

Memorandum



8/31/2017

TO: Rebecca Blanton, Senior Market Analyst, Puget Sound Energy;
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FROM: Christina Steinhoff, Planning Analyst

CC: Stephanie Rider, Senior Manager, NEEA Planning

SUBJECT: 2018-2019 Biennium Targets Final

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Puget Sound Energy, Avista Washington, and Pacific Power Washington have developed a joint approach to calculate 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 from their conservation forecast to develop their Biennial Conservation Target.

This memo provides a forecast of NEEA's 2018-2019 savings to support setting the next Biennial Conservation Target.

Appendix A documents NEEA's methodology. The attached Excel spreadsheet contains details about the baseline and technical assumptions by measure.

Please do not hesitate to contact Christina Steinhoff at 503.688.5427 with any questions about this report.

2018-2019 Draft NEEA Targets

NEEA is forecasting that Puget Sound Energy will receive 2.86 (2.0-3.3) aMW of savings from its voluntary programs, 1.15 aMW from its Codes and Standards programs and an additional 4.66 aMW from other regional measures that it is able track. To avoid double counting savings, these values net out a forecast of savings the Bonneville Power Administration, the Energy Trust of Oregon and local utilities will claim through their local programs. The savings are distributed based on funder share (Appendix A).

¹ The 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 remaining savings to the utilities based on their NEEA funder share percentage.



Table 1: Savings Forecast

	2018		2019		2018-2019	
	Estimate	Range	Estimate	Range	Estimate	Range
Program Measures	1.40	(1.0-1.6)	1.47	(1.0-1.7)	2.86	(2.0-3.3)
Codes & Standards Measures	0.55	(0.5-0.8)	0.61	(0.5-0.8)	1.15	(1.0-1.6)
Trackable Measures	2.54	(2.3-2.6)	2.12	(1.7-2.1)	4.66	(4.0-4.7)

Notes:

1. *These are site-base, first-year savings.*
2. *NEEA has multiple savings reports. The purpose of this report is to align with the calculation approach the Washington Investor owned Utilities use to develop their Biennial Conservation Target (Appendix A).*
3. *NEEA allocates the regional savings (Idaho, Montana, Oregon, and Washington) using funder shares (Appendix A).*
4. *These savings do not include a forecast of savings the Bonneville Power Administration, the Energy Trust of Oregon and local utilities will claim through their local programs (Appendix A).*



Appendix A: Methodology to Estimate Savings

This report provides Puget Sound Energy's funding share of measure-level savings above the 7th Power Plan baseline. The values are net of a forecast of savings the Bonneville Power Administration, the Energy Trust of Oregon and local utilities will claim through their local programs. NEEA does not make any additional baseline adjustments to savings.

The savings are reported in three categories:

- **Program Measures:** These savings come from measures NEEA worked on. For example, NEEA worked on CFLs; therefore, this report counts all the savings above the Council baseline from CFLs less those claimed through local programs.
- **Codes and Standards Measures:** These savings come from codes and standards NEEA worked on. For example, NEEA contractors develop code proposals, implement and facilitate code development meetings, and provide testimony for the Technical Advisory Groups and the State Building Code Board. After adoption NEEA quantifies and reports the savings for the region.
- **Trackable Measures:** Through its work, NEEA often collects additional data in other markets. For example, NEEA worked on both the residential lighting standard and on CFLs. In doing so, NEEA is able to collect total market data, which includes other efficient measures like LEDs. This report includes savings from those efficient measures.

Savings Rates

Where available, NEEA uses savings rates directly from the 7th Power Plan. For example, if the Power Plan has an ENERGY STAR measure that aligns with a NEEA program measure, this report uses that savings rate. If the rate is not available, NEEA calculates the savings rate using the same baseline year as the 7th Power Plan. NEEA reviews these calculations annually with the Northwest Power and Conservation Council.

The savings rates are essentially frozen and units vary.

The savings rates in the attached spreadsheet will change if:

1. They are a function of sales data NEEA collects, and
2. The 7th Power Plan baseline assumptions align with the sales data

For example, the Power Plan does not have an ENERGY STAR Northwest Homes measure for Washington. NEEA does. Moreover, NEEA is able to update this savings rate with tracked data based on climate zones, housing types, and heating systems. As a result, the savings rate will change from the original Biennium forecast. Meanwhile, the Power Plan has clothes washer measures; however, in this case, NEEA cannot update the savings rate with its sales data. Because the Power Plan did not have this data in developing the baseline, its assumptions about tub capacity, configurations, etc. do not match the sales data. In this case, an update without changing the Council's baseline assumptions would provide a nonsensical result rather

than measure savings from an efficiency program. As a result, the clothes washer savings rate will remain the same as in the 7th Power Plan.

Overall, the purpose of this report is to align with assumptions the Washington Investor Owned Utilities would use for their planning purposes.

Each tab in the attached spreadsheet contains additional information regarding the savings rate calculations by measure.

Avoiding Double Counting

NEEA avoids double counting by surveying the Bonneville Power Administration, the Energy Trust of Oregon and local utilities about their local programs. This report has a forecast of local program units that it uses to avoid over-reporting savings. NEEA multiplies the Power Plan’s savings rate and baseline saturation assumptions by the units to forecast local program savings. The regional savings minus the program savings are the savings NEEA reports to the Washington Investor Own Utilities.

Allocation

NEEA allocates the 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: Funder Share for the Washington 2016-2017 Savings Forecast

Funder Share

Puget Sound Energy

Current	14.15%
2010-2014	13.80%
Previous (pre 2010 investments)	10.37%