



NORTHEAST ENERGY EFFICIENCY PARTNERSHIPS

## State of the Forum

Review of the Regional EM&V Forum Progress to Date, with  
Key Opportunities & Challenges Going Forward

**Annual Public Meeting**  
**October 19, 2010 / Baltimore, Maryland**

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Rich Sedano, Director RAP and Steering Committee Co-chair



# OVERVIEW

1. Regional EM&V Forum Background and Purpose
2. State of the Forum
  - Overview of Projects/Activities
  - Accomplishments to Date
3. Opportunities & Challenges - Implementation and Use of Forum Products by States

# NORTHEAST ENERGY EFFICIENCY PARTNERSHIPS



*“Accelerating Energy Efficiency”*

## MISSION

Accelerate the efficient use of energy  
in the Northeast & Mid Atlantic  
Regions

## APPROACH

Overcome barriers to efficiency  
through *Collaboration, Education  
& Advocacy*

## VISION

Transform the way we think about  
and use energy in the world around us.



# WHAT IS THE REGIONAL EM&V FORUM?

## QUICK BACKGROUND



**2006-07:** Development of M&V standards for demand resources (including EE) by ISO-New England for Forward Capacity Market, with coordination/facilitation of NE state input by NEEP

### 2008:

- Resolutions passed by New England Conference of Public Utility Commissioners (NECPUC) and Mid-Atlantic Conference of Regulatory Utility Commissioners (MACRUC) supporting the establishment and funding for a regional EM&V forum to develop common EM&V and reporting protocols
- Three-Year Forum Plan developed with start-up funding provided by US DOE, US EPA, NYSERDA, Energy Foundation, Conservation Services Group
- Steering Committee, Project Committees convened

**2009:** Forum Projects rolled out starting mid-year

# REGIONAL EM&V FORUM

## GOALS AND PURPOSE



- **Overarching Goal:** Develop and implement common EM&V methods, reporting guidelines and data assumptions to support the role and credibility of EE in meeting state and regional energy, economic and environmental goals
- **Purpose:** Support:
  - Participation and credibility of EE resources in wholesale electricity markets, and consistent integration into ISO/RTO system planning;
  - Assessments of EE impacts to meet environmental goals (climate change and air quality impacts)
  - Consistency and transparency across states in demand-side resource planning and procurement, and related state EE procurement policies and programs

# EM&V FORUM SCOPE

## THREE PROJECT/ACTIVITY AREAS



1. **Protocol Development:** develop common/consistent EM&V definitions, methods, and/or guidelines for estimating and reporting energy efficiency savings and associated costs, environmental and economic impacts
2. **Research & Evaluation:** to conduct joint R&E studies that result in development of common or consistent savings/input assumptions for projects of mutual interest that leverage resources for expensive studies across multiple states
3. **Education & Information Access:** provide accessibility to and education on EM&V data, issues and developments within and outside the Forum region

