

## **Appendix 3**

### **2024-2025 Electric Savings Forecast**

# Memorandum



6/14/2023

TO: Cory Scott, Vice President of Customer and Community Solutions, Pacific Power; Nancy Goddard, Senior Program Manager, Pacific Power; Peter Schaffer, Senior Planner, Pacific Power

FROM: Christina Steinhoff, Principal Planning Analyst

CC: Stephanie Rider, Director, NEEA Data, Planning, and Analytics; Susan Hermenet, Vice President, Research, Evaluation and Analytics, NEEA; Virginia Mersereau, Senior Manager of Strategy, NEEA Corporate Strategy

SUBJECT: 2024-2025 Electric Savings Forecast

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NEEA is an alliance of utilities that pools resources and shares risks to transform markets toward energy efficiency for the benefit of consumers in the Northwest. NEEA’s role is to establish technology and market conditions that advance energy efficiency in markets in a sustainable way.

Energy savings are enabled by the alliance’s market transformation programs, work on building energy codes and appliance standards, and investment in tools, training, resources, data, and research to support greater efficiency. The programs seek to affect sustainable changes in markets, which then result in energy savings.

Pacific Power Washington, Puget Sound Energy, and Avista Washington have developed a joint approach to calculate savings from NEEA initiatives. As part of the utilities’ biennium savings updates, NEEA provides a two-year electric energy savings forecast. This memo provides the forecast for 2024-2025.

[Appendix A](#) documents NEEA’s methodology. The attached Excel spreadsheet contains details about the baseline and technical assumptions by measure.

Please contact Christina Steinhoff at [csteinhoff@neea.org](mailto:csteinhoff@neea.org) with any questions about this report.

## 2024-2025 Forecast

NEEA is forecasting that Pacific Power Washington will receive 1.16 aMW of savings during the 2024-2025 biennium. Savings are above the *2021 Power Plan* baseline from NEEA programs including Heat Pump Water Heaters, Retail Products Portfolio, XMP Pumps, and New Construction. The forecast does not include

programs in development such as Variable Speed Heat Pumps and High-Performance Windows. The savings are incremental to a forecast of savings that the Bonneville Power Administration, Energy Trust of Oregon, and local utilities will claim through their programs. [Appendix A](#) describes the savings calculation and allocation approach in more detail.

**Table 1: Savings Forecast (aMW, at Site)**

Sectors	2024	2025	Total for the Biennium
Residential	0.43	0.52	0.95
Commercial	0.08	0.13	0.21
Industrial	0.00	0.00	0.00
<b>Total</b>	<b>0.51</b>	<b>0.65</b>	<b>1.16</b>

These are forecasted site-based, first-year savings. Programs included are listed in the attached spreadsheet.



## Appendix A: Methodology to Estimate Savings

### Background

Pacific Power Washington, Puget Sound Energy, and Avista Washington developed a joint approach<sup>1</sup> to calculate savings from NEEA initiatives. NEEA provides a two-year electric energy savings forecast. The utilities subtract the savings from their conservation forecast to develop their Biennium Conservation Target.

### Unit Energy Savings (UES)

This report uses:

- Either the 2021 Power Plan or the Regional Technical Forum (RTF), whichever is the most up to date. For this report, the savings rates from the RTF were approved after 2020 and prior to May 1, 2023.<sup>2</sup>
- If a 2021 Power Plan or RTF Unit Energy Savings (UES) value was not available, NEEA worked with the Power Council to create a UES based on the original Power Plan baseline assumptions.

Table 2 **Error! Reference source not found.** sources the savings rates.

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<sup>1</sup> 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.

<sup>2</sup> Moved from Sept. 1 to May 1 because NEEA provided the forecast in June 2023, using data available in May.

**Table 2: Forecasted Savings Rate Sources for 2024-2025**

Product	Forecasted Savings Rate Source
Ductless Heat Pumps	RTF. The 2024 assumptions for FAF come from version 4.0 updated in April 2022. The assumptions for single-family zonal-heated homes come from version 6.0 updated in April 2022.
Extended Motor Products	RTF. April 18, 2022. Efficient Pumps v 3.0. RTF. Jun 14, 2017. Efficient Pumps v 1.1.
Heat Pump Water Heaters	RTF. Version 6.2 updated in June 2022.
Manufactured Homes	RTF. 2020. ResMHNNewHomesandHVAC_v4_1.xlsm. RTF. 2022. ResMHNNewHomesandHVAC_v5_0.xlsm. SEEM UEC outputs for HUD, NEEM 1.1, and NEEM 2.0 homes in each heating/cooling zone are weighted by the percentage of homes in each climate zone per the 2016 RBSA. UEC includes electric heating, electric cooling, non-electric heating, lighting, and refrigeration.
Refrigerators	NEEA calculates the savings rate using the same methodology as the RTF (RTF. 2022. Residential Refrigerators and Freezers v6.0). However, NEEA includes savings from ENERGY STAR's Emerging Tech Award in the ENERGY STAR Most Efficient category.
Clothes Washers	RTF. 2022. ResClothesWashers_v8_0.xlsm.
Clothes Dryers	RTF. 2022. ResClothesDryers_v5_0.xlsm and RTF. 2020. ResClothesDryers_v4.0.xlsm.
Room Air Conditioners	NEEA calculation. <a href="https://www.neea.org">neea.org</a> . Go to the Portal Login → Savings Reports.
Televisions	<a href="#">UES analysis reviewed by TRC in 2022.</a>
High Performance HVAC	Red Car Analytics. 2022. Analysis of Expanded Efficiency Parameters for Very High Efficiency DOAS.
Luminaire Level Lighting Controls	The savings rates come from the Regional Technical Forum's Non-Residential Lighting Standard Protocol.

The attached spreadsheet contains sources and additional information regarding the savings rate calculations. More details about the assumptions are also available on [neea.org](https://www.neea.org). Go to the Portal Login → Savings Reports.

For comparison against this forecast, NEEA will update the savings rates if:

- The RTF makes an update after May 1<sup>3</sup> of the year prior to the Biennium (e.g., 2023) and before Oct. 1 of the first year of the biennium (e.g. 2024); then, NEEA will update the forecast for the second year (e.g., 2025) with the new RTF UES
- The UES is weighted based on tracked units (e.g., commercial building type, installs by climate zone, etc.)
- Or NEEA finalized savings analysis for a building energy code or standard.

<sup>3</sup> Moved from Sept. 1 to May 1 because NEEA provided the forecast in June 2023, using data available in May.

## Avoiding Double Counting

NEEA avoids double counting by surveying the Bonneville Power Administration, 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 savings rate and baseline saturation assumptions by the units to forecast local program savings. The regional savings minus the local program savings are the savings NEEA reports to the Washington Investor Own Utilities.

## Allocation

NEEA allocates the savings from programs 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 3 shows the funder shares.

**Table 3: Funder Share for the Washington Savings Forecast**

<b>Business Plan</b>	<b>Funding Share</b>
2020-2024	2.55%
2015-2019	2.55%