

U.S./Canada Cross-Border Energy Trade Summit 2017

**Integrating Markets and Public Policy:
Evolving Capacity Markets to Incentivize Renewables**

March 1-2, 2017
Boston, MA

New England States Committee on Electricity



Getting to IMAPP

Forward Movement on State Laws and Policies + Wholesale Markets

1. States must execute state laws

2. Competitive markets must accommodate those laws for markets to be sustainable over the long-term

3. Generators have litigated mechanisms -
even if litigating generators "succeed", it won't eliminate state energy, environmental laws

NEPOOL exploring potential solutions

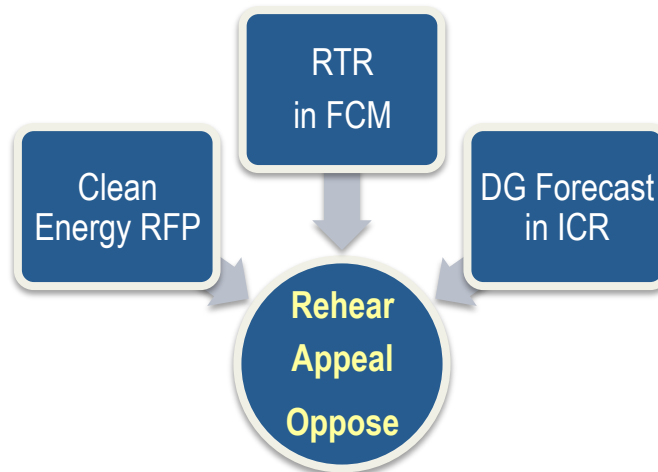
State Activities

NESCOE Scenario Analysis + Mechanisms Study 2.0

Other Analysis (ISO-NE at NEPOOL's request)

Policies & Markets: The Problem

- The **current wholesale market** meets resource adequacy at the lowest price - nothing more, nothing less - and does so in a way that **is resource neutral**.
- Other than through a narrow renewable resource exemption (*that NEPOOL supported*), **the current markets do not - by design - generally include resources that can satisfy some states' mandates** that currently require, for whatever reason, additional non-wholesale market revenues to operate.
- Despite the requirements of law, **some generators have opposed mechanisms that enable the execution of state energy and environmental policies.**



States Issued IMAPP Problem Statement

May 17, 2016

“Competitive wholesale electricity markets are designed to meet New England’s need to maintain reliability by selecting the lowest-cost resources. They do not include states’ legal obligation to execute state energy and environmental laws. However, as the markets move the region to increasing reliance on one fuel source for power generation, questions about reliability become more acute. **The challenge is finding a means to execute states’ policy-related requirements at the lowest reasonable cost without unduly diminishing the benefits of competitive organized markets or amplifying the cost to consumers of implementing those state policies in order to maintain markets.** In the same way that market mechanisms identify the lowest cost way to satisfy the region’s reliability needs, states seek to determine whether market mechanisms can accommodate public policies without unreasonably increasing the costs to consumers.”

Need to ensure that consumers do not “pay twice”

Assessing Potential IMAPP Solutions

Threshold Criteria

- ✓ **Cost-effectiveness** relative to other mechanisms
- ✓ **State self-determination** – uncompromised individual state determinations about setting those mandates for which it will incur costs
 - neither FERC nor ISO-NE may define, interpret, impose or attempt to create or confer authority about the requirements or implementation of state laws
- ✓ **Cost allocation** - no state may be compelled to fund other states' mandates
 - whether through the operation of the mechanism or by the result of a federal regulatory order

Further, Policy & Market Solutions Should...

- ✓ Enable reaction to different market conditions and state laws over time
- ✓ Focus on achieving longer-term goals (10-30 years) *cost-effectively*
 - with the ability to incorporate needed shorter-term mechanisms to achieve near-term mandates
- ✓ At a minimum, enable the achievement of the current RPS requirements
- ✓ In the near-term, consider some states' need to accomplish current objectives
 - for example, state laws directing procurements for certain resources
- ✓ Attempt to minimize short-term financial effects to current existing resources

NESCOE Feedback To NEPOOL

9/30/16

- ✓ Outcome of this exploratory effort could be a range of potential solutions
 - an ideal solution? no solution? something in between that is an improvement over status quo?
- ✓ States focus on
 - consumer costs
 - legal and regulatory risks, and
 - ability to maintain uncompromised individual state determinations about mandates for which each state will incur costs
- ✓ Do not anticipate arriving at collective state support for a proposal that includes pricing carbon into the locational marginal price, absent new information

- Outlined three objectives -

Objective 1 – Short Term

To maintain reliability at the least cost to consumers in the competitive wholesale market structure while accommodating consumer investments made at states' direction to satisfy one or more state policy mandates. **Create a mechanism or modify current market rules able to be implemented in the short-term to allow for state-contracted resources to be accommodated in New England's competitive markets**

