



# ISO New England Update

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## *Consumer Liaison Group Meeting*

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## TODAY'S UPDATES

- ISO New England's 2017/2018 Winter Outlook
- ISO New England's *Operational Fuel-Security Analysis*
- ISO New England's *Competitive Auctions with Sponsored Policy Resources* (CASPR) proposal
- ISO New England's preparations for Forward Capacity Auction #12
- Wholesale market value projections for 2017



# 2017/2018 WINTER OUTLOOK



# ISO Expects to Have Adequate Capacity to Meet the Forecasted Demand for Electricity this Winter

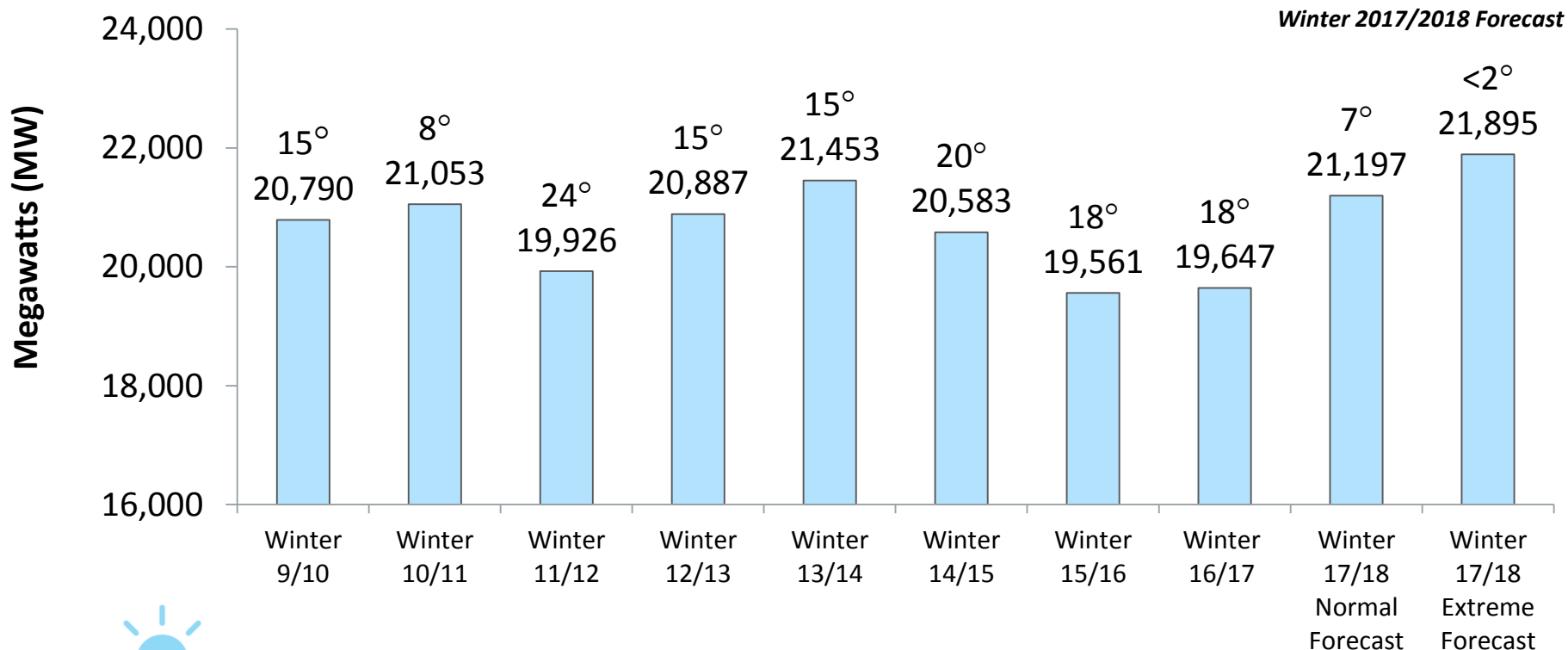
- Winter outlook press release was announced via:
  - Press release: <http://www.iso-ne.com/about/news-media/press-releases>
  - ISO Newswire: <http://www.iso-ne.com/about/news-media/newswire>
  - Twitter: [www.twitter.com/isoneengland](http://www.twitter.com/isoneengland)



