ISO New England Update

Consumer Liaison Group Meeting

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TODAY’S UPDATES

• Resources for the Consumer Liaison Group
• Results of Forward Capacity Auction #15 (FCA #15)
• Resources Update
• New England State’s Vision
• Transition to the Future Grid
• FERC Order 2222
CONSUMER LIAISON GROUP RESOURCES
2020 Report Is Posted and 2021 Meeting Dates Are Set

• The **2020 Report of the Consumer Liaison Group** includes:
  
  – **Statement** by the CLG Coordinating Committee on future goals and initiatives
  
  – **Summary** of CLG activities in 2020
  
  – **Update** on ISO New England activities and initiatives
  
  – **Information** on wholesale electricity costs and retail electricity rates in New England

*Future CLG meetings are set for June 17, September 9 and December 1, 2021*

Source: [https://www.iso-ne.com/committees/industry-collaborations/consumer-liaison/](https://www.iso-ne.com/committees/industry-collaborations/consumer-liaison/)
ISO New England Is Rolling Out Several Publications

2021 Regional Electricity Outlook
Provides a summary of ISO New England’s work to lay the foundation for clean energy, studies for the future grid, and other ISO New England efforts to improve services and performance

New England Power Grid Profile
Provides key grid and market stats on how New England’s wholesale electricity markets are securing reliable electricity at competitive prices and helping usher in a cleaner, greener grid

New England State Profiles
Provides state-specific facts and figures relating to supply and demand resources tied into the New England electric grid and state policies transforming the resource mix in the region
Additional Resources

• Meeting summaries are available on the [CLG page](#) on the ISO’s website
  – Names and affiliations of CLG Coordinating Committee members are also available on the CLG page

• Presentations, Speeches, Papers, and Other Materials are available on the External Affairs page
FORWARD CAPACITY AUCTION #15 (FCA #15)

June 1, 2024 – May 31, 2025 Capacity Commitment Period
ISO New England Administered the Latest Capacity Auction in February 2021

• Forward Capacity Auction #15 (FCA #15) was held on February 8 to procure the capacity resources needed to meet demand for electricity, plus reserve requirements, during the June 1, 2024 to May 31, 2025 capacity commitment period.

• The auction concluded with **sufficient resources** to meet the installed capacity target of 33,270 MW.

• **Clearing prices** in the auction ranged from $2.48 to $3.98 per kilowatt-month (kW-mo.), up from to $2/kW-mo. region-wide last year.
The Auction Attracted and Retained a Variety of Resources to Ensure Resource Adequacy in 2024-2025

- The auction concluded with commitments from **34,621 MW** of capacity to be available during the 2024-2025 capacity commitment period
  - **29,243 MW** of generation, including:
    - **950 MW** of new generating resources
    - **600 MW** of battery resources
  - **3,891 MW** of energy-efficiency and demand-reduction measures, including **170 MW** of new demand resources
  - **1,487 MW** of total imports from New York, Québec and New Brunswick
- FCA #15 was the first auction held without the Mystic Generating Station Units 8 & 9, which will retire June 1, 2024
Auction Prices Varied Across the Region

- **Clearing prices** in the auction ranged from $2.48 to $3.98 per kilowatt-month (kW-mo.), up from to $2/kW-mo. region-wide last year

- **Capacity prices by zone:**
  - Northern New England: **$2.48**
    - Export-Constrained
  - Maine “Nested”: **$2.48**
    - Export-Constrained
  - Southeast New England Zone: **$3.98**
    - Import-Constrained
  - Rest-of-Pool Zone: **$2.61**
    - Unconstrained

![Diagram showing the regions with corresponding prices]
Capacity Market Costs Reflect Changing Supply Outlook

As a “forward” market, consumers can anticipate future changes in capacity costs.

Total Capacity Market Costs

Capacity prices peaked when significant generator retirements signaled a need for investment in new resources.

Capacity prices increased after two large units in the Boston area retired.

Capacity prices reached their lowest level in the auction’s history.

Capacity prices in the most recent auction will show up three years into the future in the commitment period for June 1, 2024 – May 31, 2025.

Range: ~$1.1B to $1.8B

Capacity prices for the current commitment period (June 1, 2020 – May 31, 2021) were set three years ago (in the 2017 auction).

* Preliminary estimate   ** Prices may be higher for some capacity zones.
RESOURCE DEVELOPMENTS

Generator Interconnection Study Queue and ISO Forecasts
Wind Power Comprises Two Thirds of New Resource Proposals in the ISO Interconnection Queue

All Proposed Resources

- **Wind**: 15,133, 62%
- **Solar**: 4,404, 18%
- **Battery Storage**: 3,771, 15%
- **Natural Gas**: 913, 4%
- **Nuclear Uprate**: 37, <1%
- **Fuel Cell**: 55, <1%
- **Biomass**: 8, <1%
- **Hydro**: 99, <1%

**TOTAL**: 24,420 MW

Wind Proposals

- **CT 4 MW**
- **Offshore Wind 5,605 MW**
- **MA Offshore Wind 8,598 MW**
- **RI Offshore Wind 704 MW**

Source: ISO Generator Interconnection Queue (February 2021)
FERC and Non-FERC Jurisdictional Proposals; Nameplate Capacity Ratings
Note: Some natural gas proposals include dual-fuel units (with oil backup). Some natural gas, wind, and solar proposals include battery storage.
Energy-Efficiency and Renewable Resources Are Trending Up in New England