- ✓ Some state statutes impose explicit, binding near-term deadlines for procurement of certain clean energy resources
- ✓ Highly unlikely any mechanisms could secure regulatory approval, become operational in time to meet the near-term statutory mandates
- ✓ States will meet their statutory obligations to issue competitive solicitations and possibly award power purchase agreements
- ✓ The renewable exemption is an example of a market rule mechanism that reasonably accommodates specific states' policy mandates - *any short-term mechanism needs to continue to include the current renewable exemption*

Objective 2 – Long Term

Over the long-term, to implement a wholesale ISO-NE administered market auction or procurement mechanism that one or more states could use, at states' specific direction, as an alternative to individual or joint state procurements and contracts. Such wholesale auction mechanism would be sufficiently flexible to enable individual states to define their purchasing requirements such as, for example, quantity, technology, and/or location based on then-current public policy requirements. State statutes would continue to provide the basis for procurement requirements, and this mechanism would not displace any state statutory requirements (e.g., soliciting long-term contracts for clean energy)

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- ✓ Revenues paid by consumers must be considered “in-market” for FCM mitigation purposes
 - ✓ States must maintain full control, as contemplated in state laws, over the definition and implementation of their own state statutory requirements (neither FERC nor ISO-NE may define, interpret, impose or attempt to create or confer authority about the requirements or implementation of state laws)
 - ✓ The mechanism must be structured to enable a transparent comparison between bids that require transmission and bids that do not require transmission, including specification of how any transmission that may be needed would be funded and allocated and be distinguishable from Order 1000 projects

Objective 3 – Maintain Existing

To implement a wholesale market mechanism that would enable one or more states to retain those existing resources that such state or states determine would satisfy their public policy mandates

- ✓ include a form of a “trigger” that would implement such incremental payments only when needed to retain a resource and to eliminate such incremental payments when not needed by a resource...such mechanism would need to be cost allocated to the state or states that determine the need to “trigger” the mechanism

Carbon Adder-Type Proposals

Based on the information available and discussion to date, NESCOE does not anticipate arriving at collective state support for a proposal that includes pricing carbon into the locational marginal price. Absent new information, these proposals present several risk factors which, taken together, counsel toward alternative designs

- ✓ Consumer cost concerns driven by the level of adder that would be needed to facilitate new entry and risks to consumers that such an adder would increase costs and not lead to the procurement of sufficient new resources needed to meet state statutory mandates
- ✓ Complex cost allocation that would be required to make absolutely certain that no state is required, directly by the mechanism or otherwise, to fund the mandates adopted by any other state(s)
- ✓ Potential duplication of existing carbon-related market mechanisms
- ✓ Threshold legal concerns, such as for example, questions about the FERC's or ISO-NE's authority to establish and impose a carbon adder in the locational marginal price of energy

Ongoing Design Discussions

- ✓ Initially, some strong stakeholder reaction to states' disinclination toward a carbon adder
 - Now, appears to be recognition that a carbon adder alone does not guarantee new entry of clean energy resources despite consumer price impact
- ✓ Most proposal proponents have moved toward some form of two-prong approach
 - A forward market design (FCEM) - to ensure new resources get built
 - A form of carbon adder to support energy prices - to maintain energy prices to support existing resources needed for reliability
 - Claim is that with a larger penetration of renewables energy, prices will fall to a level that no longer supports existing clean energy resources
- ✓ Discussion of ancillary services – small part of today's overall regional market - is beginning
 - how does one run the system with a high penetration of renewables? What value will be attached to that service?
- ✓ The proposals, especially FCEM proposals, are highly conceptual; many complex details remain to be discussed if there is state interest

ISO-NE Winter 2016 Paper

“NEPOOL 2016 IMAPP Proposals Observations, Issues, and Next Steps”

- ✓ On others’ proposals, ISO-NE observed:
 - **pricing carbon in the energy market** fares well on key market design criteria, is technologically neutral, and conceptually straight forward but has important practical issues that need to be addressed (setting the carbon price and governance, rebate allocation, and jurisdictional questions),
 - **forward clean energy markets** (FCEM) proposals still have many details to be worked out and involves setting up a completely new product and auction structure with attendant challenges, and
 - **two-tier pricing** in the FCM raises concerns, including price discrimination, potential for offer price inflation

- ✓ Looking at next steps, ISO-NE
 - ✓ concluded that implementing an FCEM or carbon pricing proposal would be a lengthy endeavor
 - ✓ Identified that its **near-term priority** is to develop a workable proposal for accommodating resources developed in furtherance of state laws while minimizing their potential to suppress FCM prices
 - ✓ will take time to examine options, target stakeholder discussions in May 2017

Over the next few months...

- ✓ States will assess longer-term proposals

- ✓ States individually and collectively will evaluate recent presentations, meet with proponents as needed, and evaluate whether, how and to what extent the proposals accomplish their objectives

- ✓ Objectives:
 - Formulate feedback on whether NEPOOL should continue to invest further time and effort developing one or more proposals
 - Allow comparison to ISO-NE's short-term objective work
 - Provide direction on those features of the proposal that states favor and states' areas of concern