# Winter Peak Demand Is Driven by Weather

*Peak demand rises as temperatures fall*

## Winter Peak Demand in Megawatts (MW)



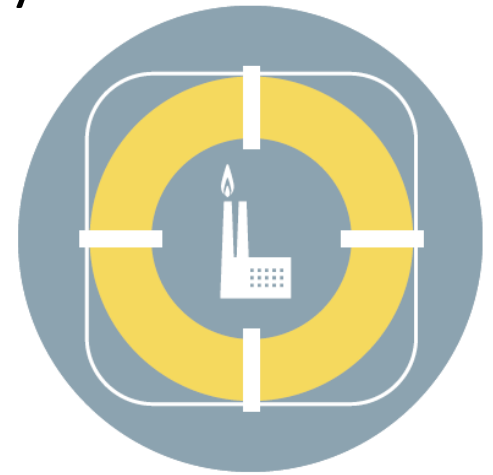
**Key Fact:** All-time winter peak demand set on January 15, 2004 at **22,818 MW**

Source: [ISO-NE Seasonal Peaks Since 1980](#) and [COO NEPOOL Participants Committee Report](#) (November 2017)

\*Temperature is dry-bulb temperature in degrees Fahrenheit based on weighted average of eight New England weather stations.

# The Winter Reliability Program Will Be in Place for the 2017/2018 Winter

- The program **mitigates** concerns surrounding constraints on the natural gas system, which supplies about half of the region's generation
- The program incentivizes oil- and gas-fired generators to secure fuel **before the winter** by compensating them for a portion of the costs related to fuel inventory that is unused at the end of the winter
- The winter program also includes a **demand-response** component
- The **total potential cost** of the program is approximately \$29 million



# ***ISO'S OPERATIONAL FUEL-SECURITY ANALYSIS AND DECISION TO DELAY FINALIZATION***



# ISO New England Is Conducting a Study of Fuel Security Challenges



- The study is examining more than 20 cases of generating resource and fuel-mix combinations during the 2024-2025 winter, and will quantify each case's **fuel security risk**
  - *i.e.*, the number and duration of energy shortfalls that could occur and that would require implementation of emergency procedures to maintain reliability
- 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 preliminary results will be presented to regional stakeholders **after resolution** of the U.S. Department of Energy (DOE) Notice of Proposed Rulemaking (NOPR)



# ***ISO'S COMPETITIVE AUCTIONS WITH SPONSORED POLICY RESOURCES PROPOSAL***



# Discussions Continue on How to Accommodate Public Policies in the Wholesale Electricity Markets

- Last year, NEPOOL launched a formal stakeholder process to discuss potential market rule changes to **integrate** the region's wholesale electricity markets with the public policy goals of the New England states (called IMAPP)
  - Currently, the states' renewable energy and environmental goals are beyond the objectives of the region's wholesale electricity markets, which are designed to maintain **reliability** through the selection of the most economically efficient set of resources
- ISO New England has developed a **proposal** that could be implemented in the near term, involving enhancements to the Forward Capacity Market
  - *Competitive Auctions with Sponsored Policy Resources*



# ISO New England's Proposed Path Forward

- The ISO's capacity market design approach:
  - **Accommodates** sponsored policy resources into the Forward Capacity Market over time, and
  - **Preserves** competitively based capacity pricing for other resources
- It builds upon—but does not replace—the capacity market framework in New England
- **Key idea:** Coordinate the entry of new state-sponsored (i.e., clean energy) resources with the exit of existing capacity resources through a new ***substitution auction***
  - Utilizes the standard, two-settlement market design familiar in other wholesale markets (e.g., ISO's day-ahead and real-time energy markets)



# Why Is a Near-Term Solution Important?

- New England relies on the wholesale electricity markets to attract private investment, but **investor confidence** in the market structure may be weakened if action is not taken
- State procurement efforts for **clean energy** may attract resources that seek to participate in the ISO's February 2019 Forward Capacity Auction (FCA #13) with plans for commercial operation in the 2022 timeframe
- Following an extensive **stakeholder process**, the ISO plans to file tariff changes in January 2018, in time for FCA #13
- FERC approval will be needed in **early 2018** to accommodate these resources



