cabinet, over 20 cu.ft. (CEE tier 2)	NR Food Service	0	\$ 350.00	0.8	2.9
Standard Efficiency Appliance to Energy Star ice maker, air cooled, ice making head, 1000 to 1199 lbs./day capacity	NR Food Service	0	\$ 140.00	2.4	3.9
Standard Efficiency Appliance to Energy Star ice maker, air cooled, ice making head, 1200 to 1399 lbs./day capacity	NR Food Service	0	\$ 160.00	2.3	3.9
Standard Efficiency Appliance to Energy Star ice maker, air cooled, ice making head, 1400 to 1599 lbs./day capacity	NR Food Service	0	\$ 180.00	2.4	3.9
Standard Efficiency Appliance to Energy Star ice maker, air cooled, ice making head, 1600 or greater lbs./day capacity	NR Food Service	0	\$ 195.00	2.2	3.9
Standard Efficiency Appliance to Energy Star ice maker, air cooled, ice making head, 200 to 399 Ibs./day capacity	NR Food Service	1	\$ 65.00	1.4	3.0

Standard Efficiency Appliance to Energy Star ice					
maker, air cooled, ice making head, 400 to 599 Ibs./day capacity	NR Food Service	1	\$ 70.00	1.6	4.0
Standard Efficiency Appliance to Energy Star ice maker, air cooled, ice making head, 600 to 799 lbs./day capacity	NR Food Service	1	\$ 95.00	2.0	4.0
Standard Efficiency Appliance to Energy Star ice maker, air cooled, ice making head, 800 to 999 lbs./day capacity	NR Food Service	0	\$ 120.00	2.3	3.9
Standard Efficiency Appliance to Energy Star ice maker, air cooled, ice making head, under 200 lbs./day capacity	NR Food Service	1	\$ 35.00	0.7	2.3
Standard Efficiency Appliance to Energy Star ice maker, air cooled, remote condensing, 1000 to 1199 lbs./day capacity	NR Food Service	0	\$ 115.00	1.5	3.8
Standard Efficiency Appliance to Energy Star ice maker, air cooled, remote condensing, 1200 to 1399 lbs./day capacity	NR Food Service	0	\$ 135.00	1.6	3.8
Standard Efficiency Appliance to Energy Star ice maker, air cooled, remote condensing, 1400 to 1599 lbs./day capacity	NR Food Service	0	\$ 155.00	1.7	3.9
Standard Efficiency Appliance to Energy Star ice maker, air cooled, remote condensing, 1600 to 1799 lbs./day capacity	NR Food Service	0	\$ 175.00	1.7	3.9
Standard Efficiency Appliance to Energy Star ice maker, air cooled, remote condensing, 1800 or greater lbs./day capacity	NR Food Service	0	\$ 195.00	1.8	3.9
Standard Efficiency Appliance to Energy Star ice maker, air cooled, remote condensing, 400 to 599 lbs./day capacity	NR Food Service	0	\$ 70.00	1.5	4.0
Standard Efficiency Appliance to Energy Star ice maker, air cooled, remote condensing, 600 to 799 Ibs./day capacity	NR Food Service	0	\$ 90.00	1.6	4.0
Standard Efficiency Appliance to Energy Star ice maker, air cooled, remote condensing, 800 to 999 Ibs./day capacity	NR Food Service	0	\$ 105.00	1.6	3.9
Standard Efficiency Appliance to Energy Star ice maker, air cooled, remote condensing, less than 400 lbs./day capacity & under	NR Food Service	0	\$ 65.00	1.2	2.8
Standard Efficiency Appliance to Energy Star ice maker, air cooled, self contained, 100 to 149 Ibs./day capacity	NR Food Service	1	\$ 40.00	0.7	2.4

