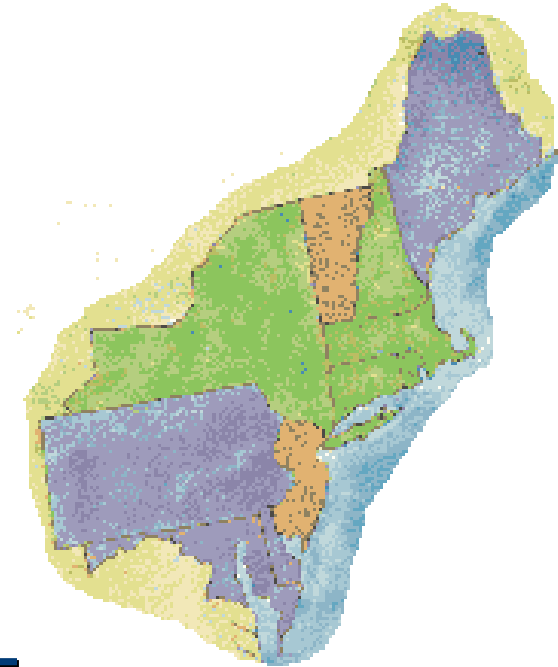


10, 9, 8, 7....The Regional Evaluation, Measurement and Verification Forum Prepares To Launch



**Presentation to US EPA
Clean Energy-Environment Technical Forum**
Julie Michals, Regional EM&V Forum Director
November 13, 2008

Northeast Energy Efficiency Partnerships, Inc.



Northeast Energy Efficiency Partnerships

“Facilitating partnerships to advance energy efficiency”

- Regional non-profit organization since 1996
- Serving New England, New York, Mid-Atlantic.

NEEP Mission:

Promote the efficient use of energy in homes, buildings and industry in the Northeast U.S. through regionally coordinated programs and policies to achieve a cleaner environment and a more reliable and affordable energy system.

Primary Audiences Served:

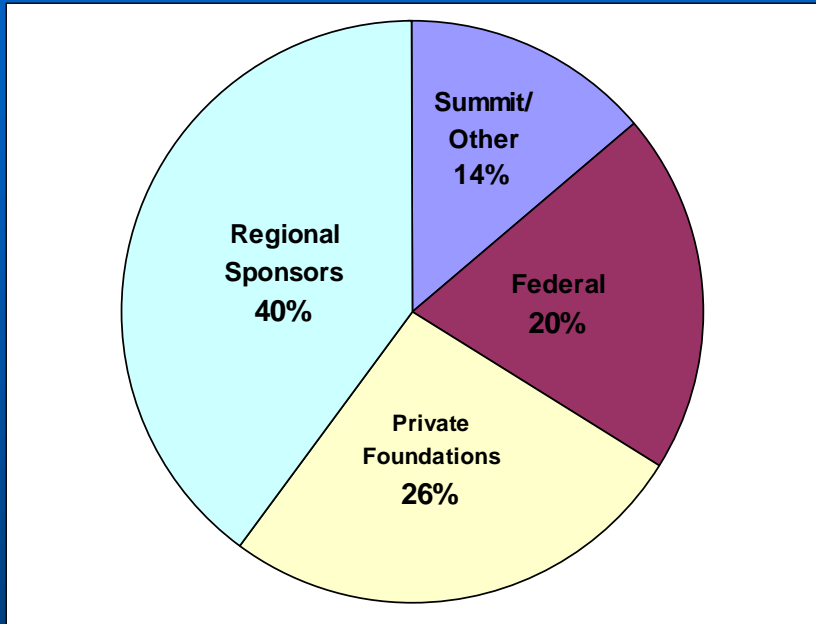
- State Policy Makers
- Efficiency Program Administrators

Approach:

Strategic regional collaboration to overcome barriers to efficiency – public policies and efficiency programs

NEEP cont.