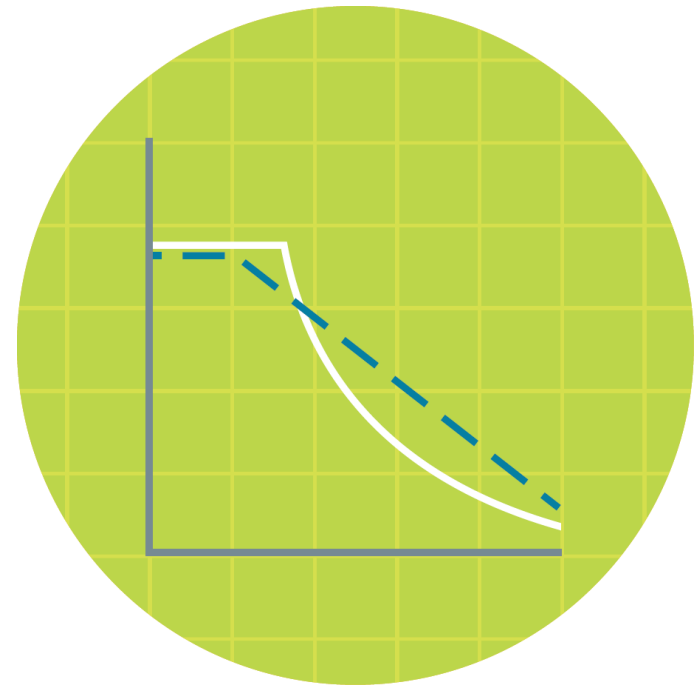
# FORWARD CAPACITY AUCTION #12

*June 1, 2021 – May 31, 2022 Capacity Commitment Period*



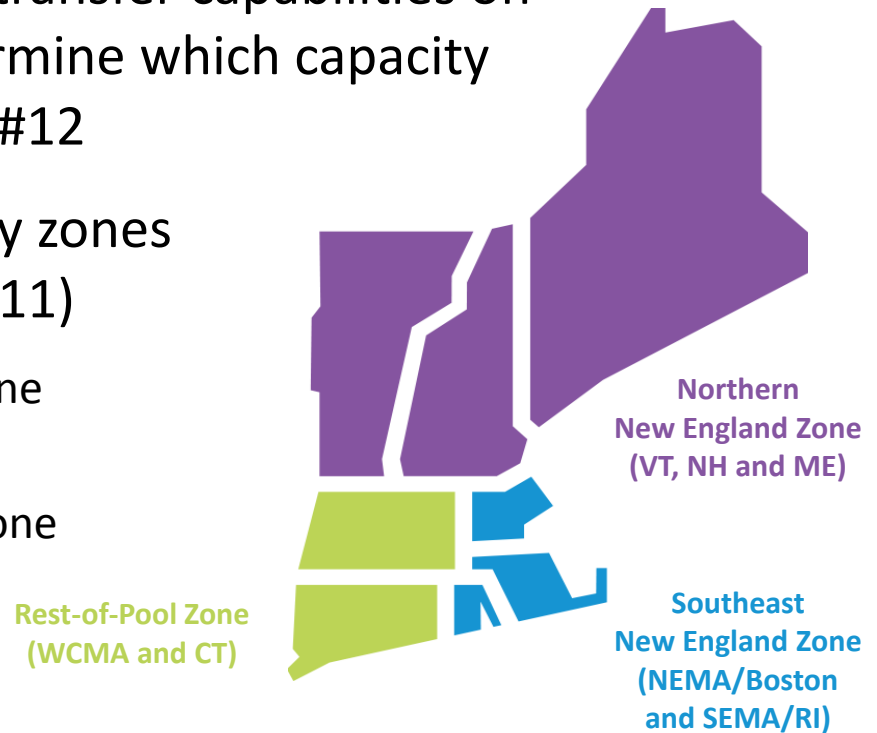
# Forward Capacity Auction #12 Is Scheduled to Take Place in February 2018

- **FCA #12** will procure the resources needed to meet the demand for electricity, plus reserve requirements, during the June 1, 2021 to May 31, 2022 capacity commitment period
- In **November**, the ISO submitted a pre-FCA informational filing with FERC for review, which included all FCA-related calculations and determinations



# Three Capacity Zones Will Be Modeled in FCA #12

- The ISO studied constraints and transfer capabilities on the transmission system to determine which capacity zones would be modeled in FCA #12
- The ISO will model **three** capacity zones in FCA #12 (same zones as FCA #11)
  - Northern New England Capacity Zone
    - Export-Constrained
  - Southeast New England Capacity Zone
    - Import-Constrained
  - Rest-of-Pool Capacity Zone
- The installed capacity target for FCA #12 is **33,725 MW**
- Overall, **35,007 MW** of existing and **5,605 MW** of new resources have qualified to participate in FCA #12