**Energy Efficiency (MW)**

- EE thru 2020: 2,600
- EE in 2029: 5,600

*Final 2020 CELT Report, EE through 2019 includes EE resources participating in the Forward Capacity Market (FCM). EE in 2029 includes an ISO-NE forecast of incremental EE beyond the FCM.*

**Solar (MW)**

- PV thru 2020: 3,994
- PV in 2030: 10,031

*Draft 2021 ISO-NE PV Forecast, AC nameplate capacity from PV resources participating in the region’s wholesale electricity markets, as well as those connected “behind the meter.”*

**Wind (MW)**

- Existing: 1,400
- Proposed: 15,000

*Nameplate capacity of existing wind resources and proposals in the ISO-NE Generator Interconnection Queue (February 2021)*

Energy Efficiency and Renewable Resources Are Trending Up in New England
Developers Are Proposing Large-Scale Transmission Projects to Deliver Clean Energy to Load Centers

• Developers are proposing 10 elective transmission upgrades (ETUs) to help deliver about 3,400 MW of clean energy to New England load centers.

• Wind projects make up roughly 62% of new resource proposals in the ISO Queue.
  – Most are offshore wind proposals in southern New England, but some are onshore wind proposals in northern New England and would require transmission to deliver the energy to load centers.

Source: ISO Interconnection Queue (February 2021)
NEW ENGLAND STATES’ VISION STATEMENT
The ISO Is Fully Engaged with the New England States in Discussions about their Vision

• The ISO was invited to help set the stage for discussions in each of the three major focus areas of the states’ Vision statement in the state-led technical sessions in early 2021

• Overview of Wholesale Electricity Markets  
  – *Presentation by Eric Johnson at the January 13 technical session*

• Transmission Planning in New England  
  – *Presentation by Bob Ethier at the February 2 technical session*

• ISO-NE’s Governance and Engagement with the States  
  – *Presentation by Anne George at the February 25 technical session*
ISO New England’s Vision

The ISO’s Vision for the future represents our long-term intent and guides the formulation of our Strategic Goals

Vision Statement:

To harness the power of competition and advanced technologies to reliably plan and operate the grid as the region transitions to clean energy
TRANSITION TO THE FUTURE GRID
Transition to the Future Grid Efforts Continue

- Stakeholder meetings launched in 2020 started on two tracks:
  - **Future Grid Reliability Study**: Stakeholder-led assessment of the future state of New England’s power system
  - **Pathways to the Future Grid**: Regional identification, exploration, and evaluation of potential market frameworks that may help support the evolution of its power grid

- In January, NEPOOL received a report exploring various pathways the region could take, focusing on two questions
  - Whether a particular pathway would support or help to advance the clean energy policies of States
  - Whether pathways garner efficiency of regional markets
  - The report is available on the ISO’s website.

- The ISO is also undertaking additional studies
# The ISO Is Supporting Several Future Grid Studies in 2021

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<tr>
<th>Study Name</th>
<th>Description</th>
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<tbody>
<tr>
<td>Future Grid Reliability Study (FGRS) Phase I</td>
<td>Stakeholder-defined scenarios examine how the power system could operate in 2040 under current energy and environmental policies</td>
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<tr>
<td>2050 Transmission Study</td>
<td>Transmission study (in support of the New England States’ vision statement) to help states determine how to expand the system to incorporate wind, hydro, and distributed energy resources</td>
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<tr>
<td>Pathways Evaluations</td>
<td>Examines potential market frameworks that may help evolve the power grid to a future that reflects states’ policies</td>
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<tr>
<td>Future Grid Reliability Study (FGRS) Phase II</td>
<td>Examines if revenues from existing markets are sufficient to attract and retain resources necessary to operate the system reliably under stakeholder-defined scenarios</td>
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How Does This Relate to Resource Adequacy and the Minimum Offer Price Rule?

• A key question for the Pathways studies is how the Minimum Offer Price Rule (MOPR) will be treated in the modeling assumptions
  – The FERC has recently made clear that addressing the MOPR is one of its top priorities
  – If these studies don’t resolve the issues around MOPR, additional analysis may be necessary to develop a solution by Q1 2022

• Discussion with New England stakeholders is ongoing
FERC ORDER NO. 2222
The ISO Continues FERC Order 2222 Compliance Efforts

- Conversations continue with utilities, regulators, and other stakeholders
  - The ISO released its *High-Level Market Design Approach to Compliance* in January
  - The ISO continues to receive and reflect on feedback from stakeholders, which may result in design modifications
  - Discussions regarding Order 2222 are expected to continue through the spring
- Issued in September, 2020, the order requires ISOs/RTOs to change the way Distributed Energy Resource Aggregations (DERAs) participate in wholesale markets
- The compliance filing is due in July
I look forward to seeing you again *in-person* (someday)!

Until that’s possible, we’ll see you virtually on **June 17, September 9 and December 1**
FOR MORE INFORMATION...

Subscribe to the *ISO Newswire*

*ISO Newswire* is your source for regular news about ISO New England and the wholesale electricity industry within the six-state region.

Log on to *ISO Express*

*ISO Express* provides real-time data on New England’s wholesale electricity markets and power system operations.

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Download the ISO to Go App

*ISO to Go* is a free mobile application that puts real-time wholesale electricity pricing and power grid information in the palm of your hand.
Questions