Bonneville Power Administration Evaluation Project Updates June 2018
Evaluation Timelines

2018

- Billing Analysis: Phase I
- Billing Analysis: Phase II
- Performance HVAC
- 2017 UES Impact Eval
- 2018 UES Impact Eval Plan
- Process Evaluation

Planning → Data Collection → Analysis → Draft Report and Review → Final Report and Communicating Results
2016-2017 UES Evaluation Work

**Background:**
BPA conducted an impact evaluation of the Unit Energy Savings (UES) portfolio in 2016 focused on residential envelope and HVAC measures. The team conducted a DHP eFAF customer survey to better understand the draft savings estimates from 2016 billing analysis for this measure. BPA conducted further impact evaluation of the UES portfolio in 2017 focused on performance HVAC measures and other measure groups across the residential, agricultural and industrial sectors.

An internal team of subject matter experts has supported BPA in the strategy and planning for the evaluations. You can find presentations of the evaluation approaches, highlights one-pagers, and final evaluation plans at www.bpa.gov/goto/evaluation.

**2016 Weatherization and Residential HVAC Impact Billing Analysis:**
This task is complete. In late 2017, the evaluation team shared final billing analysis results for residential window, insulation, heat pump conversion, and performance duct sealing measures with external stakeholders. The evaluation team sent utility specific results to relevant BPA utility customers, and sent the final site-specific results to BPA. The report is available here: https://www.bpa.gov/EE/Utility/research-archive/Documents/Evaluation/1802_BPA_Residential_Impact_Evaluation_Final_Report.pdf.

**DHP eFAF & DHP Zonal Impact Analysis:**
The evaluation team completed surveys to help the team better understand the draft savings estimates from our billing analysis of DHP eFAF projects. In March, the team received and addressed feedback from RTF staff on the proposed approach to incorporate survey and installation form data into the billing analysis. The evaluation team will meet with RTF staff in the next quarter to discuss the initial results and will incorporate any additional changes to the approach that need to be documented.

As a part of the 2017 data collection efforts, our team received opt-in billing data from 11 utilities for prescriptive duct sealing and DHP projects. We are continuing to clean and incorporate this data into our sample in an effort to improve the savings estimates and statistical significance derived from our 2016 evaluation work. The next deliverable of this work is a basic summary of the billing data by key variables, like heat zone.
2017 UES Impact Evaluation of Performance HVAC Measures and other Residential, Agricultural, and Industrial Measures:

The evaluation team completed the analysis report, including cost-effectiveness analysis results, for the sampled 2017 UES measures, including residential advanced power strips, showerheads, heat pump water heaters, agricultural transformer de-energization and industrial & agricultural green motor measures, and shared it with BPA staff.

The evaluation team also collected data and conducted analysis on select residential performance HVAC measures to determine the feasibility of using program QA/QC data for impact evaluation. While the team could not ultimately conduct an impact evaluation on the measures due to multiple factors, the team drew several conclusions from the analysis that could support a future impact evaluation.

The team held an internal brown bag in April 2018 and an external brown bag in early May 2018 to discuss results from both the UES impact evaluation and the performance HVAC measures investigation. Visit www.bpa.gov/goto/evaluation to review all the files.

Other Evaluation Activities

Process Evaluation:

The team has been working to implement the new Process Evaluation framework that BPA finalized in 2017. This quarter, the process team conducted a survey of utilities to get feedback on specific areas of the BPA EE portfolio. The survey was fielded to 139 utilities for approximately two weeks in February-March 2018, and achieved a 50% response rate. Since the close of the survey, BPA program staff have been reviewing the results. The team is working towards finalizing the survey results and plans to communicate the results to utilities in the coming months. The presentation and accompanying slide doc of detailed results are now available at www.bpa.gov/goto/evaluation.

2018/2019 Impact Evaluation Planning:

The evaluation team is looking ahead to future impact evaluation activities in 2018 and 2019. The team is currently finalizing measure groups and refining evaluation approaches, and expects to share the evaluation plan and draft samples in the coming months.

Why Evaluation? www.bpa.gov/goto/evaluation has plans and reports!