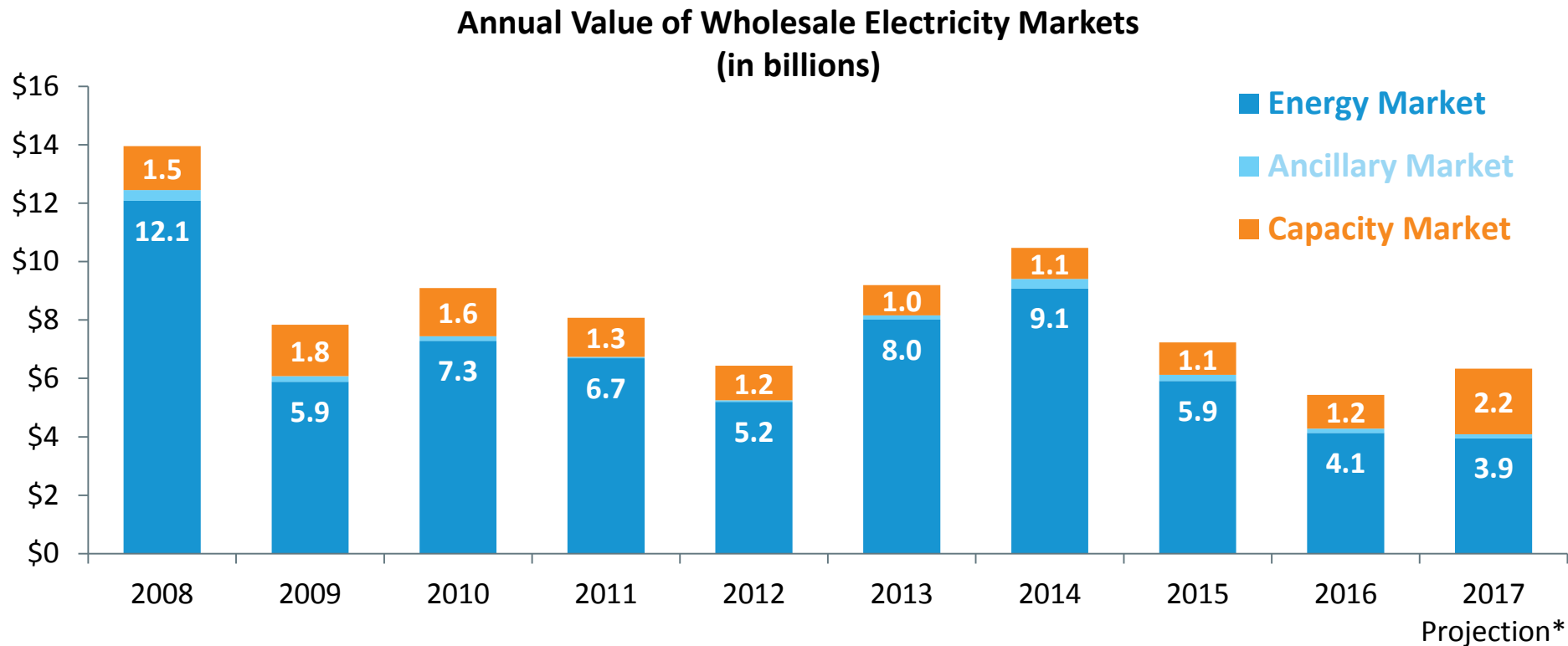


# WHOLESALE MARKET COSTS





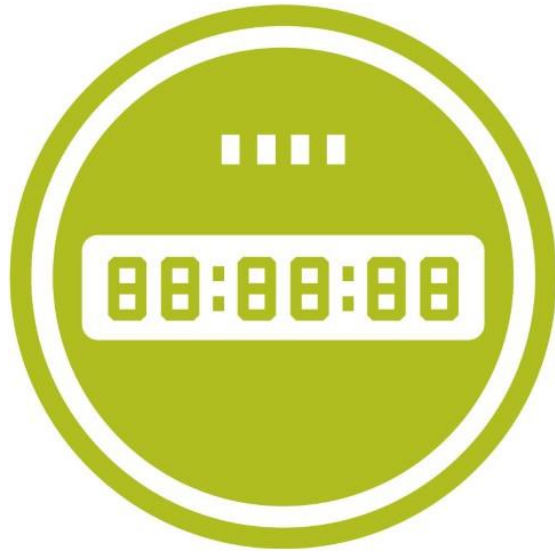
# Energy Market Values Vary with Fuel Prices While Capacity Market Values Vary as Existing Resources Retire and Investment in New Resources Is Needed



