Attachment #7.1
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NYSRC

Large Load Working Group ("LLWG")

Work Scope

Purpose

The Large Load Working Group (LLWG) is charged to identify risks to bulk power reliability and reliability gaps associated with the current and the expected increase in electric interconnections of large loads. Large load reliability risks may exist for both (1) large load connections, and (2) the reliability risks and impacts caused by the aggregate of smaller existing and new loads designed to simultaneously disconnect from the NYCA in amounts that will impact the balance of generation and load at a magnitude and speed that the NYCA cannot adequately handle. The LLWG may consider and propose solutions (not limited to NYSRC rules changes) to mitigate any bulk power reliability concerns.

The LLWG defines "Large Loads" consistent with NERC's Large Load Task Force, as "Any commercial or industrial individual load facility or aggregation of load facilities at a single site behind one or more point(s) of interconnection that can pose reliability risks to the BPS due to its demand, operational characteristics, or other factors."

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. 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.

LLWG Responsibilities

1. Review the current processes and rules provided under the NYISO's, the PSC's, and the TOs' Tariffs and Procedures
    a. Review and understand current New York power quality standards including utility load connection technical requirements.
    b. This includes existing Two-Party transmission system security requirements and NYISO System Impact Study processes.
    c. Catalogue any proposed changes to these requirements that may be underway by these entities.

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.
        i. Follow and review NERC RSTC, NERC Large Load Task Force, NERC draft and final white papers, and NERC Guidelines.
        ii. Follow any NPCC work and work in other Regions.
        iii. Follow DOE directives to FERC/NERC, and any FERC actions relating to Large Loads.

3. 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.

4. Identify any potential reliability issues associated with existing and proposed large loads.
    a. Discuss and consider any additional transmission system impact studies that should be performed.
    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.
            1. This is related to item “a” above and complex if different loads have different customer protection and operating control settings.

5. 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.
    a. 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.
    b. 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.

6. Follow developments with external entities investigating/integrating resource adequacy concerns into their large load processes, including both operational and planning areas.

Reporting

The LLWG reports directly to the NYSRC Executive Committee.

Large Load Working Group Membership

The LLWG shall be comprised of a Chair, Vice 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 LLWG 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.