Standard Efficiency Appliance to Energy Star ice maker, air cooled, self contained, 150 to 199 lbs./day capacity	NR Food Service	0	\$	45.00	0.7	2.3
Standard Efficiency Appliance to Energy Star ice maker, air cooled, self contained, 200 to 249 lbs./day capacity & under	NR Food Service	0	\$	60.00	0.7	2.3
Standard Efficiency Appliance to Energy Star ice maker, air cooled, self contained, 250 to 299 lbs./day capacity	NR Food Service	0	\$	70.00	0.8	2.4
Standard Efficiency Appliance to Energy Star ice maker, air cooled, self contained, 300 to 349 lbs./day capacity	NR Food Service	0	\$	85.00	0.9	2.3
Standard Efficiency Appliance to Energy Star ice maker, air cooled, self contained, 350 to 399 lbs./day capacity	NR Food Service	0	\$	95.00	0.9	2.4
Standard Efficiency Appliance to Energy Star ice maker, air cooled, self contained, 400 or greater lbs./day capacity	NR Food Service	0	\$	110.00	0.9	2.3
Standard Efficiency Appliance to Energy Star ice maker, air cooled, self contained, 50 to 99 lbs./day capacity	NR Food Service	0	\$	30.00	0.6	2.3
Standard Efficiency Appliance to Energy Star ice maker, air cooled, self contained, less than 50						
lbs./day capacity & under	NR Food Service	0	\$	-	0.3	1.8
Visi Cooler	NR Food Service	0	\$	20.00	4.6	7.4
15 HP Agricultural	NR Green Motors	0	\$	134.00	2.2	9.0
15 HP Industrial	NR Green Motors	1	\$	134.00	1.8	7.2
20 HP	NR Green Motors	0	\$	150.00	2.7	9.1
20 HP Ind	NR Green Motors	1	\$	150.00	2.1	7.2
25 HP	NR Green Motors	0	\$	171.00	3.1	9.6
25 HP Ind	NR Green Motors	1	\$	171.00	2.4	7.6
30 HP	NR Green Motors	0	\$	188.00	3.0	8.6
30 HP Ind	NR Green Motors	1	\$	188.00	2.4	6.8
40 HP	NR Green Motors	0	\$	230.00	2.9	7.5
40 HP Ind 50 HP	NR Green Motors NR Green Motors	0	\$	230.00 254.00	2.3	5.9
50 HP	NR Green Motors	0	\$ \$		2.8	6.5 5.1
60 HP	NR Green Motors	0	\$	254.00 300.00	2.2	6.0
60 HP Ind	NR Green Motors	0	\$	300.00	2.2	5.0
75 HP	NR Green Motors	0	\$	324.00	2.5	5.0
75 HP Ind	NR Green Motors	0	\$	324.00	2.5	4.1
100 HP	NR Green Motors	0	\$	402.00	2.7	4.9
100 111	AIT GICCII MOTOTOS		٧	702.00	۷./	₹.5

