Northeast Energy and Commerce Association

Benefits of Electric Power Competition

New Hampshire Energy Planning Advisory Board
Stakeholder Forum

June 23, 2006

Overview of Topics

- Who is NECA?
- Position on Electric Competition
- Factors Driving Electricity Costs in New England
- Benefits of Electric Competition
  - Studies
  - Transfer of Risk
  - Reliability Issues
  - Environmental Issues
- Recommendations

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Northeast Energy & Commerce Association

NECA is New England's largest non-profit competitive power trade association.

- Founded in 1985
- 300 members including gas and electric utilities, power marketers, industrial users, electric generators, project developers, fuel and equipment suppliers, & service providers to industry such as law firms, investment bankers, environmental engineering & economic consulting firms
- 30-member Board of Directors
- Dual mission
  - Facilitate an open forum among all electric power stakeholders to foster development & maturation of competitive power markets
  - Promote reliable, environmentally responsible & cost-effective regional power supply

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NECA's Position

Electric competition is delivering benefits and should continue.

- NECA was an advocate and supporter of moving toward competitive power markets in the mid to late 1990s
- NECA believes that competition has delivered real tangible benefits to the New England region
- Despite some bumps in the road, NECA believes New England should stay the competitive course

What About High Electric Costs?

A host of factors – unrelated to electric restructuring – have contributed to current high electricity prices.

	Natural Resources	*Lack of indigenous natural resources makes us particularly vulnerable to fuel prices.*
+	**Resource Mix**	*Retirement of units (e.g., nuclear) & new natural gas plants have made region highly dependent on natural gas*
+	**Location**	*Region's location at end of natural gas pipelines makes it more expensive to get natural gas to the region.*
+	**Hurricanes**	*Last summer's Gulf Coast hurricanes threatened the reliability of our natural gas supply this winter*
+	**Environmental Standards**	*High environmental expectations have led to progressive regulation (i.e., fuel switching restrictions, permitting, siting)*
=	**New England Electricity Costs**	

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Benefits of Competition

Recent studies highlight benefits of electric competition for consumers

CERA Study (6/05)	AIM Foundation Study (12/05)
• Majority of U.S. consumers have paid less for electricity since onset of power system deregulation, with cost savings of $34 Billion • Average U.S. real price of power declined over era of deregulation from 1997-2004	• 1997 Restructuring Act has led to significant economic benefits for all customer classes & greater environmental protection • Accrued Massachusetts customer savings of more than $2 Billion • 40% decrease in power plant emissions even with 20% production increases • Competitive, reliable wholesale markets
Real power prices are lower – compared to previous regulated period & what prices would have been if traditional regulation continued	*AIM's report concluded that the Massachusetts Restructuring Act is working, but remains a work in progress.*

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Global Energy Decisions (7/05)	New York PSC (3/06)
• Wholesale competition has led to lower wholesale costs & more renewable resource options • Consumers realized $15.1 Billion in value during 1999-2003 • Dramatic improvement of power plant operational efficiency • $85.4 Million in production costs savings for PJM wholesale power customers	• Total real (inflation-adjusted) electric price for a typical residential retail customers in NY dropped by average of 16% between 1996 & 2004 • New generation construction in load pocket areas • Increased generator availability • Preserved safety & reliability of power system

GED's analysis of Eastern Interconnection concluded that wholesale competition is working

Evaluation of New York's wholesale market found that wholesale competition led to significant efficiencies

Benefits of Competition

Recent studies highlight benefits of electric competition for consumers

ISO-NE Whitepaper (4/05)

- Wholesale market cost reductions of $700 Million annually
- Electric prices (after adjusting for fuel costs) declined by 5.7% since 1997
- $9 Billion in power plant investment from 2001-2004
  - 10,000 MW of efficient new capacity
- Environmental improvements with reduction of CO_2, NO_X, and SO_2 emissions

ISO-NE's evaluation of New England wholesale market found a host of regional benefits from electric competition

ISO/RTO Council (11/05)

- Regional operators such as ISO-NE
  - Maintain & improve grid reliability
  - Improve operational efficiencies
  - Operate markets that lower customer energy costs
  - Provide fair, independent & open markets, & transmission access
  - Provide effective regional planning

ISO/RTO Council's report highlights the value of independent regional operators such as ISO-NE

What Does Competition Do?

One of the prime benefits of competition is the transfer of risks from consumers to the market.

Cost-of-Service Model	Deregulated Model
• Ratepayers finance new investments • Rate recovery of bad investments • Environmental & other upgrades recovered through rate base	• Shareholder financing • Bad investments recovered from shareholders, not the ratepayers • Environmental & other plant upgrades recovered from the market

Since 1999 (beginning of competition):

- CWIP costs = $0
- New stranded costs = $0
- Substantial power plant efficiency gains

Regional Reliability is Improving

Existing generation has become more efficient, new generation has been built & new market signals to incent more generation.

- Existing Generation has become more reliable
  - Increased availability from 81% to 88%
- New Resources are available
  - Approximately 10,000 MW of new generation in New England since 2000
  - New demand side resource programs have been developed
- Stronger market signals for additional resources
  - Locational forward reserve market (incent resources in constrained areas)
  - Forward capacity auction
  - Increased demand response programs

Environmental Enhancements

New England's competitive wholesale market has supported real environmental benefits to the region.

RPS/REC Trading
• Regional renewable energy credit (REC) trading system • 5 of 6 New England states have a Renewable Portfolio Standard • REC proceeds create incentive for renewable generation development

Resource Decisions
• New gas-fired generation has displaced older, less environmentally friendly resources • Market enhancements will allow demand resources to participate in real-time energy & reserve markets

Plant Performance
• Increased power plant efficiency • Decrease in emissions   • NO_X by 32%, SO_2 by 48% and CO_2 by 6%

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NECA Recommendations

A host of regional economic, environmental & reliability benefits have been realized through competitive electric markets, thus region should "stay the course."

- Stay the course – do not give up on competitive electric markets
- Focus on developing new & diverse generation resources
- Address the region's NIMBY issues
- Complete regional transmission upgrades
- Include innovative demand side management, energy efficiency & conservation as part of approach

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Appendix Material

Citations for Competition Studies

- CERA: *Beyond the Crossroads: Future Direction of Power Industry Restructuring* (June 2005)
- The AIM Foundation: *Electric Industry Restructuring in Massachusetts: Progress in Achieving the Goals of the Restructuring Act* (December 2005)
- Global Energy Decisions: *The Benefits of Competition in America's Electric Grid: Cost Savings & Operating Efficiencies* (July 2005)
- New York State DPS: *Staff Report on the State of Competitive Energy Markets: Progress to Date & Future Opportunities* (March 2006)
- ISO/RTO Council: *The Value of Independent Regional Grid Operators* (November 2005)
- ISO-NE: *The Benefits of ISOs and RTOs* (April 2005)

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