APPENDIX B

2016 Avista Washington Natural Gas Impact Memorandum

MEMORANDUM



May 2, 2017 Page count: 4

To: Dan Johnson, Amber Gifford; Avista

From: Lynn Roy; Nexant

Re: WA 2016 Natural Gas Impact Memorandum

In 2016, 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 adjusted reported therm savings values for the 2016 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 2016 Washington Natural Gas Savings

The following table outlines the total reported and adjusted reported natural gas savings for the 2016 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 Customer Care and Billing database and from data provided by third-party implementers not tracked in Avista's databases. The adjusted reported savings are calculated through the application of adjustment factors based on errors found in the reporting databases. Savings are broken out by sector in the remainder of this memo.

Table 1: 2016 Total Reported and Adjusted Reported Gross Savings for Washington Natural Gas

Sector	Reported Savings (therms)	Adjusted Reported Savings (therms)
Nonresidential - Conservation	160,355	162,375
Residential - Conservation	393,622	367,891
Low Income - Conservation	18,490	18,490
Total Conservation	572,467	548,756

Nonresidential Savings

Table 2 outlines the reported and adjusted reported gross natural gas savings for the 2016 nonresidential programs in Avista's Washington service territory. An adjustment factor was applied to the reported savings to account for any errors found by the evaluation team.

Table 2: 2016 Nonresidential Reported and Adjusted Reported Savings for Washington Natural Gas

Program and Measure Category	Reported Savings (therms)	Adjustment Factor	Adjusted Reported Savings (therms)
ESG PSC Cases	8,461	100%	8,461
ESG SS Case Doors	9,382	100%	9,382
ESG SS Cases	1,430	100%	1,430
PSC Commercial HVAC	18,057	100%	18,057
PSC Food Service Equipment	36,786	100%	36,786
PSC Insulation	7,432	100%	7,432
PSC Lighting Interior	-2,020	0%	0
SS Appliances	378	100%	378
SS HVAC Combined	33,433	100%	33,433
SS HVAC Heating	16,904	100%	16,904
SS Industrial Process	6,303	100%	6,303
SS Lighting Interior	709	100%	709
SS Shell	5,106	100%	5,106
Small Business	17,994	100%	17,994

Residential Savings

Table 3 outlines the reported and adjusted reported gross natural gas savings for the 2016 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. An adjustment factor was applied to the reported savings to account for any errors found by the evaluation team.

Table 3: 2016 Residential Reported and Adjusted Reported Gross Savings for Washington Gas

Measure Type	Reported Savings (therms)	Adjustment Factor	Adjusted Reported Savings (therms)
G Attic Insulation With Natural Gas Heat	11,619	94%	10,893
G Duct Sealing	224	100%	224
G Duct Sealing + CO2	522	100%	522
G Energy Star Home - Natural Gas Only	1,421	100%	1,421
G Floor Insulation With Natural Gas Heat	536	86%	461
G Natural Gas Boiler	2,133	100%	2,142
G Natural Gas Furnace	231,350	101%	233,089
G Smart Thermostat DIY with Natural Gas Heat	4,867	97%	4,732
G Smart Thermostat Paid Install with Natural Gas Heat	8,448	96%	8,112
G Tankless Water Heater	22,968	100%	22,968
G Wall Insulation With Natural Gas Heat	2,509	87%	2,174
G Window Replc With Natural Gas Heat	101,887	75%	76,015
G 40 Gallon Natural Gas Water Heater	106	102%	108
G 50 Gallon Natural Gas Water Heater	334	100%	333
Simple Steps Showerheads	4,698	100%	4,698

Low Income Savings

Table 4 outlines the reported and adjusted reported gross natural gas savings for the 2016 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: 2016 Low Income Reported and Adjusted Reported Savings for Washington Gas

Measure Type	Reported Savings (therms)	Adjustment Factor	Adjusted Reported Savings (therms)
E Energy Star Doors	194	100%	194
E INS - Floor	1,241	100%	1,241
E INS - Wall	986	100%	986
G Air Infiltration	1,478	100%	1,478
G Duct Sealing	450	100%	450
G Energy Star Doors	646	100%	646
G Energy Star Windows	4,500	100%	4,500
G HE Furnace	1,720	100%	1,720
G HE WH 50G	17	100%	17
G INS - Attic	1,658	100%	1,658
G INS - Duct	238	100%	238
G INS - Floor	3,598	100%	3,598
G INS - Wall	1,764	100%	1,764