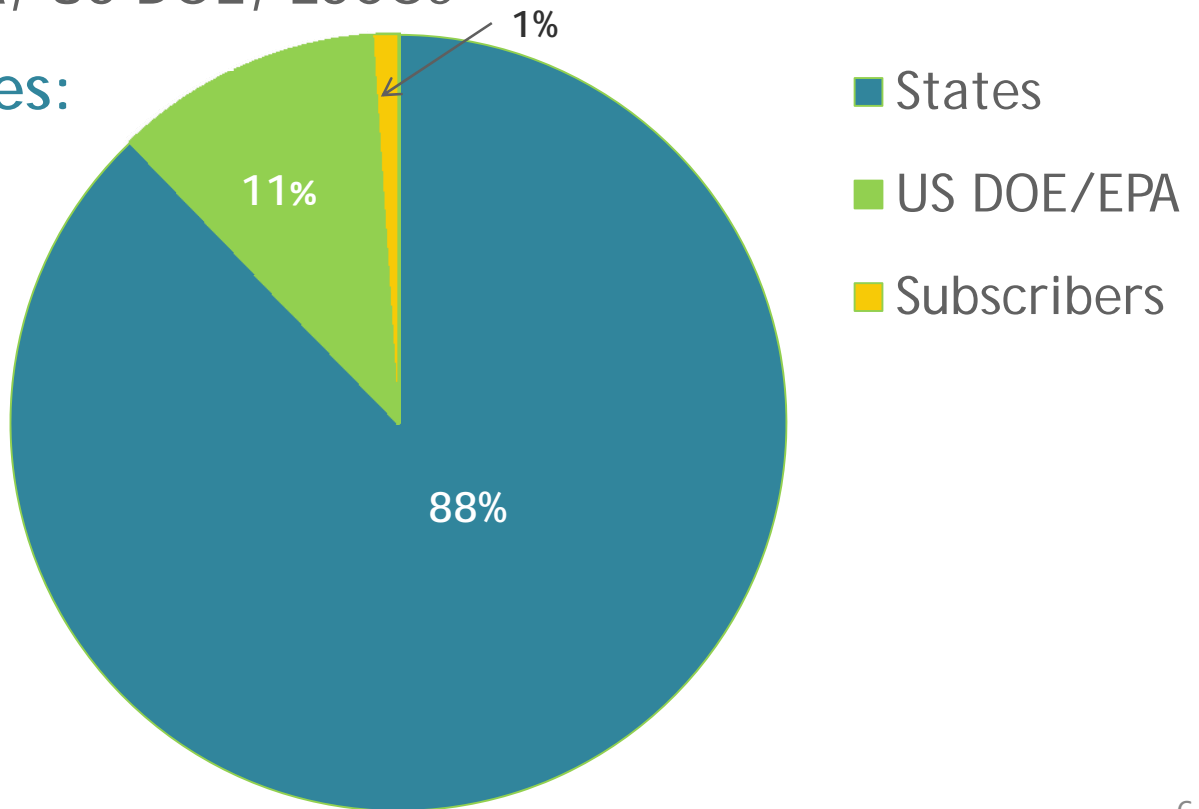
*Forum Budget: Approximately \$2.0 million per year*

# FORUM PARTICIPANTS

## WHO'S AT THE TABLE?



- **Ten Jurisdictions:** New England states, New York, Maryland, Delaware and District of Columbia (+ NJ participating in 2009)
- **Steering Committee:** PUC Commissioners, Air Quality Regulators
- **Project Committees:** PUC staff and air regulatory staff, program administrators, US EPA, US DOE, ESCOs
- **Forum Funding Sources:**



# REGIONAL EM&V FORUM STRUCTURE



**NEEP Board of Directors**

- Provide overall strategic guidance for NEEP Projects
- Approve Annual Forum Project Agenda, Budget and Revenue Plan
- Oversee NEEP Operations and Fiscal Management

**Steering Committee**

- Develop Forum plans and budgets
- Support Forum funding
- Endorse for state adoption protocols and materials developed through Forum
- Provide clear, accountable governance structure
- Encourage transparency (e.g., access to info)
- Adopt provisions to protect confidential or market sensitive information/data

**Project Committees**

- Inform development of Forum project agenda & budgets
- Review and comment on draft project materials
- Develop recommendations to the Steering Committee regarding adoption of Forum products

**Project Subcommittees**

Work with NEEP staff to develop and review draft project materials: scopes of work, RFPs, contractor bid review and selection, and draft reports/deliverables

<b>Protocol Development</b>	<b>Research &amp; Evaluation</b>	<b>Education &amp; Info Access</b>
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**NEEP Forum Staff**

- Convene and facilitates committees
- Provide technical and administrative support, and project management
- Facilitate revenue generation to support Forum activities
- Retain contractors selected with Project Committees input to undertake projects
- Coordinate Forum activities with state, regional, and national EM&V efforts
- Disseminate Forum results and products to target audiences
- Conduct outreach/education to support understanding/use of Forum products
- Serve as legal fiduciary and fiscal agent/manager for Forum projects
- Maintain Forum website and EMV Library

**3<sup>rd</sup> Party Contractors**

- Conduct research to inform and develop common EM&V protocols/guidelines
- Conduct coordinated or joint R&E studies

