

ISO New England Update

Carolyn O'Connor

Director, External Affairs, ISO New England

Milford, Massachusetts

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FERC Order 1000 Update

Key issues

- Public Policy requirements must be included in regional planning process
 - ISO's position: States together need to identify the public policy
 - NESCOE Draft Framework
 - ISO performs a public policy (PP) study to analyze PP requirements identified by the states
 - States to seek stakeholder input
 - After ISO publishes PP study, states request that ISO perform detailed transmission studies on the basis of parameters and assumptions determined by the states
 - CLF
 - All stakeholders (not just states) should be involved in deciding public policy mandates

FERC Order 1000 Update, *cont.*

Key issues

- New England has taken steps prior to the Order to implement interregional planning and coordination
 - ISO's filing will enhance coordination with neighboring regions and help identify interregional transmission that may be more cost effective or efficient solutions to the needs in each region
- Review of Transmission Operating Agreement (TOA) and whether changes are needed to address requirement to eliminate Right of First Refusal
- Next steps
 - Transmission Committee will review compliance issues
 - ISO developing tariff language for first compliance filing (fall 2012)
 - 2nd filing to address interregional planning and cost allocation (spring 2013)
 - ISO is tracking compliance issues in matrix posted on TC webpage:
http://www.iso-ne.com/committees/comm_wkgrps/trans_comm/tariff_comm/mtrls/2012/order_feb282012/index.html

Demand Response in Energy Market

FERC Approves ISO Rules for DR Participation and Compensation

- Value of Demand Response
 - Help to flatten peak load when demand is high
 - Help mitigate Locational Marginal Prices (LMPs) when price is high
 - Help balance supply and demand
 - Provide consumers opportunity to reduce consumption and make money
- Demand response to be paid full LMP
 - When cost effective to dispatch resources, as defined by net-benefits test
 - Transition period – Effective June 1, 2012
 - Full integration – Effective June 1, 2017

Forward Capacity Auction #6

Begins April 2, 2012 to procure resources for June 2015 – May 2016

| Installed Capacity Requirement: 33,456 MW | | |
|---|-------------------------|--------------------|
| Resource Type | Qualified Existing (MW) | Qualified New (MW) |
| Generation | 32,204 | 134 |
| Demand Resource | 3,738 | 521 |
| Imports | 315 | 1,820 |
| Total | 36,257 MW | 2,474 MW* |

- 37 new resources (approx. 1,100 MW) were rejected
 - Projects did not meet qualification criteria, such as measurement and verification plans for DR, and interconnection requirements and/or necessary transmission upgrades necessary for commercial operation for generating resources
- 2 capacity zones will be modeled – Maine and Rest-of-Pool
- Qualification underway for FCA #7

* Sum of individual amounts may not add up to the totals due to rounding.

