ISO New England Expects Sufficient Power Supplies This Summer

Holyoke, MA—May 15, 2019—New England is expected to have sufficient resources to meet peak consumer demand for electricity this summer under both typical and extreme weather conditions, according to ISO New England Inc., the operator of the region’s bulk power system and wholesale electricity markets.

ISO New England prepares short-term forecasts for the summer and winter seasons, taking into account estimated contributions from all resources, including those with and without an obligation through the capacity market to supply electricity; unplanned resource outages; imports from neighboring regions; and resource additions and retirements. These estimates help inform ISO New England’s planning on how to operate the grid during the upcoming peak season.

2019 summer peak demand forecast
This summer, under typical weather conditions, electricity demand is forecasted to peak at 25,323 megawatts (MW). Extreme summer weather, such as an extended heat wave, could push demand up to 27,212 MW.

These forecasts incorporate the demand-reducing effects of about 2,900 MW of energy efficiency measures, an additional 200 MW reduction from 2018. This decrease is made up of resources that are designed to save electricity across many hours, but cannot change the amount saved in response to instructions from system operators. Examples include energy-efficiency measures, such as the use of energy-efficient appliances and lighting, and advanced cooling and heating technologies.

The forecasts also include a reduction of more than 700 MW during the peak hour that can be expected from the region’s behind-the-meter solar photovoltaic (PV) installations, an additional 100 MW reduction from last year. Though New England has more than 3,000 MW of solar PV installed, these systems produce their highest output in the early afternoon hours. The increase of solar power in New England has, in effect, pushed the peak hour of grid demand later in the day, when the sun is lower in the sky and production from solar PV systems is also lower. Rather than peaking during the mid-afternoon, as was customary in the summer before PV installations became more widespread, demand for grid power now peaks in the early evening hours.

More than 32,000 MW of capacity is expected to be available to meet New England consumer demand for electricity. ISO New England employs a variety of resources to meet demand: generators that produce electricity, using fuels such as natural gas, nuclear, oil, coal, hydro, biomass, and wind; demand-response resources that reduce their energy use; and power imported into New England from New York and Canada.

Last summer, demand for electricity peaked on August 29, 2018, at 25,899 MW – the region’s highest peak in five years. The all-time record for peak demand was set on August 2, 2006, when demand reached 28,130 MW after a prolonged heat wave. In New England, consumer demand for electricity is highest during the summer because of air conditioning use.

Pilgrim retires, new resources come online
The Pilgrim Nuclear Power Station, a 680-MW plant in southeastern Massachusetts, will permanently retire on May 31, 2019, and therefore will not be available this summer. The plant had announced its intention to retire in October 2015.
As the Pilgrim plant retires, new resources are coming online totaling 1,185 MW of capacity. The new generation includes three dual-fuel plants capable of using either natural gas or oil to produce power. In addition, five new grid-scale solar facilities are expected to add nameplate capability of about 87 MW, and a new wind farm and increased capacity at another will add about 44 MW of nameplate capability. (“Nameplate” refers to the maximum energy a resource could produce if it was operating at its maximum capability.)

**Operating procedures to maintain reliability**
ISO New England has well-established operating procedures to maintain grid reliability in the event of an unexpected power plant or transmission line outage, an extended heat wave that results in increased consumer demand, fuel supply issues or emissions limitations that affect the amount of electric generation available, or a combination of these factors. These procedures include importing emergency power from neighboring regions, calling on power system reserves, and asking businesses and residents to voluntarily conserve energy.

**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.