

2018

# Q4

# Key Assumptions Summary Report

Updated: 10/09/18

## IMPORTANT UPDATES:



### What's New!

This is the Q4 2018 Key Assumptions report for NEEA's portfolio of Market Transformation Initiatives. This Q4 report contains assumption updates for two NEEA codes and standards programs: Commercial Codes, and Non-Residential Standards. The Commercial Codes update is a change to the 2015 Washington code savings rate based on final analysis from Mike Kennedy, of Mike D. Kennedy, Inc., while the Standards update is for the addition of two new standards that have been modeled. There are implications for both historical and future savings estimates, which will be included when NEEA staff completes its 2018 annual reporting in the first quarter of 2019.

In addition to these two Key Assumption updates, the report also includes previews of upcoming changes planned for Heat Pump Water Heaters, Ductless Heat Pumps, and Residential Lighting. These previews will likely become Key Assumption changes in a future quarterly report.

### What are Key Assumptions, Exactly?

To estimate savings and cost effectiveness for NEEA initiatives, the Market Planning team gathers and analyzes data to arrive at assumptions for key inputs to those calculations. At the highest level, these key assumptions include per-unit savings rates and incremental costs, measure life, market size, and tracked units, among others. Each assumption may be driven by additional lower-level assumptions such as hours of use, baseline market share, or climate zone weighting. When NEEA staff changes these assumptions - perhaps due to better information or a changing market - savings and cost effectiveness estimates are impacted, and communicating assumption changes gives context to those changing estimates.

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## 2017 REGIONAL STAKEHOLDER REPORTS

- **NEEA Baseline Report:** [https://neeanet.neea.org/sites/emp/Official%20Regional%20Savings%20Library/2017%20Annual%20Report%20\(NEEA%20Baseline\).xlsx](https://neeanet.neea.org/sites/emp/Official%20Regional%20Savings%20Library/2017%20Annual%20Report%20(NEEA%20Baseline).xlsx)
- **7th Power Plan Report:** [https://neeanet.neea.org/sites/emp/Official%20Regional%20Savings%20Library/2017%20Annual%20Report%20\(7th%20Power%20Plan%20Baseline\).xlsx](https://neeanet.neea.org/sites/emp/Official%20Regional%20Savings%20Library/2017%20Annual%20Report%20(7th%20Power%20Plan%20Baseline).xlsx)



### Questions about this report may be addressed to:

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## Residential



## Commercial

No key assumption updates this quarter.



## Codes & Standards



## Industrial/Agricultural

No key assumption updates this quarter.

INITIATIVE	HIGHLIGHTS
Clothes Washers	
Ductless Heat Pumps	✓
Efficient Homes	
Heat Pump Water Heaters	✓
Residential Lighting	✓
Residential New Construction/Next Step Homes	
Retail Product Portfolio	
Super-Efficient Dryers	
<hr/>	
Building Operator Certification Expansion	
Commercial Real Estate	
Commissioning Buildings	
Desktop Power Supplies	
Luminaire Level Lighting Controls	
Reduced Wattage Lamp Replacement	
Strategic Energy Management	
<hr/>	
Commercial Codes	✓
Multifamily Codes	
Non-Residential Standards	✓
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Certified Refrigeration Energy Specialist (CRES)	
Drive Power	
Refrigerators	



# Residential

## KEY ASSUMPTION HIGHLIGHTS

### *Ductless Head Pumps (DHP)*

*Note, this is not a current Key Assumption update; it is a preview of an update that will impact future savings reporting.*

HVAC Distributor Data Collection is complete and has moved into analysis and reporting phase. The Bonneville Power Administration is taking the lead on the analysis which will include an assessment of data gaps and a regional-level extrapolated dataset. NEEA staff is partnering with BPA and will deliver additional reporting to stakeholders as needed.

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### *Heat Pump Water Heaters*

*Note, this is not a current Key Assumption update; it is a preview of an update that will impact future savings reporting.*

Using findings from the most recent Market Progress Evaluation Report (MPER), we are refining our savings model to account for new construction and existing replacement HPWHs separately. There is no impact on historical savings but this does improve our ability to forecast the influences of different submarkets on overall HPWH adoption going forward.

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### *Residential Lighting*

*Note, this is not a current Key Assumption update; it is a preview of an update that will impact future savings reporting.*

NEEA staff is planning to apply some adjustments to the Chain Logic method that combines shelf survey data with purchased sales data to estimate the total retail sales market for the region. These adjustments bring NEEA's estimate of the market closer in line with reasonable comparison datapoints and reduce the market share of LED lighting.

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# Codes & Standards

## KEY ASSUMPTION HIGHLIGHTS

### *Commercial Codes*

NEEA staff has updated the savings rate for Washington's 2015 Commercial code. The code went into effect in July of 2016, but NEEA has not reported savings in its annual reports until the final analysis became available from its contractor, Mike Kennedy, Inc. in August 2018. Savings for 2016 and 2017 will be trued-up in future savings reporting.

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### *Non-Residential Standards*

NEEA's contractor Cadeo has completed savings modeling for two new standards: Refrigerated Beverage Vending Machines and Walk-in Coolers and Freezers (WICF). For WICF, in addition to the 2017 final rule, NEEA staff also had the 2014 final rule re-analyzed because parts of the original standard were vacated following a lawsuit.

NEEA staff has also commissioned baseline evaluations for WICF and Commercial Unitary Air Conditioners (also known as Rooftop Units). Both evaluations should be completed by the end of the year. The results will enable NEEA to report Net Market Effects in the 2018 Annual Report. NEEA staff also plans to have a baseline evaluation completed for Refrigerated Beverage Vending Machines evaluated in 2019.

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