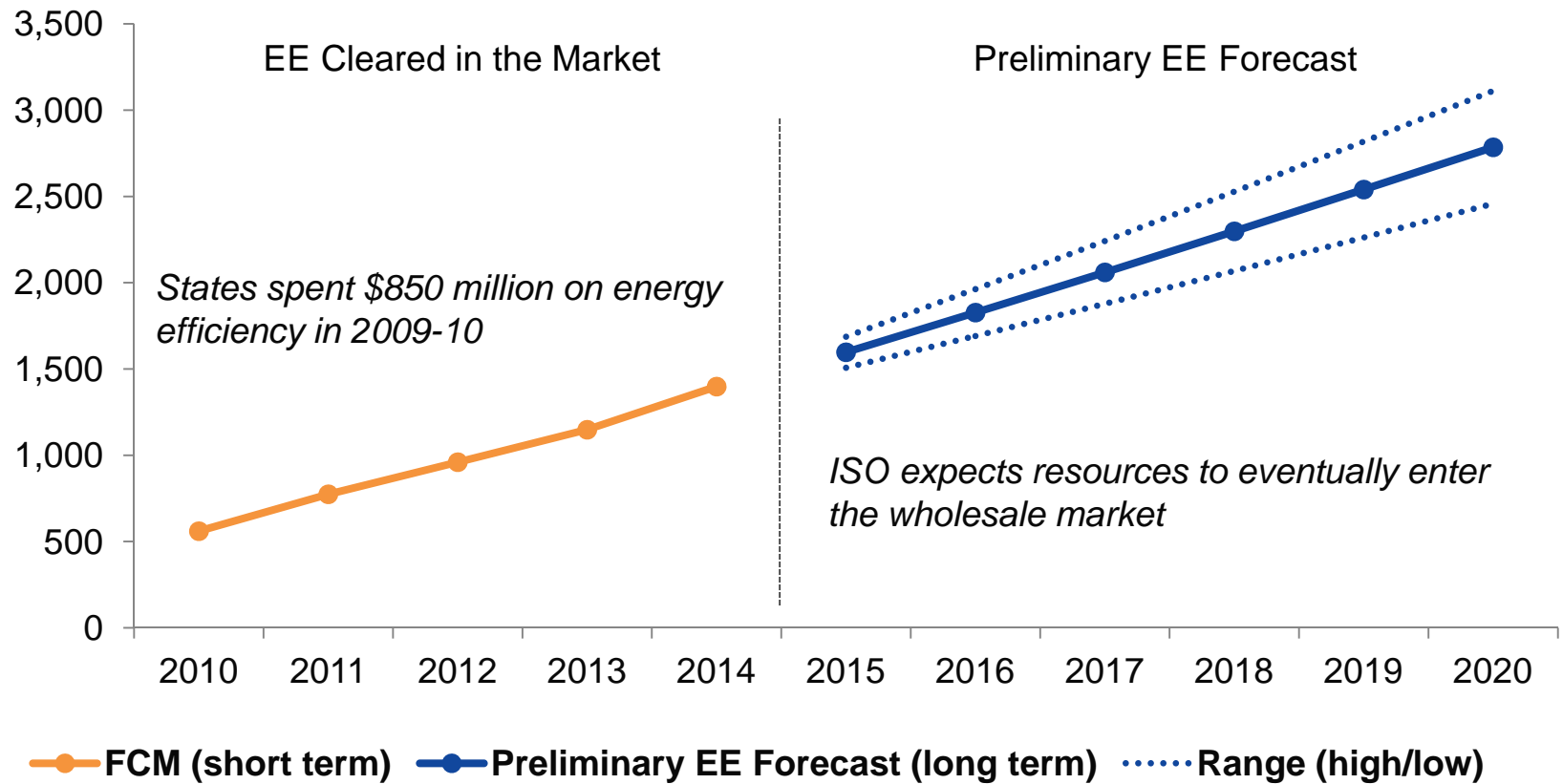
Forecasting Energy Efficiency



- ISO to forecast energy and peak savings resulting from state-sponsored energy efficiency (EE) programs
 - New England's EE investments are significant: 2009 - \$350 million; 2010 - \$500 million
- Discrete EE forecast to be used in long-term planning studies
- First Energy-Efficiency Forecast Working Group (EEFWG) meeting held 2/24/12
 - Discussed EE forecast assumptions, data inputs and preliminary model results
- This year, ISO conducted a preliminary energy efficiency forecast
 - Final EE forecast to be presented Mid-April
 - More information: http://www.iso-ne.com/committees/comm_wkgrps/othr/engry_effncy_frcst/index.html

