

Energy Efficiency Resource Standard (EERS) Stakeholder Workshop

Evaluation, Measurement and Verification

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SAVE THE PLANET, SAVE @ HOME.
SAVE ENERGY AT HOME. HELP PROTECT YOUR FAMILY'S FUTURE.



SAVE ENERGY. SAVE @ MUNICIPALITIES.
SAVE ENERGY AND USE THE EXTRA RESOURCES TO IMPROVE YOUR TOWN'S ROADS.

Evaluation, Measurement and Verification

“Evaluation, Measurement and Verification (EM&V) demonstrates the value of energy efficiency programs by providing accurate, transparent and consistent assessments of their methods and performance.” (ACEEE)

“Evaluation, Measurement and Verification (EM&V) is the collection of methods and processes used to assess the performance of energy efficiency activities so that planned results can be achieved with greater certainty and future activities can be more effective” (US DOE)

EM&V Today

NHPUC & Utilities work collaboratively to:

- Develop & Prioritize EM&V initiatives as part of planning process
- Develop Evaluation Scopes
- Hire and manage independent 3rd party evaluators
- Study management
 - Kickoff Meetings
 - Draft Report Reviews
 - Final Presentations (for input prior to finalizing report)
- Incorporate findings into plans and programs

EM&V Today

- Statewide Benefit-Cost Screening Model contains all measure & energy savings assumptions (will be basis of a statewide TRM)
 - NH-specific evaluation assumptions
 - Regional evaluations & studies
 - Energy Star Appliance calculators
 - Common assumptions (informed by past results, vendors, market data, other states' assumptions)

EM&V Reporting and Accountability

- **EE Tracking Data & Projects**
 - Projects tracked at customer level
 - Energy savings based on common assumptions
 - Continuous QA/QC by utility staff & contractors
- **Reporting**
 - Quarterly and annual reports to the PUC
 - Quarterly meetings with stakeholders
- **Audits**
 - Annual PUC fiscal audit
 - Annual ISO certification by independent 3rd party

EM&V Guiding Documents

- **Avoided Energy Supply Costs Study**
 - Regional Economic Analysis of Long-Run Cost of Energy
 - Performed every 2-3 Years (with updates as needed)
- **Energy Efficiency Potential Study**
 - Snapshot of Market Potential from 2009-2019
- **ISO EM&V Planning**
 - Updated annually by each electric Utility
- **TecMarket Works Six-Year Evaluation Plan**

TecMarket Recommendations

Shorter Term

- Large Business Energy Solutions – Complete
- NH Homes (Resi New Construction) – Wrapping up
- Small Business and Muni lighting impact – Scoping
- Lighting and Appliances – RFP under development
- Home Performance with Energy Star – Future
- HEA – Future

TecMarket Recommendations

Longer Term

- Develop and publish a NH-specific Technical Reference Manual (TRM)
- Streamline hiring and management of evaluation contractors (e.g., 2-3 sector or topical teams)
- Leverage studies in nearby jurisdictions
- Explore HVAC interactive effects, spillover, baselines, measure lives
- Additional support for Commission Staff (EM&V Contractor)

TecMarket

Market Assessment Framework

A structured approach to identify and consider what should, and should not, be included in the portfolio of energy efficiency activity

Pursue studies from the perspectives of:

- Customer classes and sub-groups
- Appropriate timing of energy efficiency interventions
- Existing adoption of EE products, service and practices
- Maturity of the EE delivery infrastructure

EM&V - Looking Ahead

- Formalize an EM&V Framework and Protocols
 - Participants
 - Structure for decision making and execution
- PUC to hire an EM&V consultant per settlement
- Draw on experience of sister operations in neighboring states, secondary research, TecMarket Works Plan
- Build upon existing expertise and resources

EM&V - Looking Ahead

- Within a Collaborative EM&V Framework
 - Make strategic evaluation choices based on limited EM&V budget
 - Develop and publish statewide NH TRM
 - Consider market characterization, assessment studies
 - Pursue impact and process studies based on
 - Size of savings
 - Level of uncertainty
 - Degree of innovation
 - Age of previous study (remain in compliance with ISO-NE)

Questions?