100 HP Ind	NR Green Motors	0	\$ 402.00	2.2	4.1
125 HP	NR Green Motors	0	\$ 451.00	2.7	4.4
125 HP Ind	NR Green Motors	0	\$ 451.00	2.3	3.7
150 HP	NR Green Motors	0	\$ 503.00	2.8	4.3
150 HP Ind	NR Green Motors	0	\$ 503.00	2.4	3.7
200 HP	NR Green Motors	0	\$ 605.00	3.1	4.3
200 HP Ind	NR Green Motors	0	\$ 605.00	2.7	3.7
250 HP	NR Green Motors	0	\$ 778.00	2.8	4.0
250 HP	NR Green Motors	0	\$ 778.00	3.6	5.1
300 HP	NR Green Motors	0	\$ 786.00	3.4	4.0
300 HP	NR Green Motors	0	\$ 786.00	4.2	5.1
350 HP	NR Green Motors	0	\$ 824.00	3.7	4.0
350 HP	NR Green Motors	0	\$ 824.00	4.7	5.1
400 HP	NR Green Motors	0	\$ 921.00	3.8	4.0
400 HP	NR Green Motors	0	\$ 921.00	4.8	5.0
450 HP	NR Green Motors	0	\$ 1,006.00	3.9	4.0
450 HP	NR Green Motors	0	\$ 1,006.00	4.9	5.0
4500 HP	NR Green Motors	0	\$ 7,479.00	4.8	3.6
4500 HP	NR Green Motors	0	\$ 7,479.00	5.1	3.9
500 HP	NR Green Motors	0	\$ 1,087.00	4.0	4.0
500 HP	NR Green Motors	0	\$ 1,087.00	5.1	5.0
600 HP	NR Green Motors	0	\$ 1,611.00	3.1	3.8
600 HP	NR Green Motors	0	\$ 1,611.00	4.0	4.9
700 HP	NR Green Motors	0	\$ 1,747.00	3.3	3.8
700 HP	NR Green Motors	0	\$ 1,747.00	4.3	4.9
800 HP	NR Green Motors	0	\$ 1,939.00	3.4	3.8
800 HP	NR Green Motors	0	\$ 1,939.00	4.4	4.8
900 HP	NR Green Motors	0	\$ 2,137.00	3.5	3.8
900 HP	NR Green Motors	0	\$ 2,137.00	4.5	4.8
1000 HP	NR Green Motors	0	\$ 2,303.00	3.6	3.8
1000 HP	NR Green Motors	0	\$ 2,303.00	4.6	4.8
1250 HP	NR Green Motors	0	\$ 2,752.00	3.7	3.7
1250 HP	NR Green Motors	0	\$ 2,752.00	4.0	4.0
1500 HP	NR Green Motors	0	\$ 3,152.00	3.9	3.7
1500 HP	NR Green Motors	0	\$ 3,152.00	4.2	4.0
1750 HP	NR Green Motors	0	\$ 3,598.00	4.0	3.7
1750 HP	NR Green Motors	0	\$ 3,598.00	4.3	4.0
2000 HP	NR Green Motors	0	\$ 4,036.00	4.0	3.7
2000 HP	NR Green Motors	0	\$ 4,036.00	4.3	4.0
2250 HP	NR Green Motors	0	\$ 4,397.00	4.1	3.7
2250 HP	NR Green Motors	0	\$ 4,397.00	4.4	3.9

2500 HP	NR Green Motors	0	\$ 4,811.00	4.2	3.7
2500 HP	NR Green Motors	0	\$ 4,811.00	4.5	3.9
3000 HP	NR Green Motors	0	\$ 5,625.00	4.3	3.6
3000 HP	NR Green Motors	0	\$ 5,625.00	4.6	3.9
3500 HP	NR Green Motors	0	\$ 6,216.00	4.5	3.6
3500 HP	NR Green Motors	0	\$ 6,216.00	4.8	3.9
4000 HP	NR Green Motors	0	\$ 6,940.00	4.6	3.6
4000 HP	NR Green Motors	0	\$ 6,940.00	4.9	3.9
5000 HP	NR Green Motors	0	\$ 7,983.00	5.0	3.6
5000 HP	NR Green Motors	0	\$ 7,983.00	5.3	3.9
Washington Air Guardian	NR Air Guardian	10	\$ 1,440.00	2.2	2.0
Washington Fleet Heat	NR Fleet Heat	67	\$ 150.00	6.4	5.8
Controls - Anti Sweat heat - Dedicated ASHC Device - Low Temp	Energy Smart Grocer	7	\$ 40.00	4.4	3.4
Controls - Anti Sweat heat - Dedicated ASHC Device - Med Temp	Energy Smart Grocer	7	\$ 40.00	2.8	2.1
Controls - Anti-Sweat Heat - Energy Management System - Low Temp	Energy Smart Grocer	7	\$ 14.00	0.9	9.8
Controls - Anti-Sweat Heat - Energy Management System - Med Temp	Energy Smart Grocer	7	\$ 14.00	0.6	6.1
Gaskets Reach In Low Temp	Energy Smart Grocer	2	\$ 40.00	2.6	4.5
Gaskets Reach In Medium Temp	Energy Smart Grocer	2	\$ 25.00	0.7	7.9
Gaskets Walk In Low Temp	Energy Smart Grocer	2	\$ 65.00	6.7	4.2
Gaskets Walk In Medium Temp	Energy Smart Grocer	2	\$ 25.00	9.6	6.5
Evap motors: shaded pole to ECM in Walk-in - Greater than 23 watts	Energy Smart Grocer	105	\$ 140.00	2.7	5.8
Evap motors: shaded pole to ECM in Walk-in - less than 23 watts	Energy Smart Grocer	105	\$ 140.00	1.5	3.1
Floating Head Pressure for Single Compressor Systems, LT Condensing Unit	Energy Smart Grocer	42	\$ 100.00	0.9	6.4
Floating Head Pressure for Single Compressor Systems, LT Remote Condenser	Energy Smart Grocer	70	\$ 100.00	0.1	5.4
Floating Head Pressure for Single Compressor Systems, MT Condensing Unit	Energy Smart Grocer	105	\$ 100.00	0.9	6.0
Floating Head Pressure for Single Compressor Systems, MT Remote Condenser	Energy Smart Grocer	0	\$ 100.00	2.5	3.5
Evaporated Fan - Walk-In ECM Controller - Low Temp - 1/10-1/20 HP	Energy Smart Grocer	0	\$ 35.00	1.1	5.3

