

## FOR IMMEDIATE RELEASE

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## ISO New England Issues 10-Year Power System Plan for Region

*Reports on energy security, transmission development, and grid transformation*

**Holyoke, MA—October 31, 2019**—The [2019 Regional System Plan \(RSP19\)](#), the biennial report that lays the foundation for long-term power-system planning in New England, was approved by the ISO New England board of directors today. ISO New England Inc. is the operator of the New England power system and wholesale electricity markets.

The comprehensive report details power system needs for the next 10 years, through 2028, and how these needs can be addressed. *RSP19* also discusses three key issues affecting the regional power system:

- **Energy security:** New England is energy constrained, which is the greatest risk to power system reliability. While new resources are being proposed for New England, energy-security and reliability issues may arise from energy-production limitations resulting from just-in-time fuel sources, intermittent renewable resources, and compliance with environmental regulations.
- **Transmission development:** Transmission improvements are needed to maintain the reliability of the regional power system and support state policies to access remotely-located sources of clean energy. Transmission plans are in place throughout the region to meet system needs.
- **Grid transformation:** The rapid growth of inverter-based technologies, such as wind and solar resources, as well as behind-the-meter solar photovoltaic (PV) systems on the distribution system that the ISO can't observe or control, are transforming the power grid. These developments will require transmission upgrades and control system improvements to ensure reliability. Structural changes to the transmission and distribution systems are being implemented, and new procedures put in place, to help transform the grid reliably.

### **RSP19 Highlights**

**Long-term load forecast**—The 10-year forecast of demand shows total net annual use of electric energy declining by 0.4% per year, with the summer peak also declining 0.4% annually by 2028 under normal weather conditions. Without PV and energy efficiency (EE), the baseline forecast shows that annual energy consumption would grow by 1.1% annually, and the summer peak demand would grow by 0.7%.

**Capacity resources**—Sufficient resources are projected for New England through 2028 to meet the resource adequacy planning criterion, assuming no major retirements and the successful completion and operation of all new resources that have cleared the Forward Capacity Market (FCM). In February 2019, the ISO conducted the 13th Forward Capacity Market auction (FCA #13) where 34,839 megawatts (MW) of capacity was procured for the 2022/2023 capacity commitment period, which was approximately 1,089 MW above the net Installed Capacity Requirement of 33,750 MW.

**Resource development**—The list of projects in the ISO-NE interconnection queue seeking to connect to the regional high-voltage power system has increasingly trended towards renewable resources, particularly wind and large-scale PV, as well as battery storage. Information on the types of projects looking to connect is available at <https://www.iso-ne.com/about/key-stats/resource-mix>.

**Solar**—Solar photovoltaic resources totaled 2,884 MW nameplate capacity (referring to the total amount a resource could produce running at 100% of its capability) by the end of 2018, and are projected to grow to 6,774 MW nameplate by 2028. Behind-the-meter PV resources are estimated to reduce summer peak loads by 1,051 MW in 2028.

**Energy-efficiency measures**—The New England states are expected to continue investing more than \$1 billion per year in energy-efficiency programs, which are expected to reduce summer peak demand by 5,372 MW in 2028.

**Generator retirements**—More than 5,400 MW of generation and demand-response capacity have either retired since 2018 or will retire through 2022/2023. Additionally, other older oil- and coal-fired and nuclear generators are facing economic and environmental pressures and could retire.

**Transmission upgrades**—From 2002 through June 2019, 801 transmission project components to address reliability needs were put into service in the six New England states, representing a \$10.9 billion investment in new infrastructure that improves system reliability and reduces both air emissions and costly congestion on the high-voltage transmission system. Another \$1.3 billion is planned.

**Strategic electrification**—The ISO is closely monitoring the New England states' initiatives to meet greenhouse gas reduction goals through electrification of transportation and heating. These initiatives are in early stages but could become important considerations in the long-term outlook for energy usage and peak demand in years beyond the RSP19 forecast period.

**Interregional planning**—The ISO participates in national and interregional planning activities, including development of coordinated system plans with other regions. Close coordination continues with the New York ISO and PJM, the system operator for all or parts of 13 states and the District of Columbia.

## The Role of Planning in New England

The Regional System Plan is developed every other year to meet requirements established by the Federal Energy Regulatory Commission, the North American Electric Reliability Corporation, and the Northeast Power Coordinating Council, and is produced in accordance with the requirements in Attachment K of the ISO's [Open Access Transmission Tariff](#). Each RSP is a snapshot of the power system and relevant studies and forecasts at a point in time, and the results are updated as needed. The regional planning process is open and transparent and reflects input from a diverse group of regional stakeholders through the [Planning Advisory Committee](#).

The [2019 Regional System Plan](#) is available on ISO New England's website.

### ABOUT ISO NEW ENGLAND

Created in 1997, ISO New England is the independent, not-for-profit corporation responsible for the reliable operation of New England's electric power generation and transmission system, overseeing and ensuring the fair administration of the region's wholesale electricity markets, and managing comprehensive regional electric power planning.