**FORUM USERS**

# EM&V FORUM LEADERSHIP

## STEERING COMMITTEE



Tim Woolf, Commissioner MA Dept of Public Utilities (co-chair)  
Rich Sedano, Director Regulatory Assistance Project (co-chair)  
Clifton Below, Commissioner NH Public Utilities Commission  
Lawrence Brenner, Commissioner MD Public Service Commission  
Christopher Carew, DC Dept of the Environment  
Phil Cherry, Policy Director DE Dept of Natural Resources & Environ Control  
Robert Curry, Commissioner NY Public Service Commission  
Anne Ficeto, Commissioner CT Dept of Public Utility Control  
Arthur Marin, Exec Director Northeast States for Coordinated Air Use Mgmt.  
Arnetta McRae, DE Public Service Commission  
Rick Morgan, Commissioner DC Public Service Commission  
Elizabeth Randall, President NJ Board of Public Utilities (for 2009 projects)  
Nancy Seidman, Air Director MA Dept of Environmental Protection  
Malcolm Woolf, MD Energy Administration  
James Volz, Commissioner, VT Public Service Board

# EM&V FORUM LEADERSHIP



**Steering Committee Co-chairs:**  
Rich Sedano, RAP and NEEP Board Member  
Tim Woolf, MA Dept Public Utilities

**Project Committee Co-Chairs**

**Protocol  
Development**

Sheldon Switzer  
(BG&E)

Helen Eisenfeld and  
Mary Cahill (NYPA)

**Research &  
Evaluation**

Dave Jacobson  
(National Grid)

Chris Neme  
(Energy Futures  
for VEIC)

**Education &  
Info Access**

Dan Cleverdon  
(DC PSC)

Pam Stonier  
(VT PSB)

# EM&V FORUM PROJECTS

## SELECTION CRITERIA



- Project makes sense regionally:
  - Topical issue for many/most states
  - Saves states \$\$ compared to individual state-by-state efforts/projects, while helping meet state needs
- If adopted by states, results of project will:
  - Improve credibility of EE savings
  - Reduce barriers to participation of EE resources in wholesale capacity markets
  - Improve state and regional demand-side resource and energy planning, implementation and evaluation
- Project results inform/guide national EM&V efforts & brings unified regional voice to national dialog
- Flexibility - Projects can be sub-regional

# FORUM ACCOMPLISHMENTS: PROTOCOL DEVELOPMENT COMPLETED PROJECTS TO DATE/EXPECTED BY YEAR END



1. **Glossary of EM&V Terms** - Version 1 *adopted by Steering Committee in 2009* (with updated Version 2 by December)
2. **Common EM&V Methods & Savings Assumptions Guidelines** - for comprehensive evaluation of 14 priority measure types for current set of technologies, *adopted in May 2010* (with proposed 2011 project to address *emerging* technologies and program designs)
3. **Common Statewide Energy Efficiency Reporting Guidelines** - Final draft in review, *adoption expected in December* (proposed 2011 project to develop on-line spreadsheet tool and tech support)
4. **Common M&V Standards in Wholesale Markets** - *PJM incorporated Forum comments into M&V standards for EE (2009)*. Forum currently informing North American Energy Standards Board (NAESB) EE wholesale and retail M&V standards development
5. **Mid-Atlantic Common Savings Assumptions (MD, DE, DC)** - *Version 1 completed Spring 2010* (30 measures, all electric), Version 2 underway (additional measures, including gas)

# FORUM ACCOMPLISHMENTS - RESEARCH & EVALUATION

## COMPLETED PROJECTS TO DATE/EXPECTED BY YEAR END



- 1. Loadshape Research:** Identify/develop loadshape data to meet range of policy/market needs (capacity market, SIP/ozone attainment, etc)
  - **Phase 1:** Catalog of existing/secondary loadshape data resources to inform primary research needs. Completed in 2009
  - **Phase 2:** Primary research on priority measures - Commercial Lighting, and Unitary HVAC - draft report by year end
  - **Phase 3** (proposed for 2011): primary research on additional measures
- 2. Roadmap to Claiming Energy Savings from Building Codes and Appliance Standards Workshop** -Sept 2010 workshop to help lay groundwork for 2011 project to estimate savings associated with improvements to building energy codes and standards
- 3. Net Savings Scoping Paper** - Draft in review, final paper this fall, with findings & recommendations to inform 2011 development of regionally consistent definitions and measurement approaches for net savings