Evaporated Fan - Walk-In ECM Controller - Medium Temp - 1/10-1/20 HP	Energy Smart Grocer	0	\$ 35.00	2.0	4.4
Strip Curtains for Convenience Store Walk-in Freezers	Energy Smart Grocer	0	\$ 5.00	0.2	3.6
Strip Curtains for Restaurant Walk-in Freezers	Energy Smart Grocer	0	\$ 5.00	1.0	15.1
Strip Curtains for Supermarket Walk-in Coolers	Energy Smart Grocer	0	\$ 5.00	0.9	14.4
Strip Curtains for Supermarket Walk-in Freezers	Energy Smart Grocer	0	\$ 5.00	37.6	29.1
Evap motors: shaded pole to ECM in Display Case	Energy Smart Grocer	0	\$ 55.00	6.3	6.4
Add doors to Open Medium Temp Cases	Energy Smart Grocer	266	\$ 253.60	1.5	2.1
Cases - Low Temp Reach-in to High Efficiency Reach-in	Energy Smart Grocer	140	\$ 192.60	2.8	3.7
Cases - Medium Temp Open Case to New High Efficiency Open Case	Energy Smart Grocer	210	\$ 44.40	2.1	3.7
Cases - Medium Temp Open Case to New Reach In	Energy Smart Grocer	210	\$ 117.00	5.4	3.7
Floating Head Pressure Control - Air Cooled	Energy Smart Grocer	14	\$ 66.40	5.2	3.7
Floating Head Pressure Control - Evap Cooled	Energy Smart Grocer	35	\$ 141.60	11.2	3.7
Floating Head Pressure Control w/ VFD- Air Cooled	Energy Smart Grocer	35	\$ 183.00	3.7	3.7
VFD - Condenser Fan Motors - Air Cooled	Energy Smart Grocer	35	\$ 186.00	4.0	3.7
VFD - Condenser Fan Motors - Evap Cooled	Energy Smart Grocer	35	\$ 186.00	4.0	3.7
Single Row T8_Low Power LED_Inside Refrigerated Space_Medium Temperature Case	Energy Smart Grocer	3500	\$ 10.00	0.6	3.7
Single Row T12_Low Power LED_Inside Refrigerated Space_Medium Temperature Case	Energy Smart Grocer	1400	\$ 10.00	1.1	6.4
Double Row T8 _High Power LED_Inside Refrigerated Space_Medium Temperature Case	Energy Smart Grocer	700	\$ 18.00	1.4	4.7
Double Row T12 _High Power LED_Inside Refrigerated Space_Medium Temperature Case	Energy Smart Grocer	700	\$ 18.00	2.3	7.5
Single Row T8_Low Power LED_Outside Refrigerated Space_HVAC Interaction	Energy Smart Grocer	0	\$ 7.00	0.1	3.9
Single Row T12_Low Power LED_Outside Refrigerated Space_HVAC Interaction	Energy Smart Grocer	0	\$ 7.00	0.3	6.7

