

Appendix A Washington 2014 Electric Impact Memorandum



MEMORANDUM



May 28, 2015

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To: Dan Johnson, Avista

From: Lynn Roy, Nexant

Re: WA 2014 Electric Impact Memorandum

In 2014, Avista offered a suite of nonresidential, residential and low income programs to customers in their Washington service territory. The programs incented Avista's customers to purchase and implement energy savings measures in their homes and businesses through prescriptive rebates, buy-down offerings, direct installs, and site specific rebates. This memo outlines the unverified, gross electric savings values for the 2014 program year. Net-to-gross values have not been applied to the savings values, except in those cases where the deemed energy savings value is based on market baseline and therefore is a net value.

Total 2014 Washington Electric Savings

The following table outlines the total reported and gross unverified electric savings for the 2014 program year in Avista's Washington service territory, by nonresidential sector, residential sector, and low income sector. The reported savings values are from Avista's Saleslogix and Cognos database and from data provided by third-party implementers not already tracked in Avista's databases. The unverified savings are calculated based on the evaluation team's review of the database fields provided for each program and through the application of adjustment factors (based on errors found in the reporting databases) and realization rates (based on the findings from the 2012-2013 evaluation of Avista's programs¹) when deemed necessary. Savings are broken out by sector in the remainder of this memo.

¹ Avista 2012-2013 Washington Electric Impact Evaluation Report, the Cadmus Group, May 15, 2014

Table 1: 2014 Total Reported and Unverified Gross Savings for Washington Electric

Sector	Reported Savings (kWh)	Unverified Savings (kWh)
Nonresidential	16,627,556	16,226,327
Residential	26,928,376	25,397,486
Low Income	400,247	400,247
Total	43,956,179	42,024,060

Nonresidential Savings

Table 2 outlines the reported and unverified gross electric savings for the 2014 nonresidential programs in Avista's Washington service territory. Realization rates were applied for the Site-Specific (SS) program measure categories and are based on the findings from the 2012-2013 evaluation of Avista's WA programs². A realization rate of 1.0 was applied to the Prescriptive (PSC) program measure categories because it is understood that the energy savings values reported by Avista in 2014 have already been adjusted to capture an updated per unit value found in the 2012-2013 evaluation. An adjustment factor was applied to the reported savings to account for any errors found by the evaluation team.

² Avista 2012-2013 Washington Electric Impact Evaluation Report, the Cadmus Group, May 15, 2014

Table 2: 2014 Nonresidential Reported and Unverified Gross Savings for Washington Electric

Program and Measure Category	Reported Savings (kWh)	Realization Rate	Adjustment Factor	Unverified Savings (kWh)
PSC Com Water Heater	138	1.00	1.00	138
PSC Com Windows and Insul	466,468	1.00	1.00	466,468
PSC EnergySmart – Case Lighting	753,714	1.00	1.00	753,714
PSC EnergySmart – Industrial Proc	496,105	1.00	1.00	496,105
PSC Food Service Equipment	106,825	1.00	1.00	106,825
PSC Green Motors Rewind	10,918	1.00	1.00	10,918
PSC Lighting Exterior	1,711,156	1.00	1.05	1,790,477
PSC Lighting Interior	2,085,055	1.00	1.02	2,130,153
PSC Motor Controls HVAC	475,554	1.00	1.00	475,554
PSC Standby Generator Block	8,668	1.00	1.00	8,668
SS Appliances	532,946	0.95	1.00	506,299
SS HVAC Combined	2,188,202	0.95	1.00	2,078,792
SS HVAC Cooling	42,361	0.95	1.00	40,243
SS HVAC Heating	112,286	0.95	1.00	106,672
SS Industrial Process	3,082,485	0.95	1.00	2,928,361
SS Lighting Exterior	783,663	0.95	1.00	744,480
SS Lighting Interior	3,731,942	0.95	1.00	3,545,345
SS Motors	32,327	0.95	1.00	30,711
SS Shell	6,743	0.95	1.00	6,406
SS Compressed Air	-	-	-	-
SS Motor Controls Industrial	-	-	-	-
Cascade Strategic Energy Management	-	-	-	-
Total	16,627,556	0.98	1.001	16,226,327

Residential Savings

Table 3 outlines the reported and unverified gross electric savings for the 2014 residential measures offered in Avista’s Washington service territory. Savings are reported by measure type to align with the data utilized in the cost-effectiveness analysis. A realization rate of 1.0 was applied to all reported values in the residential programs because it is understood that the energy savings values reported by Avista in 2014 have already been adjusted to capture an updated per unit value found in the 2012-2013 evaluation. An adjustment factor was applied to the reported savings to account for any errors found by the evaluation team.