2008 NEEP Funding:



Federal \$\$

US DOE
US EPA

Foundations

Energy Foundation
Kendall Foundation
John Merck Fund
Merck Family Fund

2008 Regional Sponsors:

National Grid
NYSERDA
LIPA
NJ Board of Public Utilities
Efficiency Vermont
Efficiency Maine
CT Light and Power
WMECo
NSTAR Gas and Electric
United Illuminating
Public Service Co of NH
Cape Light Compact
CT Municipal Electric Co-op

2009 NEEP Functional Areas and Projects

Policymakers	Program Administrators		Support Services
<p>Public Policy Development & Implementation</p> <p>Policy Outreach</p> <p>Appliance Standards</p> <p>Building Codes</p> <p>High Performance Buildings</p>	<p>Regional Evaluation, Measurement and Verification Forum</p> <p>Protocol Development</p> <p>Research and Evaluation</p> <p>Public Information and Access</p>	<p>Regional Initiatives</p> <p>Retail Products</p> <p>Residential Whole House Strategies</p> <p>Commercial Buildings and Technologies</p> <p>Solid State Lighting</p> <p>Workforce Development</p>	<p>Financial Services</p> <p>Financial Management</p> <p>Grant Management</p> <p>Human Resources</p> <p>Information Technology</p> <p>Facilities Management</p> <p>Development & Strategic Marketing</p> <p>Strategic Positioning</p> <p>Grant & Development</p> <p>Summit & Events</p> <p>NEEP Notes</p> <p>Website</p> <p>Media Relations</p> <p>Annual Report</p>



2009 Northeast Energy Efficiency Summit
MAXIMIZING THE ENERGY EFFICIENCY SOLUTION

Why NEEP and Regional Partnerships?

- **Leverage Resources:** *Federal, ratepayer funding, industry co-promotions → strategy development, consistent messages, research, development and evaluation*
- **Increase Impacts:** *Market aggregation increases market pull and impacts:*

NY + New England + NJ = CA market size

- **Stay Informed:** *Connect to regional and national efforts, NEEP project groups for staff development; policy-program links, keep up with the latest developments across the region*

Regional EM&V Forum

Northeast Energy Efficiency Partnerships, Inc.



The Future for Energy Efficiency: Public Funding and Policy Growth in Northeast

New England, New York, New Jersey, Maryland, Delaware	Highly Likely by 2010 45% increase	Potential by 2010 300%+ increase
2008 Ratepayer Funding: Gas + Electric	\$735 million	\$735 million
Potential RGGI auction proceeds	\$300 million	\$500 million
Potential Wholesale Capacity Market Proceeds (New England, PJM next)	\$2 million	\$400 million
<i>New</i> Electric Efficiency Ratepayer Funding (Procurement Policies, new SEUs)	\$30 million	\$800 million
<i>New</i> Gas Efficiency Ratepayer Funding	\$10 million	\$100 million
Private Capital Sources	??	??
Total	\$1,077 million	\$2,535 million

Key Efficiency Policies, Developments Increasing EE Funding

- EE procurement policies in New England states
- New York – EE Portfolio Standard and 15X15
- New Jersey – 20X20, \$0.5 billion “new” for EE in 2010
- EMPower Maryland
- DE Sustainable Energy Utility
- DC Sustainable Energy Utility
- PA – new EE legislation
- RGGI allowance proceeds
- Wholesale capacity markets (NE Forward Capacity Market and PJM Reliability Pricing Model)

EE EM&V Experience in Northeast/Mid-Atlantic Region

- Based on decades of EE program and merchant EM&V
- Systematic state regulatory and stakeholder review
- Established process of M&V planning, implementation, and reporting
- Public M&V reports/studies and published conference proceedings
- Industry sharing and collaboration
- National M&V protocols/guidelines (IPMVP, FEMP, ASHRAE, NAPEE)
- Recently, regional M&V protocols in wholesale capacity markets (ISO-New England, PJM next)

EE EM&V Experience cont.

- Evaluation budgets: Historically 2-4% of EE budgets (about \$14m/year in Northeast), and growing to 5%+ of EE budgets with new state requirements
- Although long history of EM&V experience, inconsistencies in EM&V methods used, and in savings/input assumptions and algorithms – some warranted, some not
- Greater policy reliance and \$\$ on EE – procure all c/e EE, climate change goals, NOx attainment, capacity markets
- Transparency, consistency, credibility – more important than ever...

