

Michigan Energy Waste Reduction Collaborative: Utility Research Topics Update

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Utility Research Topics for EWR Collaborative

- In Fall 2015, the Expanded Calibration Research Sub-Committee was established to solicit, prioritize, and select collaborative utility research topics.
- The Sub-Committee included, in the first stage of the collaborative research screening process, a requirement that the selected research *does not replicate or duplicate* any existing research underway by DTE Energy or Consumers Energy.
- Therefore, DTE Energy and Consumers Energy agreed to continue to present findings from relevant research studies of 2015 and 2016 that support the Collaborative's research objectives.
- Research topics presented in past EWR Collaborative Meetings include:
 - Utility Coordination (DTE Energy)
 - Think! Energy Evaluation (Consumers Energy)
 - Residential Building Code Compliance Study (DTE Energy and Consumers Energy)
 - Building Energy Management Systems Market Characterization Study (DTE Energy and Consumers Energy)
- During the February 2017 Collaborative, DTE Energy and Consumers Energy agreed to update the list of utility research topics for presentation to the Collaborative in 2017.

Research Conducted by DTE Energy

- **Measurement & Verification 2.0**

DTE's AMI network may provide an opportunity to derive more value from residential energy efficiency programs by obtaining more timely and more granular estimated impacts from advanced evaluation approaches, including packaged software tools and custom econometric analysis. The objective of the M&V 2.0 research is to evaluate these approaches, relative to traditional impact evaluation techniques.

- **Residential Gas Emerging Technology**

DTE Energy worked with Navigant to conduct a residential gas emerging technology measure scan and performance review. The purpose of this research was to identify measures for whitepaper development and submission to the EWR Collaborative for inclusion in the MEMD.

- **Strategic Energy Management**

Conduct a review of Strategic Energy Management (SEM) programs documenting best practices and identifying critical success factors. SEM is a focused process to work in-depth with large customers to plan and identify EE savings over a long-term cycle. SEM integrates capital upgrades, process improvements, maintenance, and employee engagement to yield deeper, more sustainable savings.

Research Conducted by DTE Energy

- **Industrial Motors**

The objective of this study was to identify opportunities for energy efficiency savings in industrial motors, focusing on key sectors and a range of motor sizes. Navigant conducted in-depth interviews with primary market actors, to investigate energy efficiency savings potential for industrial sector motor replacement versus rewind, and researched potential solutions to market barriers for efficient motor replacement. This presentation will identify industrial motors program recommendations.

- **C&I Energy Efficiency Auction**

Energy Efficiency Auctions, also known as reverse auctions, are designed to reduce the cost of delivering electric and gas savings and identify the customers' minimum acceptable incentive amount. Research aims to understand how Energy Efficiency Auctions work, how they are managed and evaluated, and whether they are cost effective.

Research Conducted by Consumers Energy

- **Contractor Advisory Panel Surveys**

Consumers Energy has created a Contractor Advisory Panel (CAP) of trade allies participating in their contractor facing programs (including HVAC, Home Performance with ENERGY STAR, and Insulation and Windows). The 100+ CAP members are asked to complete an on-line survey 2-3 times per year with questions about various program topics that are particularly relevant to contractors. To date, Consumers Energy has completed four waves of CAP surveys, on topics such as use of and awareness of contractor marketing materials and contractor performance reports and rankings.

- **Contractor Initiatives**

Consumers Energy has launched a variety of initiatives aimed at better engaging contractors and improving the customer experience associated with contractor facing programs. This presentation will provide an overview of these initiatives, lessons learned, contractors' response, and success metrics.

- **Customer Journey Mapping**

Journey maps articulate customers' experiences as they navigate through 13 of Consumers Energy's residential energy efficiency programs. Consumers Energy's evaluators Cadmus and ILLUME conducted secondary research, in-depth interviews, focus groups, mystery shopping, and ride-alongs to piece together the visual journey maps that simultaneously convey the program pathways, number of touch points over time, and the emotional experiences of the customers at each point in the process.

- **Residential Program Success Stories**

In this presentation Consumers Energy will highlight successful and innovative features of their residential demand side management programs. New program features and successful initiatives associated with residential new home construction, a new online customer marketplace, and innovative marketing and outreach campaigns will be featured.

Proposed Schedule of Topics for EWR Collaborative

- DTE Energy and Consumers Energy have developed a proposed schedule of presentations for 2017, and will work with Commission staff to finalize.

EWR Meeting	Proposed Research Topics for Presentation to EWR Collaborative in 2017	Utility
April	Measurement & Verification 2.0	DTE Energy
May	Residential Gas Emerging Technology	DTE Energy
May	Contractor Initiatives	Consumers Energy
June	Customer Journey Mapping	Consumers Energy
July	Strategic Energy Management	DTE Energy
August	Residential Program Success Stories	Consumers Energy
September	Industrial Motors	DTE Energy
October	Contractor Advisory Panel Surveys	Consumers Energy
November	C&I Energy Efficiency Auction	DTE Energy