Double Row T8 _High Power LED_Outside Refrigerated Space_HVAC Interaction	Energy Smart Grocer	0	\$ 10.00	0.2	6.2
Double Row T12 _High Power LED_Outside Refrigerated Space_HVAC Interaction	Energy Smart Grocer	0	\$ 10.00	0.5	9.9
Single Row T8_Low Power LED_Inside Refrigerated Space_Low Temperature Case	Energy Smart Grocer	700	\$ 10.00	0.6	5.2
Single Row T12_Low Power LED_Inside Refrigerated Space_Low Temperature Case	Energy Smart Grocer	700	\$ 10.00	1.4	8.8
Double Row T8 _High Power LED_Inside Refrigerated Space_Low Temperature Case	Energy Smart Grocer	700	\$ 18.00	1.9	6.5
Double Row T12 _High Power LED_Inside Refrigerated Space_Low Temperature Case	Energy Smart Grocer	700	\$ 18.00	2.1	10.4
Low-flow faucet aerator (0.5 gpm) Electric Water Heat	Small Business	2052	\$ 8.00	20.1	18.3
Low-flow faucet aerator (1.0 gpm) Electric Water Heat	Small Business	2052	\$ 8.00	11.8	10.7
Low-flow faucet aerator (0.5 gpm) Gas Water Heat	Small Business	2052	\$ 8.00	5.3	4.8
Low-flow faucet aerator (1.0 gpm) Gas Water Heat	Small Business	2052	\$ 8.00	4.1	3.7
Pre-Rinse Spray Valve Electric Heat	Small Business	76	\$ 129.00	2.2	2.0
Pre-Rinse Spray Valve Gas Heat	Small Business	76	\$ 129.00	1.1	1.0
Shower Head Fitness Electric	Small Business	53	\$ 41.00	58.5	51.1
Shower Head Fitness Gas	Small Business	53	\$ 41.00	24.1	19.8
Shower Head Electric	Small Business	205	\$ 41.00	3.1	2.7
Shower Head Gas	Small Business	205	\$ 41.00	1.3	1.0
Vending Miser	Small Business	53	\$ 225.00	1.6	1.4
Tier 1 smart power strip	Small Business	912	\$ 39.00	0.5	0.4
Screw in LED lamp 40W	Small Business	266	\$ 17.00	3.1	2.3
Screw in LED lamp 60W	Small Business	912	\$ 17.00	4.4	3.4
Screw in LED lamp 75W	Small Business	91	\$ 27.00	3.3	2.7
Screw in LED lamp 100W	Small Business	91	\$ 31.00	3.8	3.1
Screw in LED BR30	Small Business	1976	\$ 22.00	4.1	3.3
Screw in LED BR40	Small Business	456	\$ 28.00	4.2	3.5
Screw in LED PAR30	Small Business	456	\$ 28.00	3.2	2.6
Screw in LEDPAR38	Small Business	456	\$ 32.00	3.7	3.0
Multifamily NG Market Transformation (per unit)	MF Market Transformation	400	\$ 3,500.00	0.9	1.6

Low Income Program

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 income-qualify customers, generate referrals through their energy assistance efforts, and have access to a variety of weatherization funding resources which can be utilized to meet customer needs. The seven agencies serving Avista's entire Washington service territory receive an aggregate annual funding amount of \$2,000,000 while the single agency serving Avista's Idaho territory receives \$700,000.

In 2016 the Company added a seventh agency to the mix; Spokane Indian Housing Authority (SIHA) 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 agency the Company wanted to test the potential of utilizing SIHA's services to see if additional homes could be reached in the Stevens County area. While SIHA received an allocation for 2016, there was no adjustment to the shares the other agencies receive. Over the years, the total low income funding allotment may not be fully spent out due to a variety of circumstances. 2016 was a test year to determine whether or not the funding could support the services of a 7th agency to assist with serving more homes. At the time of this writing, Avista is presuming that SIHA will receive an allocation for 2017 similar to 2016. Below is the breakdown by agency:

2017 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
Community Action Partnership	10 counties in Avista's Idaho	\$700,000
	service territory	

^{*}Pilot agency for 2016/2017

In both Idaho and Washington the agencies may spend their annual allocated funds on either electric or natural gas efficiency measures depending on customer need. The home must demonstrate a minimum level of electric or natural gas energy use for space heating use. Both states are allowed a 15% administration reimbursement as part of their annual funding. Avista also allows funds to be used towards health and safety improvements to be made up to an amount not to exceed 15% of the agency's total annual allocation.

