

New England States Smart Meter Status Report

NECA Energy

Efficiency and Demand Response

November 1, 2012

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New England States Committee on Electricity

NESCOE

- ✓ New England's Regional State Committee governed by a Board of Managers appointed by each of the New England Governors to represent the collective views of the 6 New England states on regional electricity matters
- ✓ Focus: Resource Adequacy, System Planning & Expansion
- ✓ Resources: 7 full-time staff with diverse disciplines & experience supplemented by outside consultants, primarily for transmission engineering & provision of independent analysis
- ✓ More information: including all filings & comments at www.nescocoe.com & on Facebook

2007 Energy Independence and Security Act

Consider investing in ‘Smart Grid’ systems before ‘non-advanced’ ones. With respect to:

- Total Cost
- Cost Effectiveness
- Improved Reliability
- Security
- System Performance
- Societal Benefit

New England State Legislation

Energy Efficiency
Act of 2007
Connecticut

Green
Communities Act
2008
Massachusetts

SB 451 2008
New Hampshire

Energy Efficiency
and Affordability
Act 2008
Vermont

S. 485 2009
Rhode Island

Act to Create
Smart Grid Policy
in the State 2010
Maine

ARRA Funds Across New England

To advance smart grid deployment

State	Recipient	\$Amount
Connecticut	CMEEC	\$9.2 million
Maine	CMP	\$95.8 million
Massachusetts	Danvers	\$8.5 million
Massachusetts	NSTAR	\$2.3 million
Massachusetts	National Grid	\$2.2 million
Massachusetts	Marblehead	\$1.4 million
New Hampshire	NH Electric Coop	\$15.8 million
Vermont	Vermont Transco, LLC	\$69 million

MAINE – Central Maine Power

- AMI for 600,000 residential and C&I customers
- \$95 million federal funds, \$191 million total cost
- Benefits:
 - Reduced meter reading cost, electricity costs, line losses, greenhouse gas emissions, and truck usage
 - Improved reliability and power quality
- Approved in May 2010
- Meters installed, system implementation ongoing
- PUC opened case to examine health & safety issues in response to citizen complaints
- Hearing scheduled for March 2013

VERMONT – Vermont Transco

- 20 utilities and Efficiency Vermont
- 300,000 smart meters
- Time-of-Use and Peak-time Rebate programs
- Substation equipment reduces operations costs
- \$69 million federal funds, \$137 million total cost
- Benefits:
 - Reduces cost of electricity, meter reading, operations & maintenance, equipment failures and greenhouse gases.
 - Deferred investment in distribution capacity expansion
- PSB approved AMI programs 2010-2012

MASSACHUSETTS

Total ARRA Funds of \$59 Million for:

- National Grid: employee training
- NSTAR: dynamic pricing, load control, AMR, self-healing & efficiency expansion, grid monitoring & renewable integration
- Danvers: AMI and Home Energy Network pilot
- Marblehead: two-way meters, consumer behavior
- Beacon Power, ISO-NE Synchrophasor, Premium Power, Vineyard Power (\$44 million)
- DPU approved National Grid pilot Aug 2012.
- DPU NOI on Grid Modernization, Docket 12-76.

Connecticut, New Hampshire, Rhode Island

- **CT**

- CL&P pilot in 2010 did not show robust savings
- CES recommends gradual change to TOU prices

- **NH**

- Unitil pilot – TOU/CPP for 96/29 customers, 2011
- NHEC pilot – TOU for 1000 customers, 2012

- **RI**

- National Grid withdrew proposed pilot

Importance of Customer Education

- States may encounter some opposition
- Customer education can mitigate opposition
- Utility benefits most when all participate
- Customers benefit most from participating
- Opt-Out program design may be necessary

For More Information

- SmartGrid.gov – Program Descriptions & more
- NESCOE.com/Research___Reports.html

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