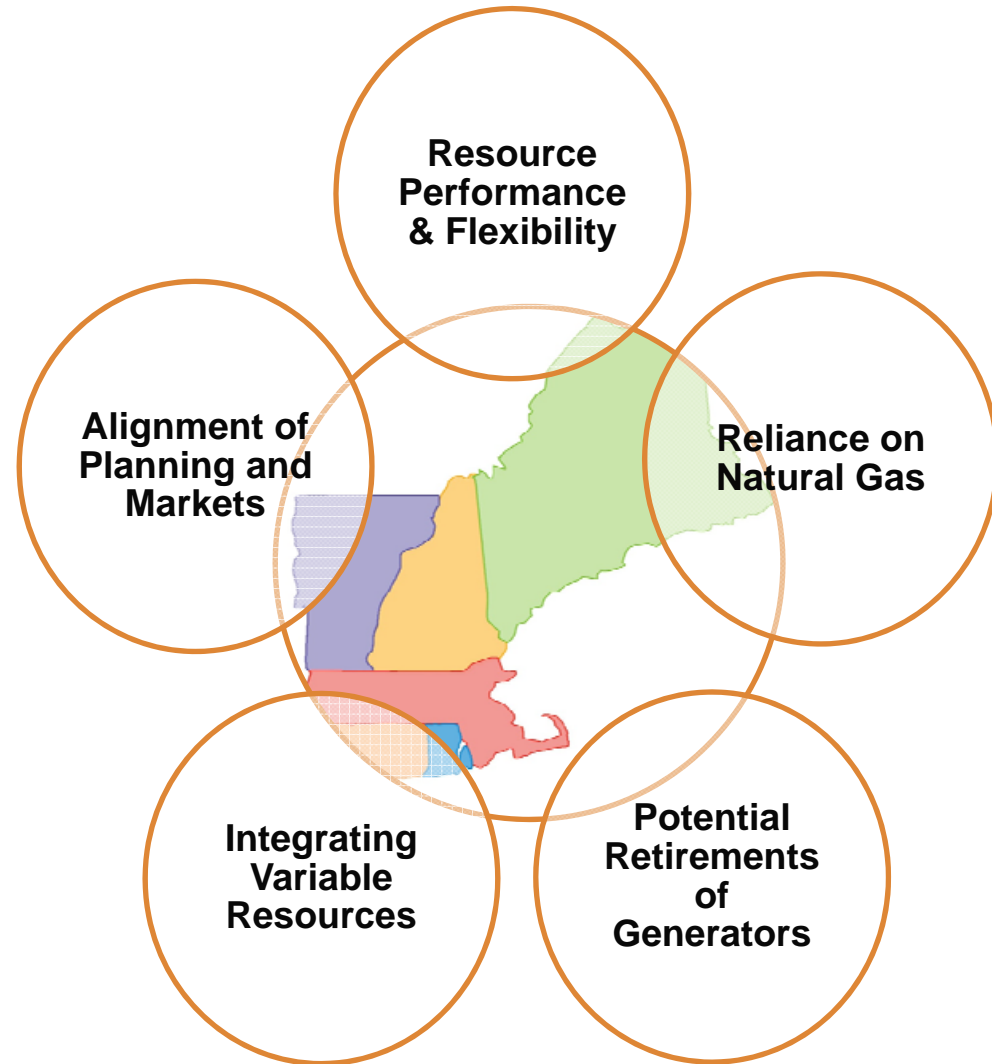
New *Energy-Efficiency* Forecast Will Inform Long-term Planning Studies

Peak Demand Savings (MW)



Strategic Planning Initiative

- Region-wide and industry-wide participation
- Identification of risks and challenges
- Consideration of potential solutions



Strategic Planning Risks

1. Resource Performance and Flexibility

- Variation between operator dispatch and actual performance

2. Increased Reliance on Natural Gas-Fired Capacity

- Generator contracting practices and uncertainty of gas supply in winter
- Potential disruptions due to gas pipeline contingencies

3. Retirement of Generators

- Economic, environmental and political factors can expedite retirements
- Older plants provide value as peaking resource and for transmission security

4. Integration of a Greater Level of Variable Resources

- Managing, dispatching and integrating more complex
- Intermittent resources being added may require gas back-up for balancing

5. Alignment of Markets and Planning

- Need for market signals and incentives for resource adequacy and transmission security

Strategic Planning Studies Underway

- **Natural Gas**

- Examination of the natural gas system to determine quantities of gas-fired available after all firm/priority deliveries
- Look at a future case when oil/coal resources may be retired and replaced with new, natural gas resources

- **Generation Retirements**

- Study of units expected to face significant capital investments due to regulatory requirements, and potential impact on transmission system operations