Avista develops and administers annual contracts with the Agencies to deliver efficiency programs for low income customers. Both "Approved" and "Rebate" lists are made available to the agencies during the contracting process so they are aware of the eligible measures and the designated amounts if applicable. Should the Agency have an efficiency opportunity that does not appear on either list, the Company will review each the merits of that measure individually to determine an appropriate funding amount.

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 have 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 list of the 2017 Approved Measures can be found in the table below:

2017 Approved Measures - Washington

Electric Efficiency - WA	Natural Gas Efficiency - WA
Insulation for walls	Insulation for attic, walls, floors and ducts
Electric to air source heat pump	Air infiltration
Electric to natural gas furnace and water	
heat	Duct Sealing

2017 Approved Measures – Idaho

Electric Efficiency - ID	Natural Gas Efficiency - ID
Electric to air source heat pump	Duct Sealing
Electric to natural gas furnace and water heat	
Duct Sealing	

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 allotment 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 2017 Qualified Rebates can be found in the tables below:

2017 Qualified Rebates - Washington

Electric Efficiency - WA	Natural Gas Efficiency - WA
Air Infiltration	Energy Star Doors
Energy Star Doors	Energy Star Windows
Energy Star Windows	High Efficiency Furnace
Insulation for attic, floors and ducts	
Duct Sealing	
Ductless Heat pump	
Energy Star Refrigerator	

2017 Qualified Rebates- Idaho

Electric Efficiency - ID	Natural Gas Efficiency - ID
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Air Infiltration	Energy Star Doors
Energy Star Doors	Energy Star Windows
Energy Star Windows	High Efficiency Furnace
Insulation for attic, walls, floors and ducts	Insulation for attic, walls, floors and ducts
Ductless Heat pump	Air Infiltration
Energy Star Refrigerator	

2017 Program Planning

The return of natural gas homes to Idaho has allowed the Agency to have a larger client pool in which to pull potential projects. While this agency typically spends out their funds, they are able to do that over a larger pool of homes vs. an electric only focus.

Initial review of energy efficiency measures for both Idaho and Washington low income programs resulted in a large shift of the number of Approved Measures available for the 2017 program year on both the electric and natural gas side. One of the main reasons related to the shift is the energy savings claimed for these homes for 2017 is less than when they were previously evaluated. Another reason is the low cost of natural gas makes it difficult to meet any cost effectiveness test that is applied to these programs.

While it is understood that cost-effective energy efficiency programs are a main requirement, the ability to serve the low income customer cost effectively is a constant challenge. Avista has taken steps to pay for the value of the energy saved which in some cases becomes an amount that is not meaningful to the agency to install. The concern in 2017 is that all the measures under review will only result in a small reimbursement to the agency – which makes it challenging for them to be able to spend out the funds that are allocated. The agencies tend to pursue projects on a whole house basis when they can instead of individually. This helps keep their costs lower than what they may otherwise be.

Avista Program Manager: -Renee Coelho

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

Proposed Rebates for 2015:

Energy Star Home, stick built \$1000 Energy Star/ECORated Home, manufactured \$800 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.

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 provide the largest portion of the gas savings for the residential portfolio.

Program Eligibility and incentives:

Any Washington and Idaho residential 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.

Proposed Rebates for 2017:

Variable speed motor \$80

Electric to Air Source Heat Pump \$900

Electric to Ductless Heat Pump \$450

High efficiency natural gas furnace \$300

High efficiency natural gas boiler \$300

Heat Pump Water Heater \$200

Tankless Water Heater \$200

Smart Thermostat \$100 (contractor install)

Smart Thermostat \$75 (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 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 or higher. Heat pump water heaters must have an efficiency of 1.8 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.

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 2016 remain consistent with throughput from 2015.

The current customer descriptions of the programs with primary program requirements are available on the

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.

Proposed Rebates for 2017: 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.