Table 3: 2014 Residential Reported and Unverified Gross Savings for Washington Electric

Measure Type	Reported Savings (kWh)	Adjustment Factor	Unverified Savings (kWh)
E Electric Water Heater	4,766	1.00	4,766
E Attic Insulation With Electric Heat	33,641	1.00	33,641
E STP WA/ID DIY	961	1.00	961
E Floor Insulation With Electric Heat	11,742	1.00	11,742
E Wall Insulation With Electric Heat	39,050	1.00	39,050
E Electric To Natural Gas Water Heater	243,315	1.00	243,315
E Electric To Natural Gas Furnace	1,309,308	1.00	1,309,308
E Electric To Natural Gas Fur & WH	258,281	1.00	258,281
X E Air Source Heat Pump	6,066	1.00	6,066
E Electric To Air Source Heat Pump	463,017	1.00	463,017
E Variable Speed Motor	276,131	1.00	276,131
E Window From Double Pane W/ Elec Heat	888,432	0.30	269,339
E Window From Single Pane W Elec Heat	451,984	1.00	451,984
E Estar Home – Manuf, Furnace	105,215	1.04	109,552
G Window Replc With Natural Gas Heat	1,393,249	0.45	624,797
E STP WA/ID PD Install	4,805	1.00	4,805
E Estar Home – Manuf, Heat Pump	4,390	1.00	4,390
E Energy Star Home – Stick Built, WA	18,936	1.00	18,936
Simple Steps CFL	7,422,561	1.00	7,422,561
Simple Steps Showerheads	262,509	1.00	262,509
Simple Steps LED	2,444,105	1.00	2,444,105
Refrigerator	359,676	0.73	262,032
Freezer	171,450	0.71	121,412
Manufactured Home Duct Sealing	2,003,402	1.00	2,003,402
Manufactured Home CFL	237,268	1.00	237,268
Manufactured Home Showerhead	379,130	1.00	379,130
Customer Outreach CFLs	2,820	1.00	2,820
Customer Outreach LEDs	845	1.00	845
Opower Home Energy Reports	8,131,321	1.00	8,131,321
Total	26,928,376	0.94	25,397,486

Low Income Savings

Table 4 outlines the reported and unverified gross electric savings for the 2014 Low Income program in Avista's Washington service territory. Savings are reported by measure type to align with the data utilized in the cost-effectiveness analysis. An adjustment factor was applied to the reported savings to account for any errors found by the evaluation team.

Table 4: 2014 Low Income Reported and Unverified Gross Savings for Washington Electric

Measure Type	Reported Savings (kWh)	Adjustment Factor	Unverified Savings (kWh)
E Ins – Ceil/Attic	10,710	1.00	10,710
E Ins – Duct	85	1.00	85
E Ins – Floor	73,406	1.00	73,406
E Ins – Wall	5,112	1.00	5,112
E Energy Star Windows	63	1.00	63
E Energy Star Doors	7,388	1.00	7,388
E To G Furnace Conversion	136,763	1.00	136,763
E To G H2O Conversion	65,092	1.00	65,092
E Air Infiltration	22,975	1.00	22,975
E Duct Sealing	10,046	1.00	10,046
E Energy Star Refrigerator	5,596	1.00	5,596
G Air Infiltration	1,676	1.00	1,676
G HE Furnace	(3,717)	1.00	(3,717)
G Ins – Duct	13	1.00	13
G Energy Star Windows	6,707	1.00	6,707
G Duct Sealing	49	1.00	49
Customer Outreach CFLs	55,215	1.00	55,215
Customer Outreach LEDs	3,068	1.00	3,068
Total	400,247	1.00	400,247