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New England’s Electric Power Grid at a Glance

- 6.5 million households and businesses; population 14 million
- More than 300 generators
- Over 8,000 miles of high-voltage transmission lines
- 13 interconnections to electricity systems in New York and Canada
- Approx. 32,000 megawatts of total supply and 2,750 megawatts of demand resources
- All-time peak demand of 28,130 megawatts, set on August 2, 2006
- More than 450 participants in the marketplace
- $5-11 billion annual energy market value
Energy Efficiency in the Forward Capacity Market

- Supply Resource used to support installed capacity requirement 3 years forward
- Same payment rate as all other supply resources
- Paid a Gross Up for avoided transmission & distribution
- Subject to penalties and termination
- Audited for each summer and winter season
- Required to submit M&V documentation quarterly/monthly
- Capacity payment only allowed for measures within useful measure life
Total Energy Efficiency Cleared Capacity*

- Cleared Capacity include 8% T&D Gross-Up.
- 2010-11 and 2011-12 also includes Reserve Margin, 14% and 16%, respectively.

Commitment Period

- Existing EE
- New EE
- Total EE

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New Energy Efficiency Cleared Capacity by Lead Participant Type*

- Cleared Capacity include 8% T&D Gross-Up,
- 2010-11 and 2011-12 also includes Reserve Margin, 14% and 16%, respectively.

Commitment Period

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Energy Efficiency in Planning Process

ISO’s Current Practice

• Installed Capacity Requirement (ICR)
  – EE resources in the Forward Capacity Market (FCM) are treated as resources that contribute toward meeting New England’s ICR and are reconstituted into the load forecast

• Load forecast
  – Reflects historical EE not in FCM, econometric data and future Federal appliance efficiency standards
  – Subtracts FCM cleared EE
  – Assumes FCM cleared EE remains constant through the 10 year planning horizon
Energy Efficiency in Planning Process

ISO-NE Annual Energy (GWh)

- Weather Normal + Demand Resources
- Weather Normal
- RSP11
- RSP11-Fed Appl Standards
- RSP11-Fed Appl Standards-DemandResources
Outline of ISO-NE Energy Efficiency Forecast Model

• To forecast incremental EE beyond last year of FCM cleared resources
• Methodology – forecasting the budgeted dollars for EE and adapting historically based MWh saved per dollar spent by state sponsored EE programs
• Budget forecast may be derived from multiple revenue sources
  • System Benefit Charge
  • Regional Greenhouse Gas Initiative
  • FCM
  • Policy based