Source: [2016 Report of the Consumer Liaison Group](#)

The 2017 projection is the sum of preliminary 2017 January-October actuals and the November-December projected values. The November-December projections were derived as follows: on average, over the last five years (2012-2016), the value of the Energy Market and the Ancillary Market accrued over the first ten months of the year was approximately 83.30% and 78.95% of the annual total for the respective market. These percentages were applied to the totals from the first ten months of 2017 to produce the November-December projections for these markets. The Capacity Market values reflect the October 2017 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.

# The Forward Capacity Market Is Attracting New Resources Amid Retirements



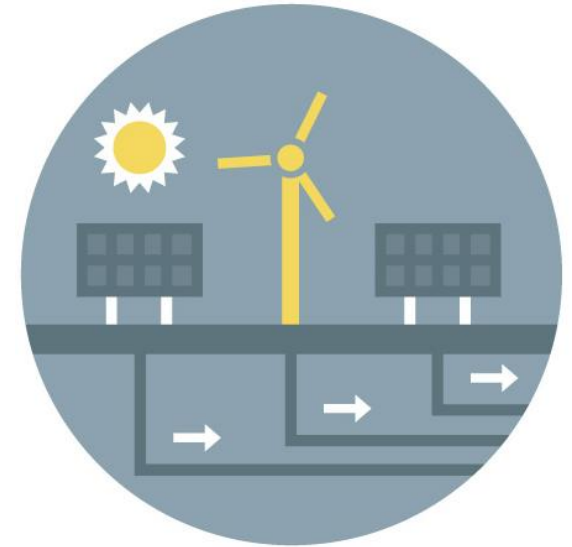
## **Demand Resources**

energy-efficiency  
and active demand  
response resources



## **Natural Gas Resources**

efficient and fast-starting  
gas resources, many with  
dual-fuel capability

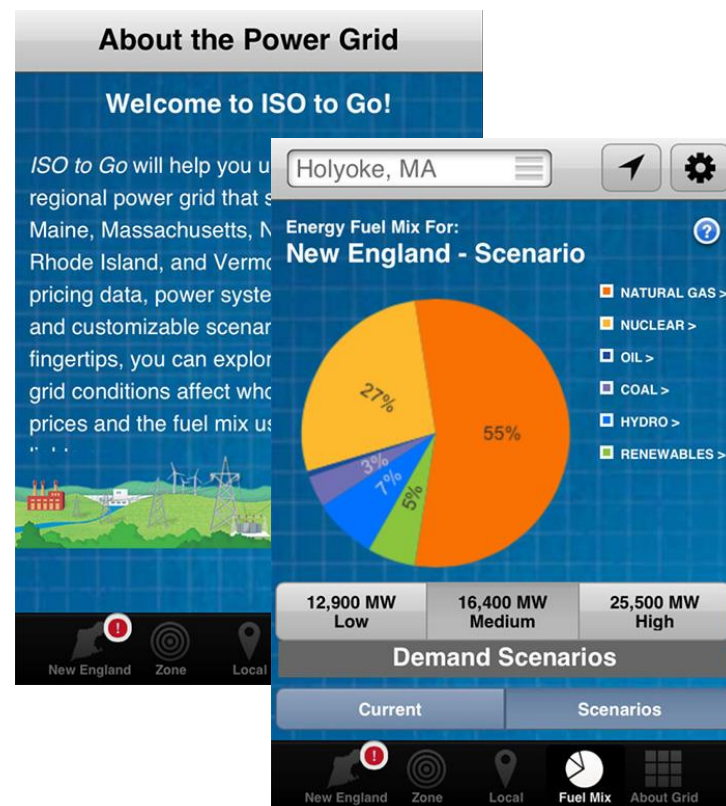


## **Renewable Resources**

onshore and offshore  
wind, solar photovoltaics,  
and fuel cells

# 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
- Follow the ISO on **Twitter**
  - [@isonewengland](#)
- 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



# Mark Your Calendars!

## Consumer Liaison Group Meeting Dates for 2018:

March 1, 2018

June 14, 2018

September 20, 2018

December 6, 2018



# Questions