EM&V Forum Value Proposition

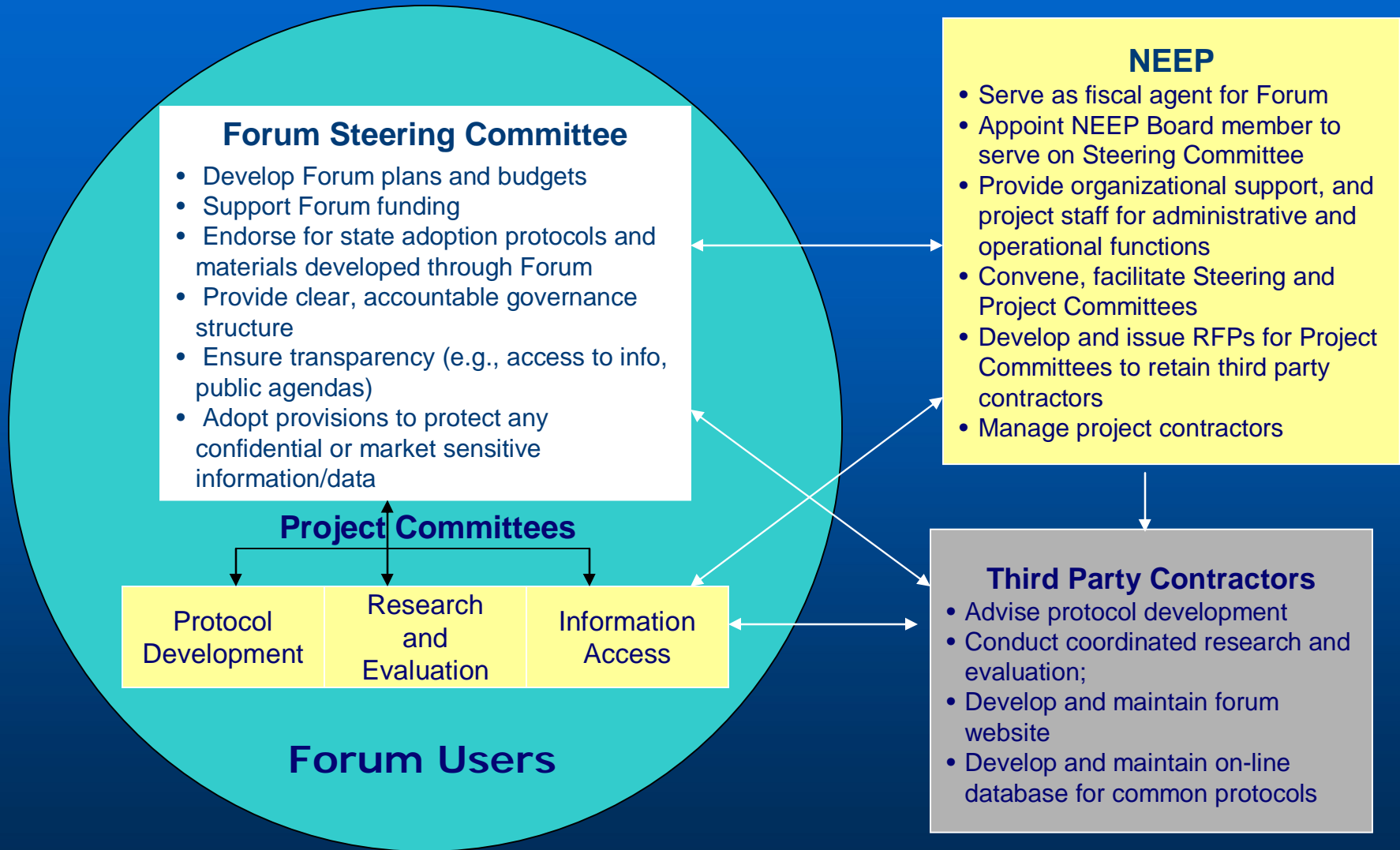
- **Increase the reliability and credibility** of demand-side resources by creating transparency and consistency in EM&V methods and assumptions across the region
- **Reduce costs** of demand-side resource evaluation and research by sharing costs across range of stakeholders
- **Increase participation** in demand resource markets by removing barriers to entry for DSM providers
- **Improve** state and regional demand-side resource and energy **planning, implementation and evaluation**
- **Inform** the development of **national/international standards and protocols** in near- and long-term

NECPUC and MACRUC Resolutions

RESOLVED, that NECPUC supports the establishment of a regional forum in collaboration with other Northeast states to develop common protocols to measure, verify and report demand resource savings, and NECPUC recognizes the need for committing resources to guide such a regional forum's activities. The New England states or utility commissions will determine the level of financial support that they each will provide to such forum. Should the other Northeast states decline to support this work, NECPUC will reconsider this Resolution. (June 2008)

RESOLVED, that MACRUC supports the establishment of a regional forum in collaboration with Northeast States to develop common protocols to measure, verify and report demand-side savings, and MACRUC recognizes the need to commit resources to guide such a regional forum's activities. The states or utility commissions will individually determine the level of financial support that each will provide to such forum. (July 2008)