- **Strategic Transmission Analysis**

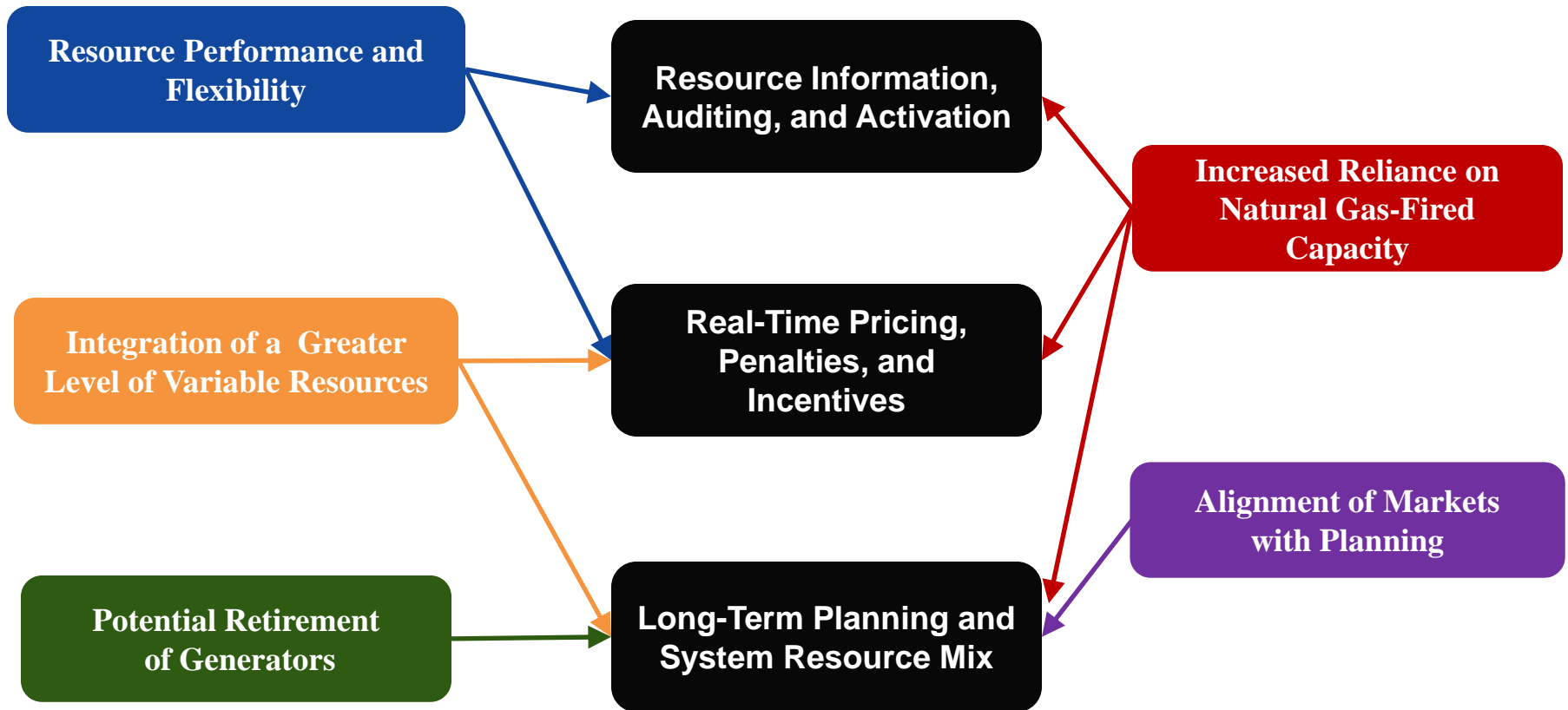
- Implication of generator retirements on transmission system requirements and integration of renewables

