New York ISO
Independent System Operator

Critical Infrastructure Load and NYISO Demand Response Programs

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2/3/2022

Purpose

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- Present definition of Critical Infrastructure Load
- Describe participation options for Demand Side Resources that include CIL
- Discuss CIL implementation timeline

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Background

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- On October 6, 2021, NERC submitted a Standard Authorization Request to address Extreme Cold Weather Grid Operations, Preparedness, and Coordination.[1]
- The NYISO is evaluating the recommended Standards, and specifically how they relate to the NYISO's role as a Balancing Authority and Transmission Operator.

[1]Link to NERC SAR: https://www.nerc.com/pa/Stand/Project202107ExtremeColdWeatherDL/2021-07%20Extreme%20Cold%20Weather%20Grid%20Operations%2c%20Preparedness%2c%20and%20Coordination%20Cold%20Weather%20SAR_112221.pdf

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Background (cont'd)

- Standard Recommendation No. 8: "Balancing Authorities' operating plans (for contingency reserves and to mitigate capacity and energy emergencies) are to prohibit use of critical natural gas infrastructure loads for demand response."
  - Recommended Implementation: Before Winter 2022/2023
- This presentation proposes a tariff modification to address Standard Recommendation No. 8 as it relates to the NYISO demand response programs.

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NYISO Definition of Critical Infrastructure Load

- Critical Infrastructure Load: Load that is necessary to maintain the delivery of natural gas, fuel oil, and other fuels used to supply generation (including Local Generators), and load otherwise likely to impact Generator operation and/or the supply of natural gas, fuel oil, and other fuel to Generators serving New York Control Area (NYCA) load.

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Critical Infrastructure Load Examples

- **Critical Infrastructure Load includes the following loads involved in providing fuel to and the operation of Generators:**
  - Compressor stations
  - Terminals
  - Liquefaction/vaporization control
  - Gate stations
  - Control centers
  - Generator climate control equipment (heating and cooling) (*e.g.*, space heating for Generators, Wind Turbine Weatherization equipment, cooling fans, and air conditioning for critical control equipment)
  - Rectifiers
  - Monitoring & control systems (pressure, flow, odorant, remote valve, gas heating)
  - Refineries
  - Fuel suppliers

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Load Curtailment and Local Generators

- The NYISO's proposal only prohibits enrollment of critical infrastructure load in the demand response programs when the facility's Demand Reductions will be achieved via curtailment of those loads
- Demand Side Resources using a Local Generator to effectuate load reductions from the grid (including critical infrastructure load) may still participate in demand response programs.
- Demand Side Resources with on-site critical infrastructure load may also participate in demand response programs by curtailing non-critical infrastructure load (*e.g.*, HVAC load not necessary for operation of the critical infrastructure).
  - The specific loads being curtailed in response to NYISO-issued directives must be stated in the Demand Side Resource's Load Reduction Plan (LRP).
- Each Market Participant must document how each facility effectuates load curtailment in the resource's LRP. *See* ICAP Manual Sec. 4.12.6.

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Implementation Schedule

Critical Infrastructure Load Implementation Schedule

- NYISO intends to implement these rules on 11/1/2022, the first day of the 2022-2023 Winter Capability Period
- The NYISO requests that resources meeting the NYISO's proposed definition of Critical Infrastructure Load not be registered in the NYISO's demand response programs for the 2022 Summer Capability Period

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Next Steps

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- **February/March ICAPWG**
  - Present tariff language to stakeholders.
- **March/April BIC & MC**
  - Vote on proposed tariff language.

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Our Mission & Vision

Mission

Ensure power system reliability and competitive markets for New York in a clean energy future

Vision

Working together with stakeholders to build the cleanest, most reliable electric system in the nation

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