EM&V Forum Structure and Governance



EM&V Forum Steering Committee

- Co-Chairs:
 - Paul DeCotis, NY Deputy Secretary of Energy (NEEP Board member)
 - Sharon Reishus, ME PUC Chairwoman
- Jack Betkoski, CT DPUC
- Arnetta McRae, DE PSC
- Rick Morgan, DC PSC
- Tim Woolf, MA DPU
- Larry Brenner, MD PSC
- Clifton Below, NH PUC
- Jeanne Fox, NJ BPU
- Bob Curry, NY PSC
- Andy Dzykewicz, RI Energy Office
- Jim Volz, VT PSB
- Arthur Marin, NESCAUM

EM&V Forum Project Committee Co-Chairs

- **Protocol Development Committee**
 - Carol White, National Grid
 - Mike Ambrosio, NJ BPU
 - Larry Pakenas/Jennifer Meissner, NYSERDA
- **Research and Evaluation Committee**
 - Jeremy Newberger, National Grid
 - Chris Neme/Coleen Orsburn, Efficiency Vermont
- **Information Access Committee**
 - Mike Sherman, MA Department of Energy Resources
 - TBD

EM&V Forum 2008 Activities

1. Convene Steering Committee, establish Forum's governance structure and adopt Operational Guidelines - *July 2008*
2. Convene Project Committees (represented by PUC staff, energy offices, EE program administrators, air regulatory staff to inform project priorities for 2009 – *Project Committee and project subcommittee meetings/outreach – on-going*
3. Steering Committee recommended 2009 agenda and budget (\$2.234m) to NEEP Board – *With caveat that agenda may be revised to reflect moving some projects to 2010, and not all states can participate in all projects. States to commit to funding by January 30, 2009*
4. Adopt EM&V Glossary of Terms and Definitions - *Drafting in process, to be completed end of 2008*
5. Kick-off Phase I of Load Shape Study – *Issue RFP in mid-November 2008, work to begin in December*

2008-09 EM&V Forum Projects

Protocol Development Projects:

- #A1. Glossary of EM&V Terms & Definitions Project (2008)
- #A2. Develop EM&V Methods Guidelines and Survey Savings Assumptions (2009)
- #A3: Survey Existing EE Savings Reporting Requirements and Develop Common Reporting Guidelines (2009 or 2010?)
- #A4: EM&V Protocol Development/Modifications in Wholesale Capacity Markets (2008-09)
- #A5: Develop Common Savings Assumptions and Algorithms – Sub-region Mid-Atlantic project TBD

Research and Evaluation Projects:

- #B1: Loadshape Project - Survey Available Data Sources (2009)
- #B2: C&I Lighting Measure Life and Persistence Project (2009)
- #B3: Scoping projects: Survey Net Savings Methods, Impact of EE Programs on Advancing Codes and Standards (2009)

Forum 2009 Estimated Budget (November 2008)

Base Costs

Forum Admin & Operations	\$ 351,300
Forum Outreach	<u>\$ 145,000</u>
Subtotal Base Costs.....	\$ 496,300

3rd Party Contractor Project Costs

(with 10% contingency and 3% fiscal admin fee)

Protocol Development Projects	\$ 660.000
Research & Evaluation Projects	<u>\$1,078,000</u>
Subtotal Project Costs.....	\$1,738,000

Total Estimated 2009 Costs **\$2,234,300**

Next Steps

- NEEP to confirm state interest in Forum projects
November 2008
- Load Shape Study Phase 1 - written commitment needed
from project funders in early December
- Subscriber service option – in development
- Forum cost allocation framework to be finalized by
Steering Committee – early December target
- By December 10 – states to confirm Forum funding
source(s) from their respective states
- By January 30, 2009 – states to commit funds (Load
Shape Phase 1 exception)
- Projects to begin in February 2009

Big Picture Observations

- Strong support for EM&V Forum, for starting projects ASAP, and making sure initial projects are successful
- Start-up challenges:
 - Many states involved, broad group of stakeholders – identifying state interest, priority projects and scope takes time...
 - States are at different places: programs and evaluation
 - Coordinating with existing state EM&V processes – presents opportunity but also some complexities
 - Funding sources within states – what makes sense, what's fair
 - Cost allocation across states
 - Getting funding commitments in timely
 - Everyone is stretched thin as states ramp up EE efforts!
- Value of Forum – importance of saving evaluation \$\$
- TBD: National protocol development – if, when, how?

Thank you

Julie Michals
Regional EM&V Forum
Director

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Northeast Energy Efficiency Partnerships, Inc.

