

# **ISO New England Update**

#### **Consumer Liaison Group Meeting**

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#### **TODAY'S UPDATES**

- Resources for the Consumer Liaison Group
- 2021-2022 Winter Outlook
- Forward Capacity Auction #16
- Projected 2021 Wholesale Electricity Costs
- 2022 Consumer Liaison Group Meeting Dates



# **CONSUMER LIAISON GROUP RESOURCES**

#### Upcoming Meetings and Activities



# **Recent and Upcoming ISO New England Activities**

#### Recent events

- The ISO's <u>budget</u> was filed with federal regulators on October 15
- <u>2021 Regional System Plan</u> was finalized in November
  - Public Meeting held on October 6
- Recent <u>presentation</u> highlights ISO's activities in response to the New England States' Vision Statement and Advancing the Vision Report

#### Of interest

- The ISO's CEO has been writing about the future grid in <u>CommonWealth magazine</u>
  - Part of a four-part series on the evolution of the region's power system



- The ISO's External Affairs Page
  - Access presentations and speeches delivered by technical experts, senior management, and External Affairs team at industry events in New England and across the nation

# WINTER 2021/2022 OUTLOOK

#### ISO's Winter Outlook Press Release Will Be Posted Soon <u>https://www.iso-ne.com/about/news-media/press-releases/</u>



# Key Takeaways Ahead of Winter 2021-2022



- Energy security risks in New England are well-documented, with heightened concerns this winter due to sharp increases in global energy demand and supply chain contraction
- Large, fuel-secure resources continue to retire while new resources are delayed, thus exacerbating energy security risks
- Weather, which is becoming more unpredictable and extreme, will be a key factor affecting regional energy availability and related reliability concerns this winter
- LNG imports are critical to meeting New England's energy needs during cold weather; the region is dependent on global cargoes arriving at import terminals in Everett, Mass and New Brunswick

# Winter Peak Demand

And Corresponding Temperatures\*



Megawatts (MW)

# High-Level Winter Assessment: Winter 2021/22

If this winter is similar to...

#### Winter 2020/21

#### Winter 2017/18

Then...

#### Then...

#### Winter 2013/14 Then...

The ISO anticipates that the system can be operated reliably *without* the need for emergency procedures The ISO anticipates that the system can be operated reliably, but *may require* the implementation of **capacity deficiency procedures** 

Assuming persistent below-normal temperatures and several cold stretches, the ISO anticipates that it *may require* implementation of all available emergency procedures

#### All three scenarios for this winter:

Assume no significant generation or transmission outages and limited fuel replenishment

If the region has *adequate fuel replenishment* this winter the ISO anticipates that the system can be operated reliably without the need for emergency procedures

# **Preparations for Winter Peak Demand**

- New England's winter peak demand period runs from December through February
- In preparation for the winter, ISO New England:
  - Forecasts New England's demand for electricity and reserves
  - Evaluates region's winter supply outlook
  - Exercises communication plan
  - Conducts Winter Readiness Seminar and Surveys
  - Conducts dual-fuel audits
  - Conducts Load Shed and Voltage Reduction Test
  - Conducts transmission system assessments



# Preparations for Winter Peak Demand, continued

- Ongoing coordination between electric and gas systems
- Short-term actions:
  - Survey fuel inventories of oil- and coal-fired generators monthly
    - Surveys conducted weekly and daily if necessary
  - Confirm scheduled volumes with natural gas-fired generators daily
  - Forecast and report on expected energy availability over a 21-day look-ahead period
    - Reports published weekly during winter months (daily if Energy Alert or Energy Emergency is declared)

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### ISO New England Has Operating Procedures to Prepare for, and Respond to, Issues on the Grid









Action During a Capacity Deficiency (OP-4)

Action in an Emergency (OP-7)

Cold Weather Condition Operations (SOP-RTMKTS.0050.0007)

Energy Inventory Accounting and Actions During an Energy Emergency (OP-21)



# **FORWARD CAPACITY AUCTION #16**

June 1, 2025 – May 31, 2026 Capacity Commitment Period



# Forward Capacity Auction #16 Is Scheduled to Take Place in February 2022

- FCA #16 will procure the resources needed to meet the demand for electricity, plus reserve requirements, during the June 1, 2025 to May 31, 2026 capacity commitment period
- In November, the ISO submitted a pre-FCA informational filing with the Federal Energy Regulatory Commission (FERC) for review. The filing includes:
  - Capacity zones to be modeled
  - Resources qualified to participate
- All other FCA-related calculations and determinations were included in a separate filing for FERC review



FCA #16 Informational Filing: <u>https://www.iso-ne.com/static-assets/documents/2021/11/public\_fca\_16\_info\_filing.pdf</u> FCA #16 ICR filing: <u>https://www.iso-ne.com/static-assets/documents/2021/11/icr\_for\_fca\_16.pdf</u>

# Four Capacity Zones Will Be Modeled in FCA #16

Maine will be modeled as a "nested" capacity zone within Northern New England

- ISO New England has a process for determining the appropriate ulletnumber and boundaries of capacity zones over time as conditions change in the region
  - The ISO studied constraints on the transmission system to determine which capacity zones would be modeled in FCA #16

Zone

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- The ISO will model four capacity zones in FCA #16
  - Northern New England Capacity Zone
    - **Export-Constrained**
  - Maine "Nested" Capacity Zone
    - **Export-Constrained**
  - Southeast New England Capacity Zone
    - Import-Constrained
  - **Rest-of-Pool Capacity Zone**