Residential Fuel Efficiency Program

General Program Description:

The fuel efficiency rebate encourages customers to consider converting their 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.

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 4,000 kWh or more during the previous heating season.

Proposed Rebates for 2017:

Electric to natural gas furnace \$1,500 Increased September 15, 2014

Electric to natural gas water \$750 Increased September 15, 2014

heater

Electric to Natural Gas Direct \$1300 Added May 2015

Vent Wall Heat

Avista Program Manager: David Schafer

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

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, energy-efficient compact fluorescent lamps (CFLs), light emitting diode bulbs (LEDs), light fixtures, energy-saving showerheads as well as ENERGY STAR appliances. Simple Steps has historically focused on upstream incentives for lighting and showerheads, however, in 2015, the program introduced a dynamic, new midstream model that includes retail incentives for 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 midstream model used for clothes washers focuses the incentives on larger, short term campaigns to align utility support with national and regional campaigns and help influence stocking practices while 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:

CFL Bulb: General Purpose and Dimmable

CFL Specialty: Decorative, Mini-Base, Globe, Reflectors, Outdoor and Three-Way

LED Bulb: General Purpose, Dimmable, Decorative, Mini-Base, Globe, Reflectors, Outdoor and

Three- Way

ENERGY STAR® CFL Fixtures ENERGY STAR® LED Fixtures

Showerhead: 2.0 GPM, 1.75 GPM, 1.5 GPM

ENERGY STAR® Clothes Washers: Amana, GE, Kenmore, LG, Maytag, Samsung, Whirlpool

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:

<u>CFL Bulb</u>: \$0.50 - \$0.75 <u>CFL Specialty</u>: \$1.00 - \$2.00 <u>LED Bulb</u>: \$2.00 - \$3.00

ENERGY STAR® CFL Fixtures: \$6.00 ENERGY STAR® LED Fixtures: \$5.00

Showerhead: \$7.00

ENERGY STAR® Clothes Washers: \$35.00

Avista Program Manager: Rachelle Humphrey

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

Home Energy Reports

General Program Description:

June of 2013, Avista launched a three year Residential Behavioral Program using the Opower platform for Home Energy Reports (HER). 73,500 electric customers in Washington and Idaho were targeted for these reports and will continue receiving reports throughout the duration of this three year program unless they opt-out or move. No one is allowed to opt-in. These programs have proven success at saving customers energy and money, and thus providing energy acquisition for Avista.

In 2015 a 3 report interruption occurred due to Avista's CC&B migration. The program end date has been extended and will result in the last reports to customers to be generated in September 2016 rather than June 2016 as originally planned. The company choose to refill the treatment and creating a new control group for the refill group to coincide with the start of the next biennium (1/1/16) and is planning on continuing the reports through the end of the biennium 12/31/17.

The premise of the reports is built upon comparison to neighbors, yearly usage tracker, comparison to self and three no-cost, low-cost and higher-cost energy savings tips are included on each HERs. Once or twice a year, Avista promotions are included on the HERs. These insights and comparisons drive customers towards behavior changes that can positively impact their usage and lower their energy bill. The library of energy savings tips which the HERs draws from includes over 100 measures (no/low and higher cost ideas) which are dynamically added to the reports.

Program Eligibility:

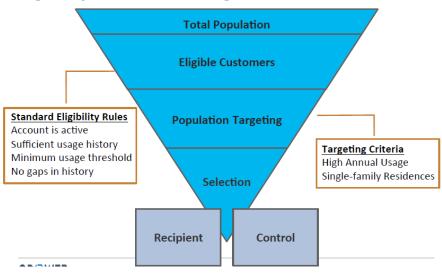
The HER Program is opt-out, which distinctly varies from Avista's normal opt-in programs historically offered.

To allow for normal attrition, a 5% increase was made to our original program size of 70,000, thus yielding the 73,500 initial HER mailings in June 2013. Initially, 48,300 HER were mailed to Washington customers and 25,200 HER were sent to Idaho customers. These customers have a load profile consistent with year round electric usage, not seasonal. Other factors are listed below.

