

DRAFT Large Load Working Group (“LLWG”)

Work Scope (11-24-2025)

Purpose

The Large Load Reliability Issues Working Group (“LLRIWG”) is charged to identify bulk power reliability risks and reliability gaps associated with current and the expected increase in electric interconnections of large loads. Large load reliability risks may exist for both (1) large customer load connections, and, (2) the reliability impact of the aggregate reliability risk of smaller existing and new loads that are designed simultaneously disconnect from the NYCA is amounts that will impact the balance of generation and load at a magnitude and speed that the NYCA can no handle. The LLWG should consider and propose solutions (not limited to NYSRC rules changes) to mitigate any bulk power reliability concerns.

NERC Large Load Task Force Scope (for consideration)

The purpose of the Large Loads Task Force (LLTF) is to better understand the reliability impact(s) of emerging large loads such as Data Centers (including crypto and AI), Hydrogen Fuel Plants, etc. 1 and their impact on the bulk power system (BPS). The LLTF will first focus on identifying the unique characteristics and risks associated with emerging large loads, and then validate and prioritize these risks. Following this, the LLTF will identify gaps and mitigation of potential risks to support BPS reliability including enhancements to existing planning and operations processes to help transmission planners and operators mitigate these risks.

Responsibilities

1. Identify any potential transmission security reliability issues associated with existing and proposed large electric loads.
 - a. Discuss and consider what transmission system impact studies should be performed in addition (incremental) to what the NYISO and Transmission Owners are already performing under Two-Party study requirements.
 - b. Discuss and consider enhancements to the current Two-Party study requirements to mitigate the reliability risk impact of large load additions.

- c. Discuss and consider large load performance requirements on frequency and voltage fluctuations (ride-through during transients?) ramp rates, and other requirements
 - i. Consider single large loads and aggregation of loads with customer equipment protection and operating controls. (this is related to item “a” above and complex if different loads have different customer protection and operating control settings)
 - d. Consider scope changes for NYISO System Impact Studies to identify Large Load related reliability risks and verify that the actual final interconnections meet all applicable reliability standards.
 - e. Require Transmission Owners to include in their interconnection agreements:
 - i. Development of solutions to reliability and resilience deficiencies found in impact studies including automatic underfrequency load shedding requirements.
 - ii. Interconnection only after solutions are in-service
 - iii. Requirement to meet NYISO performance requirements
2. As part of the consideration for Responsibility #1 described above,
- a. Follow and understand other industry identifications of reliability gaps associated with large loads and other industry recommendations to mitigate reliability gaps associated with large loads. More specifically leverage.
 - i. Follow and review NERC RSTC, NERC Large Load Working Group, NERC draft and final white papers, and NERC Guidelines
 - ii. Follow any NPCC work and other Regions. For instance ERCOT’s new Large Load Planning module in its planning manual.
 - iii. Recent DOE directives to FERC/NERC
 - b. Review current, existing Two-Party transmission system security requirements including current NYISO System Impact Study processes.
 - c. Define and consider the reliability issues associated with loss of single large loads from the reliability issues associated with the loss of aggregation of

loads with customer protections systems predicted to disconnect at certain electric protection set points. (kind of a repeat of Responsibility #1 above)

- d. Review and understand large load electric and operational characteristics (especially during transient conditions). More specifically, what portion (percentage) of certain loads will disconnect during design criteria contingencies and the distinction between loss of load during voltage events in contrast to frequency events. Review and understand the customer trip settings.
- e. Review and understand current New York power quality standards including utility load connection technical requirements.

PARKING LOT – Need to decide In or Out of Scope for this Working Group

- 3. Resource Adequacy???
- a. Should Resource Adequacy reliability concerns be a defined responsibility with this new Large Load Reliability Issues WG, NYSRC ICS, NYISO RNA.
Other? **Maybe share between this new LLWG and ICS or entirely with LLWG.**

Reporting

The Large Load Reliability Issue Working Group reports directly to the NYSRC Executive Committee .

Large Load Reliability Issues Working Group Membership

The Large Load Reliability Issues Working Group shall be comprised of a Chair, Transmission Owners Subject Matter Experts, and NYISO Planning staff members. Working Group meetings will be open to interested NYSRC members and NYISO Stakeholders.

Approval Process

The Large Load Reliability Issues Working Group will seek to achieve a consensus on its actions and recommendations. However, if necessary, majority and minority reports will be submitted to the NYSRC Executive Committee.

Technical Analyses

Not applicable at this point in time.

Liaison with NPCC

Not applicable at this point in time .