## FCA #16: Other Important Auction Inputs

- The ISO qualified a total of 33,356 MW of existing capacity resources to participate in the auction, including:
  - **30,080 MW** from existing generating resources (intermittent and non-intermittent)
  - **0 MW** from existing import resources, and
  - **3,275 MW** from existing demand resources
- The ISO qualified 302 new capacity resources totaling 5,246 MW, to participate in the auction



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- The net Installed Capacity Requirement is **31,645 MW**
- The ISO qualified 15 demand bids, totaling **994 MW**, and 193 supply offers, totaling **779 MW**, to participate in the substitution auction under the Competitive Auctions with Sponsored Policy Resources (CASPR) framework

# **PROJECTED WHOLESALE MARKET COSTS**

Projected wholesale market costs for 2021



# Energy Market Values Vary with Fuel Prices, While Capacity Market Values Vary with Changes in Supply



#### Source: 2020 Report of the Consumer Liaison Group; 2021 data are subject to adjustment

Note: Forward Capacity Market values shown are based on auctions held roughly three years prior to each calendar year. The 2021 projection is the sum of preliminary 2021 January-October actuals and November-December projected values. The November-December projected values were derived as follows: on average, over the last two years (2019-2020), the value of the. Energy Market accrued over the first ten months of the year was approximately 80.90% of the annual total. This percentage was applied to the total from the first ten months of 2021 to produce the November-December Projections. An analysis of the historical relationship between the Energy Market totals and the Ancillary Services Market totals suggests that the total for the Ancillary Services Market is approximately 2.23% of the Energy Market total. The November-December projections for the Ancillary Services Market represent the value needed to bring the 2021 ten month total to the expected annual total. The Forward Capacity Market values reflect the October 2021 value held constant for the remainder of the year. Please note that this projection is for illustrative purposes only. Data are preliminary and subject to reconciliation.

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## Looking Forward To Seeing You All Next Year

• Consumer Liaison Group Meeting Dates for **2022** 

- March 10
- June 9
- September 15
- November 30
- Locations: TBD



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#### FOR MORE INFORMATION...



#### Subscribe to the ISO Newswire

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#### Log on to ISO Express

<u>ISO Express</u> provides real-time data on New England's wholesale electricity markets and power system operations



#### Follow the ISO on Twitter

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#### Download the ISO to Go App

<u>ISO to Go</u> is a free mobile application that puts real-time wholesale electricity pricing and power grid information in the palm of your hand







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# Questions

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### **New England Wholesale Electricity Costs**

Annual wholesale electricity costs have ranged from \$7.7 billion to \$15 billion



#### New England Wholesale Electricity Costs<sup>(a)</sup>

	2016		2017		2018		2019		2020	
	\$ Mil.	¢/kWh	\$ Mil.	¢/kWh	\$ Mil.	¢/kWh	\$ Mil.	¢/kWh	\$ Mil.	¢/kWh
Wholesale Market Costs										
Energy (LMPs) <sup>(b)</sup>	\$4,130	3.2	\$4,498	3.5	\$6,041	4.7	\$4,105	3.3	\$2,996	2.4
Ancillaries <sup>(c)</sup>	\$146	0.1	\$132	0.1	\$147	0.1	\$83	0.1	\$62	0.1
Capacity <sup>(d)</sup>	\$1,160	0.9	\$2,245	1.8	\$3,606	2.8	\$3,401	2.7	\$2,662	2.2
Subtotal	\$5,437	4.2	\$6,875	5.4	<i>\$9,794</i>	7.6	\$7,589	6.0	\$5,720	4.7
Transmission charges <sup>(e)</sup>	\$2,081	1.6	\$2,199	1.7	\$2,250	1.7	\$2,146	1.7	\$2,331	1.9
RTO costs <sup>(f)</sup>	\$180	0.1	\$193	0.2	\$196	0.2	\$184	0.1	\$191	0.2
Total	\$7,698	5.9	\$9,267	7.3	\$12,240	9.4	\$9,918	7.9	\$8,242	6.7

(a) Average annual costs are based on the 12 months beginning January 1 and ending December 31. Costs in millions = the dollar value of the costs to New England wholesale market load servers for ISO-administered services. Cents/kWh = the value derived by dividing the dollar value (indicated above) by the real-time load obligation. These values are presented for illustrative purposes only and do not reflect actual charge methodologies. **\*The wholesale values for 2020 are preliminary and subject to resettlement.** 

(b) Energy values are derived from wholesale market pricing and represent the results of the Day-Ahead Energy Market plus deviations from the Day-Ahead Energy Market reflected in the Real-Time Energy Market.

(c) Ancillaries include first- and second-contingency Net Commitment-Period Compensation (NCPC), forward reserves, real-time reserves, regulation service, and a reduction for the Marginal Loss Revenue Fund.

(d) Capacity charges are those associated with the Forward Capacity Market (FCM).

(e) Transmission charges reflect the collection of transmission owners' revenue requirements and tariff-based reliability services, including black-start capability, voltage support, and FCM reliability.

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(f) RTO costs are the costs to run and operate ISO New England and are based on actual collections, as determined under Section IV of the ISO New England Inc. Transmission, Markets, and Services Tariff.