

Memorandum



Aug. 14, 2015

TO: Dan Johnson, Director of Energy Efficiency, Avista Utilities

FROM: Christina Steinhoff, Planning Analyst

CC: Stephanie Rider, Senior Manager, NEEA Planning; Susan Hermetet, Director of Planning, Evaluation and Technology

SUBJECT: 2016-2017 Biennial Savings Forecast Final

Avista Washington, Pacific Power Washington and Puget Sound Energy have a joint approach to claim savings from NEEA initiatives. As part of the utilities' biennial savings updates, NEEA provides a two-year electric energy savings forecast.¹ The utilities subtract the savings estimates from the first two years of their ten-year electric conservation potential to determine their Biennial Conservation Target.

Below are NEEA's values for the 2016-2017 Biennial Conservation Target. Appendix A documents how NEEA developed the values and the attached Excel spreadsheet contains the baseline and technical assumptions.

Please contact Christina Steinhoff at 503.688.5427 with any questions about this report.

2016-2017 Biennial Savings Forecast

NEEA forecasts Avista Washington's share of annual electric energy savings associated with its initiatives for 2016-2017 is 0.71 aMW (Table 1). The energy savings forecast is above the Northwest Power and Conservation Council's (Council) draft 7th Power Plan baseline and exclude an estimate of savings the Energy Trust of Oregon, Bonneville Power Administration, and local utilities claim through their programs. NEEA allocates the savings using funder shares.

¹ Under the joint agreement, these utilities agreed that NEEA would develop a Total Regional Savings estimate using baseline and technical assumptions from the most recent Power Plan. NEEA would remove estimated savings counted by the utilities, the Bonneville Power Administration and the Energy Trust of Oregon. NEEA would allocate the estimated savings to these utilities based on their NEEA funder share percentage.

Table 1: Preliminary Biennial Remaining Savings Estimate

Sector	Initiative	2016		2017		Biennial Target
		Regional Savings	Remaining Savings	Regional Savings	Remaining Savings	Remaining Savings
Residential	Ductless Heat Pumps	0.20	0.06	0.24	0.10	0.15
Residential	Heat Pump Water Heaters	0.03	0.02	0.04	0.02	0.04
Residential	Residential Lighting	0.24	0.11	0.21	0.12	0.23
Residential	Residential New Construction ¹	0.01	-	0.05	0.03	0.03
Multiple Sectors	Standards ²	-	-	-	-	-
Commercial	Building Operator Certification Expansion	0.04	0.02	0.04	0.03	0.05
Commercial	Reduced Wattage Lamp Replacement	0.06	0.05	0.11	0.10	0.15
Commercial	Commissioning	0.02	0.02	0.02	0.02	0.04
Commercial	Commercial Codes	0.00	0.00	0.01	0.01	0.01
Industrial	Drive Power Motor Rewinds	0.00	0.00	0.00	0.00	0.00
Total		0.61	0.29	0.72	0.43	0.71

¹Includes a savings forecast for the next Washington and Oregon code.

²2016 and 2017 savings from NEEA's standards work are either in the 7th Power Plan load forecast or in the measure baseline. (See Appendix B)

NEEA does not report savings forecasts for initiatives that are pre Market Development Phase². These initiatives include the following:

- RETA Operator Certification*
- Clothes Dryers*
- Commercial Real Estate and Existing Building Renewal*
- Luminaire Level Lighting Controls*
- Retail Products Portfolio*



Appendix A: Methodology to Set Biennial Targets

Allocation Methodology

NEEA allocates the regional savings using funder shares. The shares vary based on the funding cycle. Savings from previous investments receive the previous funder share. Savings from current investments receive the current funder share. Table 2 shows the funder shares.

Table 2: Avista Washington's Funder Share for the 2016-2017 Savings Forecast

Funder Share

Avista Washington

Current	4.03%
2010-2014	3.89%
Previous (pre 2010 investments)	2.77%

Note: Avista's Washington funding share is 70% of its total NEEA funding share (Idaho plus Washington).

Baseline and Technical Assumptions

Because the Council will not have a final 7th Power Plan until the first quarter of 2016, this report uses the 7th Power Plan baseline and technical assumptions available as of August 12, 2015. NEEA met with Council staff in June 2015 to align its measures. NEEA will use these assumptions to report actual savings against the targets.

Appendix B: Standards included in the 7th Power Plan

Table 3: Compliance Date of Standards included in the 7th Power Plan Load Forecast or Measure Baseline

Sector	Product Regulated	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
All	Battery Charger Systems					✓						
	External Power Supplies							✓	✓			
	General Service Fluorescent Lamps			✓		✓				✓		
	General Service Incandescent Lamps			✓	✓	✓						✓
	Incandescent Reflector Lamps								✓			
	Metal Halide Lamp Fixtures								✓			
Residential	Boilers			✓								
	Central Air Conditioners and Heat Pumps						✓					
	Clothes Dryers						✓					
	Clothes Washers						✓			✓		
	Dehumidifiers			✓								
	Dishwashers				✓						✓	
	Furnace Fans										✓	
	Microwave Ovens							✓				
	Pool Heaters				✓							
	Refrigerators/Freezers					✓						
	Room Air Conditioners					✓						
Water Heaters							✓					
Commercial	Automatic Ice Makers	✓								✓		
	Boilers			✓								
	Clothes Washers				✓							
	Packaged AC and Heat Pumps (65-760 kBtu/hr)	✓									✓	
	Packaged AC and Heat Pumps (<65 kBtu/hr)									✓		
	Packaged Terminal AC and Heat Pumps	✓								✓		
	Refrigerated Beverage Vending Machines			✓								
	Refrigeration Equipment	✓		✓					✓			
	Single Package Vertical AC and Heat Pumps	✓								✓		
	Walk-in Coolers and Freezers						✓		✓			
	Water and Evaporatively Cooled CAC and HP				✓	✓						
	Water Heaters										✓	
Water Source Heat Pumps		✓							✓			
Commercial/ Industrial	Distribution Transformers							✓		✓		
	Pumps									✓		
	Small Electric Motors						✓					
	Electric Motors	✓						✓				

Note: NEEA staff members actively participated in the rule making process of the **bolded** standards listed.