NECA Power Markets Conference Integrating Markets and Public Policy (IMAPP) Initiative: What is it? Where is it headed?

November 1, 2016

New England States Committee on Electricity



NESCOE is New England's Regional State Committee, governed by a Board of Managers appointed by each of the New England Governors to represent the collective views of the six New England states on regional electricity matters.

- ✓ Focus: Resource Adequacy, System Planning & Expansion
- ✓ Resources: 6 full-time staff with diverse disciplines & experience. Consultants, primarily for transmission engineering & independent studies
- ✓ More information: including filings & comments at
 - www.nescoe.com
 - Twitter @NESCOEStates

Any views expressed today do not and should not be construed to represent those of NESCOE, any NESCOE manager, or any individual state.

So Why IMAPP?

- Good Question.....
- Some say without some change, state laws and wholesale markets are about to collide head on
- The issue is important to all market participants, not just states



The Build Up to IMAPP

Forward Movement on State Laws and Policies + Wholesale Markets **NEPOOL** Conversations on **Potential** 3. Generators **Solutions** litigate mechanisms. 2. Competitive markets must **Even if litigating NESCOE** accommodate 1. States must generators **Mechanisms** state laws in execute state "succeed", it Study 2.0 order for laws. won't eliminate markets to be state energy and sustainable environmental **State Activities** over the longlaws. term. Other Analysis

What is IMAPP?

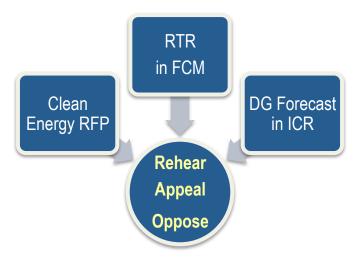
An initiative, commenced by NEPOOL, to explore whether there may be changes to the existing wholesale competitive market design that could ensure reliability of the electric system through competitive wholesale markets and accommodate or achieve the mandates of some New England states' laws at the lowest possible cost to consumers.

States Issued 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."

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 or blind to state laws.
- Other than through a narrow renewable resource exemption (<u>that was supported by NEPOOL</u>), 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.



Subject to Mitigation Resources

Resources that are Subject to Mitigation (STM resources) in the Forward Capacity Market result in competing design objectives

- Recognizing the contribution of the STM resources to resource adequacy
- Establishing a "competitive" FCM price for compensating existing resources and attracting new non-STM resources
- Clearing a reasonable total amount of capacity at a reasonable total cost

Ensuring that consumers do not "pay twice"

2015: Mechanisms 1.0

Mechanisms to Support Public Policy Resources in the New England States

December 18, 2015

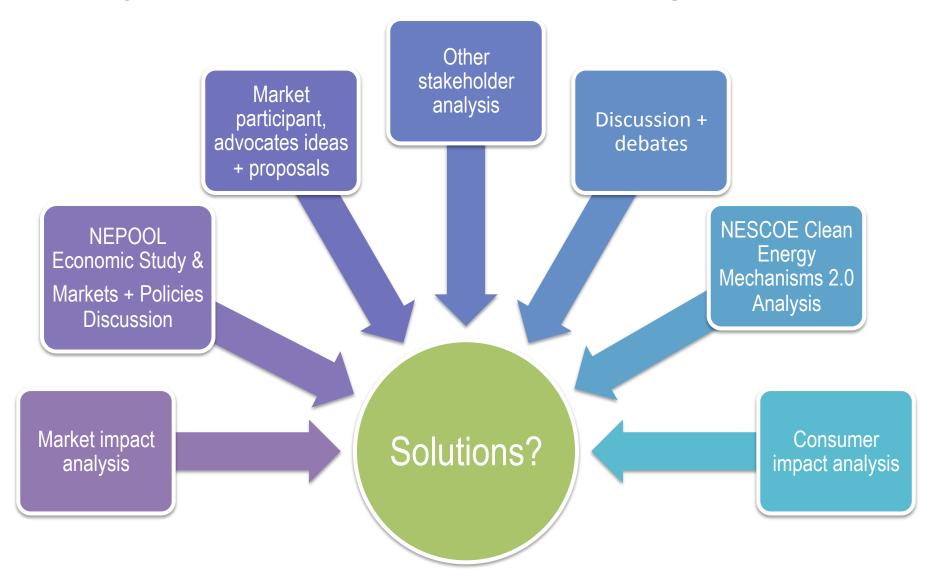


2016: Mechanisms 2.0

Continued analysis of a range of mechanisms that could support public policy resources, such as, for example:

- renewable portfolio & clean energy standards
- power purchase agreements
- strategic transmission investments
- centralized auction-based procurement

Analysis, Studies and Discussion In Looking for Solutions



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

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.
 - 1. 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.
 - 2. 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).
 - 3. Potential duplication of existing carbon-related market mechanisms.
 - 4. 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.

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 and binding near-term deadlines that require procurement of certain clean energy resources.
 - It is highly unlikely any mechanisms could secure regulatory approval and become operational in time to meet the near-term state 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)..
 - 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 – Long Term

> 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. Such mechanism would 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. As noted above such mechanism would need to be cost allocated to the state or states that determine the need to "trigger" the mechanism.

At the end of the day, a half a cup is better than an empty one.



IMAPP may not discover the "ideal" solution but possibly a partial solution that satisfies/accommodates some or most state mandates.

THANK YOU AND LOOK FORWARD TO THE PANEL DISCUSSION

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