- High electricity consumption customers which had 99 other homes with like usage in a 100 mile radius were targeted for the HER.
- All participants are an Avista electric customer.
- Approximately 42% of report recipients also have a gas meter. Reports have no gas or dual fuel focus. This is an electric only program.
- A control group of similar characteristics was randomly selected by Avista's 3rd part evaluator at the time, Cadmus. 13,000 in each state (Washington and Idaho) were selected. The refilled treatment and control group were chosen by Nexant.
- The Washington and Idaho treatment refill groups were 16,369 and 8,337 customers respectively. The Washington and Idaho control refill groups were 10,000 and 8,337 customers respectively.

A representation of the selection process is shown below.

Reports are primarily targeted at customers with the highest potential for savings



Customer satisfaction with the reports remains consistent with Opower guidelines. Opt-Out rates remain less than 2% across both states since program inception. In addition, Avista conducted a customer satisfaction survey. Overall, 72% of customers overall satisfaction remained the same, 19% surveyed had an increase in overall satisfaction as a result of the reports while 8% surveyed indicated a decreased level of satisfaction with Avista. Customer Service Representatives at Avista suggested several ideas on how to improve the program based on the calls they receive. Those ideas are being discussed, which include but aren't limited to adding a customer web-portal so that customers may self serve to update their home's profile, and include verbiage on the reports periodically to inform customers of the benefits to them of the program. These changes would be incorporated into a new program should future discussions include a behavior program in Avista's energy efficiency portfolio. No changes are planned in the current program.

Key Avista Staff:

- Program Manager Camille Martin. Program management responsibilities include ongoing process evaluations, coordinating program marketing efforts, vendor management, coordinating program updates and support to Customer Service and coordinating all implementation aspects of the program
- Annette Long is designated to assist with Tier 2 level Customer Support for customer calls regarding the program
- Technical support: Avista's Enterprise Technology team and Opower
- Outreach support: Colette Bottinelli
- Analytical support: Mike Dillon and Avista's 3rd party evaluator, Nexant

Nonresidential 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 High Performance T8, T5 and LEDs and TLEDs.

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

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

Nonresidential 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.

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 in Washington and Idaho and Schedule 190 in Washington. 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 appliances, compressed air, HVAC, industrial process, motors, shell measures, some custom lighting projects that don't fit the prescriptive path 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 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.

*Multi-family Electric-to-Natural Gas Market Transformation Program

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>: Tom Lienhard, site-specific engineering, Renee Coelho, multifamily market transformation, Greta Zink, site-specific planning, Lorri Kirstein, site-specific contract administration and tracking

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

Nonresidential 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 provided by Avista Utilities in Idaho or Washington and 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 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 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.

Nonresidential 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.

Nonresidential 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 in Washington or Idaho 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.

Nonresidential 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 to 5,000 hp 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.

Nonresidential 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 and Idaho 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 EnSave. The target market for the direct installation of AirGuardian devices are small and medium sized businesses using rotary screw compressors of at least 15 horsepower. 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.

Nonresidential 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 on-board 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 will be 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.

Nonresidential 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. Please see above for incentives.

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.

Nonresidential Small Business Program

General Program Description:

The Small Business program is a third party delivered turnkey program for direct install of samll energy saving measures. The program targets small businesses located in Avista's Washington and Idaho service territory. The direct install measures include LEDs, faucet aerators, showerheads, vending misers, smart strips and pres-rinse spray valves. While on site, a quick facility audit is also conducted. Any commercial Schedule 11 Avista electric customer is eligible for this program.

Program Implementation:

The Small Business program is turnkey and delivered by SBW Consulting, Inc. The target market for the direct installation of small business devices are Washington and Idaho schedule 11 customers. These facilities represent a prime opportunity for energy efficiency measures to be directly installed where customers may not have the time or resources to do so themselves. SBW Field Installers saturate an area by zip code doing a cold call method. They provide a quick facility audit, install any measures that are applicable, leave warranty and follow up information. This program is available to all non-residential schedule 11 electric customers in Washington and Idaho. The DSM Program Management team monitors the contract, inputs the monthly results and runs analysis on program measures.

Avista Program Manager: Greta Zink

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