# RESEARCH & EVALUATION

## PROJECTS UNDERWAY - COMPLETE IN 2011



4. **Commercial Lighting Measure Life/Persistence** - Develop estimates of C/I lighting measure persistence and measure life based on secondary sources and on-site data collection - complete in early 2011
5. **Incremental Cost Study** - Research incremental cost data for set of priority high efficiency equipment to help inform program design and cost-effectiveness testing - complete mid-year 2011
6. **Natural Gas Research** - Project being scoped, likely to address market assessment/market baseline study, or additional incremental cost research on gas measures (TBD).

# FORUM EDUCATION & INFORMATION ACCESS

## ACTIVITIES



- **EM&V Forum Resource Center** - develop, update and maintain:
  - EM&V Library/repository of evaluation studies and state TRMs
  - Links to EM&V and other relevant sites/resources
  - Quarterly Newsletters
  
- **Forum Annual Public Meeting** (2009, 2010)
  
- **Support for implementation/state adoption and use of Forum products** through references, public comments in:
  - Energy Efficiency Plans
  - Evaluation Plans
  - PUC orders
  - EM&V RFPs , etc.

# EM&V FORUM PARTICIPATION

## FOCUSED GROWTH



### Increased Coordination with Air Regulators:

- Building understanding of air regulatory data needs through Common Statewide EE Reporting Guidelines project, and developing process recommendations for improved coordination across state agencies and program administrators to support inclusion of EE in air quality and climate change planning

### Outreach to ISOs/RTOs (e.g., APM Panel today):

- Build better understanding of current practice and barriers to more fully integrating EE into system planning, and follow up with discussions to identify interest in ISOs/RTOs to coordinate on developing common approach for integrating efficiency into system planning (as part of a Forum 2011 project)

# EM&V FORUM SUCCESS OPPORTUNITIES & CHALLENGES



- **State Adoption/Use of EM&V Forum Results** - Steering Committee is adopting Forum products as best practice. *Critical next step - State adoption and use of Forum products (some referencing, but more needed)*
- **Informing National EM&V** - Timely to feed EM&V Forum projects/products into these efforts (e.g., DOE/EPA SEE Action, DOE ARRA guidelines, and NAESB) *Critical next step - US DOE and EPA active participation in EM&V Forum to inform products*
- **Regional Alignment:** Balancing near-term state EM&V needs with long-term regional EM&V protocol development goals is a challenge - *Steering Committee support & leadership key!*
- **Time Constraints:** Engaging Forum participants to review/inform projects and deliverables is tough (everyone is so busy) but is key to success - *States/utilities - keep staff participation a priority*

# EM&V FORUM PRODUCT ADOPTION

## STEERING COMMITTEE CRITERIA



- 1. Project Committee Review/Recommendation** - Forum product is reviewed/recommended by the relevant Forum Project Committee through a transparent and timely process based on consensus (per Operational Guidelines)
- 2. Alignment with Forum Goals** - The product, if ultimately adopted and practiced by the states will serve the Forum goals and objectives to:
  - Increase consistency in EM&V practices*
  - Reduce EM&V costs for the states*
  - Help to improve the credibility of EE resources*

**By adopting EM&V Forum products, the Steering Committee:**

“Encourages the products be used or implemented by and in the participating Forum states; and acknowledges the criteria for adopting the Forum products.”

(March 2009)

# REGIONAL EM&V FORUM PLANNING

## Success Criteria for 2011...



1. 2011 Agenda & Budget adoption & funding - Steering Committee to adopt in December of 2010
2. Steering Committee continues to adopt Forum products as best practice, with states then effectively implementing and using Forum products
3. Forum process and products serve energy and environmental policy needs
4. Forum continues broad regional support and engages new participants
5. Forum effectively informs state, regional and national EM&V projects/efforts
6. Evaluation of EM&V Forum, per Three Year Plan, to determine Forum life/scope beyond 2011



For more information:

<http://neep.org/emv-forum>

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