

# Extreme Weather Continues to Shine Light on Need for Dispatchable Generation

The month of July brought periods of sustained heat and other extreme weather in New York that resulted in high energy use, as well as substantial variability in the output of renewable generation sources in the State.

According to the New York Independent System Operator (NYISO), the State's generation supply in July 2022 was dominated by dual fuel (oil/natural gas), natural gas, nuclear and hydro resources, respectively; with wind and other renewable resources accounting for approximately 5 percent of the total generation.

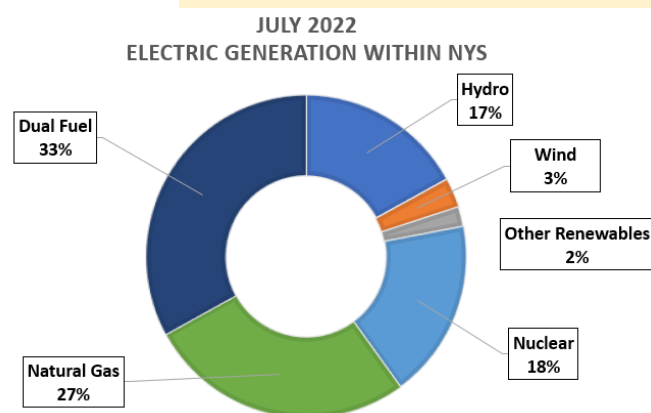
The NYISO reported low wind generation levels, below 5 GWh per day compared to an average total sendout of 509 GWh per day in July, for 11 days (35%) of the month. This includes a five-day wind lull from July 13-17 where statewide wind generation production was less than 2.5 GWh per day. On average, combined wind and solar generation contributed 30 GWh or less per day of state energy consumption (*i.e.*, less than 6% of the average daily sendout).

A core reliability and public safety question for ensuring customer energy demand can be met is: in the future, what resources will be available and utilized during periods of low wind and solar generation? During July 2022, the production gap in New York was filled by increased output from natural gas and fuel oil generation, and/or energy imports from neighboring control areas.

The Utility Consultation Group (UCG) supports accelerated development of renewable generation, but there is also a growing need for increased levels of zero-carbon dispatchable electric supply to maintain reliability while meeting CLCPA goals. The State can meet this need using a number of methods, including: increasing the amount of energy storage on the electric system; increasing the amount of dispatchable zero carbon resources available including, among others, traditional hydro generation and continuing the availability of baseload nuclear facilities; increasing access to zero-carbon dispatchable supply by expanding the electric transmission system; using gas transmission and distribution systems to transport zero- or low-carbon fuels to conventional generation; investments in research and development of new and emerging technologies; or some combination of all these methods.

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*- Utility Consultation Group July 2022 Case Study*



[Source: NYISO Real Time Dashboard](#)

Achieving commercial operation of new renewable resources prior to retiring dispatchable fossil fuel resources is critical to maintaining continued high levels of reliability. The State, in consultation with the NYISO, the responsible Transmission Owner(s) and existing reliability entities, should provide guidance on the timing and sequencing of generation asset retirement decisions before any non-reversible actions occur to ensure reliability and public safety are maintained.

The Climate Action Council's draft Scoping Plan notes that: "Current studies identify that even after full deployment of available clean energy technologies, there is a remaining need for 15 GW to 25 GW of electricity generation in 2040 to meet demand and maintain reliability." The UCG believes the best path to decarbonization includes a diverse mix of all available energy resources to achieve emissions reductions.