Competitive Auctions with Subsidized Policy Resources, and Fuel Security Study


Gordon van Welie
PRESIDENT AND CEO
States Are Subsidizing Clean Energy Development to Meet Their Legislative Mandates

• Growing provision of out-of-market revenues through long-term contracts

• Legislative initiatives vary by state

<table>
<thead>
<tr>
<th>State(s)</th>
<th>Recent State Resource Procurement Initiatives</th>
<th>Expected Resources</th>
<th>Target MW (nameplate*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA, CT, RI</td>
<td>2016 Multi-State Clean Energy RFP</td>
<td>Solar, wind</td>
<td>460</td>
</tr>
<tr>
<td>MA</td>
<td>2016 Energy Diversity Act</td>
<td>Clean energy, incl. hydro import</td>
<td>Approx. 1200</td>
</tr>
<tr>
<td>MA</td>
<td>2016 Energy Diversity Act</td>
<td>Off-Shore Wind</td>
<td>Up to 1600</td>
</tr>
</tbody>
</table>

*Note: Nameplate MW may be higher than qualified FCM capacity MW
Concerns over Subsidized Resources

- **Status quo.** With a Minimum Offer Price Rule (MOPR), resources built to meet state policies may cost too much for the capacity market
  - Limited MOPR exemption for some renewables

- **Likely Results are Inefficient.** Region may end up overbuilt for resource adequacy

- **States are concerned** that consumers would bear unnecessarily high costs if state policy resources do not participate in the FCM:

  1. FCM Costs
  2. Additional retail charges to fund state subsidies
Competitively-Based Capacity Pricing Remains Essential

- Subsidized renewables can profitably sell in the capacity market for artificially low prices
- MOPR prevents capacity price suppression, helping to ensure competitive capacity prices
- Even if unintentional, subsidized entry has a similar effect to buyer-side market power
- Competitive capacity pricing is essential to attract investment in non-subsidized new entry cost-effectively when needed
ISO New England’s Proposed Path Forward

• The ISO is developing capacity market enhancements to:
  – Accommodate subsidized resources into the Forward Capacity Market (FCM) over time, and
  – Preserve competitive capacity price signals for unsubsidized resources

• **Key idea:** Coordinate, through a *new* auction, the *entry* of subsidized capacity resources and *exit* of unsubsidized ones

• States’ subsidies enable high-cost, existing resources to receive a *net payment to retire*, and be replaced by states’ preferred new (e.g., higher-cost clean energy) resources
Solution Approach: A Substitution Auction

• After the FCA: Existing or new resources awarded capacity supply obligations (CSOs) may *transfer their obligations* to new, *subsidized* resources that do not have CSOs

• This is arranged using a two-settlement process known as a *substitution auction*
  – Existing resources “buy out” and must then *permanently retire* (they have no CSOs)
  – New subsidized entrants may also *substitute for* unsubsidized new resources (which would then not enter)

• Uses the standard, two-settlement market design familiar in other wholesale markets (e.g., ISO New England’s Day-Ahead and Real-Time energy markets)
A Substitution Auction Has Many Notable Features

• The substitution auction generally does not affect payments to existing (non-retiring) resources awarded CSOs, or to load
  — It preserves competitive pricing (with MOPR) in the primary auction

• The substitution auction is technology neutral

• It is likely to help New England states achieve their GHG policy goals (as older, high-emitting units are likely to retire sooner)

• FCA’s competitive price signals continue to guide entry and exit when no subsidized supply is available
Why Is a Near-term Solution So Important?

• New England relies on wholesale electricity markets to attract private investment, but **investor confidence** in the market structure may be weakened if we don’t take some action
  – **Litigation uncertainty** will likely result from the application of the current rules, and
  – **Price suppression** will result if subsidized resources enter the market without application of the MOPR; this could result in rates that are not ‘just and reasonable’

• The CASPR proposal will:
  – Maintain **price formation** in the capacity market
  – Allow **state-sponsored resources** to be counted toward resource adequacy over time, and
  – Allow us to create **certainty for the market** and attract investment when resources are needed (i.e., as further resources retire)

• **State RFPs** are very likely to attract resources that seek to participate in the ISO’s February 2019 auction for capacity needed in 2022 (FCA #13)
  – **FERC approval will be needed in early 2018 to accommodate these resources**
ISO New England Is Conducting a Study of Fuel Security Challenges

• ISO New England is conducting a study of fuel security challenges to the continued reliability of New England’s power system.

• In this context, fuel security refers to the ability of power plants to have or obtain the fuel required to generate electricity, especially during the winter peak season.

• The study is examining more than a dozen cases of generating resource and fuel-mix combinations and will quantify each case’s fuel security risk.
  – Fuel security risk is the number and duration of energy shortfalls that could occur during the entire winter period in 2025 and that would require implementation of emergency procedures to maintain reliability.
ISO New England Is Conducting a Study of Fuel Security Challenges, continued

• The study is **not** focused on the effects of expanded access to natural gas and will not identify needs for new or expanded pipeline capacity or natural gas infrastructure

• The study is **still underway**, with completion expected by the end of October 2017

• The results will be presented to regional stakeholders for discussion and input

• The ISO will work with stakeholders to determine whether further **operational** or **market design measures** will be needed to address the fuel security risk