Proposed Solution Categories

Risks

Solution Categories

Risks



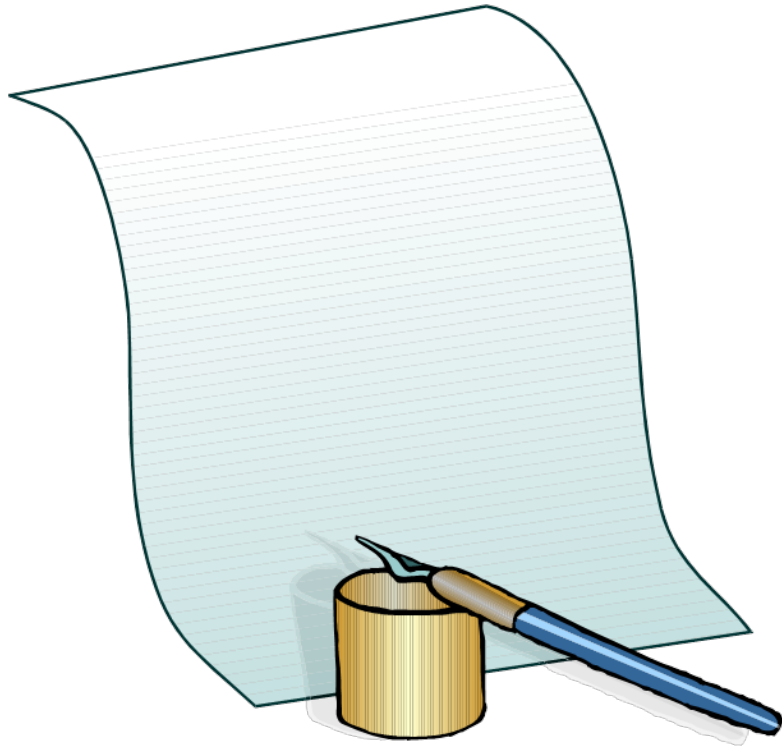
Goals for Gas/Electric Interaction

- Electricity Market Improvements
 - Strengthen performance requirements for capacity resources
 - Increased incentives for certainty of fuel availability
 - Increase ability for energy market to reflect fuel costs
 - Intra-day reoffers and hourly offers
 - Increase coordination between gas and electric markets
 - Evaluate timing of Day Ahead electric market
- Enhanced gas market products to meet electric system demand

Other Forums for Addressing Natural Gas and Electric Generation Coordination

- NERC study on interdependencies addresses coordination and communication challenges
 - http://www.nerc.com/files/Gas_Electric_Interdependencies_Phase_I.pdf
- FERC request for comment on what role it should have in overseeing better coordination between natural gas supplies and electricity generation
 - <http://ferc.gov/about/com-mem/moeller/moellergaselectricletter.pdf>
 - ISO-NE and ISO/RTO Council comments underway; due March 30
- North America Energy Standards Board (NAESB) Gas-Electric Harmonization Committee may make recommendations to Board after reviewing:
 - Transparency of Information
 - Coordination of Transactions
 - Operations/Commercial Practices

Evaluation of Forward Capacity Market



- Review performance incentives and obligations
- Consider mechanisms to achieve greater operational flexibility – and locational requirements
- Whitepaper release expected this spring
 - Recommendations for market design options

Economic Studies

- Each year, the ISO conducts economic planning studies
 - Requests are made through the PAC and are reviewed with stakeholders
- 2010
 - *New England 2030 Power System Study: Scenario Analysis of Renewable Resource Development*
 - Follow up to 2009 *New England Governor' Renewable Energy Blueprint* that studied the integration of large-scale renewable resources and the impact of retiring resources
- 2011
 - Expanding renewable resources within New England
 - Scope of Work presented in 2011; currently reviewing stakeholder comments
- 2012
 - Requests due April 2 and should be submitted to PACMatters@iso-ne.com. Stakeholder presentations are scheduled for April 18

Training Opportunity for CLG



- For the second year, ISO will be offering a one day training for Consumer Liaison Group members
- “Overview of ISO New England” (ISO-NE 101)
 - Presents information to help stakeholders understand the ISO’s responsibilities and basic functions of New England’s wholesale electricity markets



Save the Date: Tuesday, October 2, 2012

- Doubletree Hotel, Westborough, MA
- CLG meeting is October 3, 2012 at the same location
- 2011 ISO-NE 101 materials available at: http://www.iso-ne.com/support/training/courses/isone_101/index.html

For More Information...



2012 State & Regional Profiles

http://www.iso-ne.com/nwsiss/grid_mkts/key_facts/index.html

Executive Summary RSP 11

<http://www.iso-ne.com/trans/rsp/2011/index.html>



2012 Wholesale Markets Project Plan

http://www.iso-ne.com/pubs/whlsle_mkt_pln/index.html

ISO Newswire

www.isonewswire.com

