

REGIONAL MARKET UPDATE



NARUC Energy Regulatory Partnership Program

*The Energy Regulatory Commission of the Republic of Macedonia
and*

The Vermont Public Service Board

by

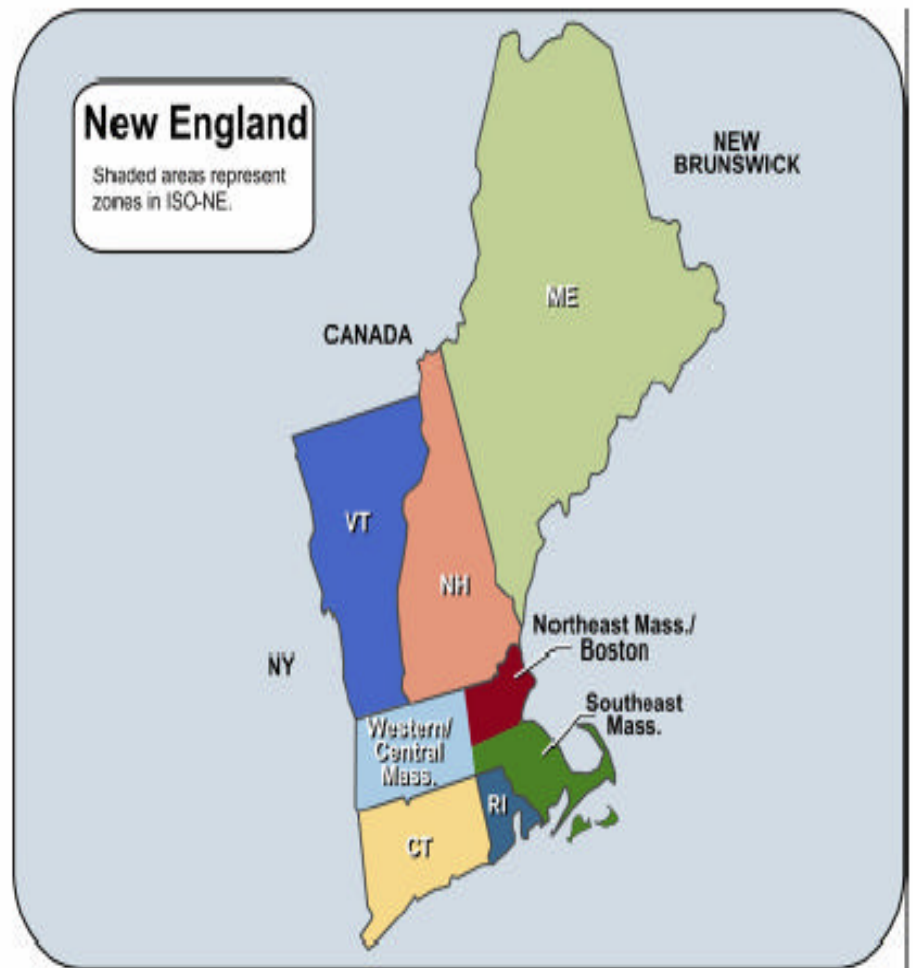
Commissioner David C. Coen

Vermont Public Service Board

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Regional Market Facts (review)

- ❖ 6.5 million electricity customers
- ❖ 8 Zones
- ❖ 230 market participants
 - 7 transmission owners
 - 74 capacity owners
- ❖ 2003 annual peak load of 24,762 MW
- ❖ 31,000 MW of total supply
 - 30% gas-fired
 - 26% nuclear
 - 30% fossil fuel (coal or oil)
 - Hydro, wood, refuse, wind, imports (4.2%)
- ❖ 8,000+ miles of high-voltage transmission lines
 - 12 interconnections with systems in New York and Canada
- ❖ \$4.5 billion total market value



The Regional Electricity Market – Current Status

- ❖ Wholesale market opened: May 1999
- ❖ Standard Market Design and Locational Marginal Pricing implemented in March 2003
- ❖ Since that time the energy market has run smoothly
- ❖ But other market components need improvement
 - #1 Ancillary services reforms
 - #2 Capacity market reforms
 - #3 Elimination of “seams” with neighboring markets
 - #4 Enhanced pricing signals (nodal pricing for load)
 - #5 Demand response programs

#1 Ancillary Services Reforms

- ❖ Forward reserve markets now operating
 - The ISO acquires reserves that it needs in order to meet reliability criteria
 - The reserves are acquired via auctions held several months in advance of the obligation period
 - Costs of the auctions will be allocated to load, based on real-time load obligations
- ❖ Plans are in place for the joint optimization of energy and reserves in real-time
- ❖ A locational component will be added to the forward reserve markets
- ❖ The Regulation Market will also be redesigned

#2 *Capacity Market Reforms*

- ❖ Currently there are price caps in the energy market
 - The revenue from the energy market is not generating sufficient revenue to sustain existing generation
- ❖ Capacity reform centers on constructing an artificially-determined demand curve to price capacity
 - Specific parameters are still under debate
- ❖ It will include a locational component
 - Goal is to send price signals to areas that need new capacity
 - This should lead to new generation being built in those areas

#3 Elimination of Seams

- ❖ New England shares borders with other regional energy markets (NY, Canada)
- ❖ Virtual Regional Dispatch
 - Will synchronize system operations between New England and New York
 - Energy exchanges between the two markets will be adjusted based on market price differences
 - Is designed to capture unrealized arbitrage opportunities
- ❖ Design is underway but not yet ready to go

#4 Enhancement of Price Signals

- ❖ Nodal Pricing for load
 - Currently generators within an energy zone receive the price at the node at which they inject energy
 - But load does not pay a nodal price; it pays the weighted average of the nodal prices within that energy zone (zonal price)
- ❖ Nodal pricing will now be available to single load customers >5 MW

#5 Demand Response Programs

- ❖ There are multiple demand response programs currently in place
 - Price responsive load programs
 - Reliability/emergency load response programs
 - Demand response can bid in real-time in the energy markets
 - But has not been able to bid into the day-ahead energy market
- ❖ A new Day-Ahead program for demand response is under development