

Attachment #5.2.2 Return to Agenda

Request to Develop or Modify Reliability Rules and Requirements (NYSRC Policy No. 1) Submit request to Herb Schrayshuen (herb@poweradvisorsllc.com) via the NYSRC site www.nysrc.org

Item	Information
1. PRR No. & Title of Reliability Rule or Requirement change	PRR 157 Mandatory Under-Frequency Load Shedding (UFLS) Design Requirements for Large Load Facilities.
2. Rule Change Requester Information	
Name	Martin Paszek and David Allen
Organization	Con Edison and RRS Chair
3. New rule or revision to existing rule?	New Rule - Reliability Rule B-6: Integration of Large Loads into the UFLS Program
4. Need for rule change, including advantages and disadvantages	The current New York State automatic UFLS program implementation (under PRC-006 and PRC-006-NPCC) relies on individual Transmission Owners (TOs) to implement an automatic UFLS program on an island basis, with the UFLS performance attributes specified in Attachment C of PRC-006-NPCC. This includes specific percentage of load to shed at specified frequency thresholds. Historically, TOs have met these targets by utilizing wide-area distribution feeders. This "feeder-level" approach lacks precision and frequently results in the disconnection of essential community services and infrastructure—such as hospitals, police stations, and fire departments—because they are co-located on the same distribution infrastructure as residential and commercial consumers. Concurrently, there is a significant increase in large load facilities (e.g., data centers, large-scale industrial processors, etc.) entering the interconnection queue. These facilities, with limited exception, are concentrated blocks of commercial and other non-essential community services load that the Transmission Owners have not typically included in their selection of loads included in their implementation of the automatic UFLS program. In accordance with established UFLS Criteria (<i>i.e.</i>, PRC-006 and PRC-006-NPCC), at a high-level the NYISO is responsible for the design of the UFLS program in New York and the Transmission Owners are responsible for the implementation of the designed program, including the selection of specific loads or feeders for the locations of the UFLS relays. This rule change is necessary to ensure the NYISO and Transmission owners incorporate new large load facilities into their implementation of the UFLS program through Interconnection Agreements. By requiring new large load facilities to install automatic UFLS relaying, the grid can continue to meet the UFLS design requirements. The development of this rule should also continue to monitor large load requirements being developed through NERC efforts. <u>Advantages</u> New large load facilities will be aware of the requirement that they be equipped to participate in the TO's automated UFLS program while the TO's will continue to have flexibility in their specific implementation of the UFLS design requirements within and uniform statewide requirement. Protection of Public Health and Safety: Continues to prioritize the use of non-essential loads as the primary participants in the UFLS implementation by the Transmission Owners while minimizing the risk of loss to critical government and community services and infrastructure such as hospitals police, fire and other emergency and essential activities. Engineering Precision: May allow for "surgical" load shedding of concentrated MW

	blocks at the point of interconnection, rather than the broad, indiscriminate tripping of entire zip codes. Fairness in Design: Ends the "loophole" where large-scale industrial/commercial users remain energized while the community at large suffers outages to maintain system stability. Prospective Rule: Requiring all new large load participation in the UFLS program is needed to be in place prior to the interconnection of the significant number of large load facilities now seeking to interconnect to the system. The need for NYSRC to establish the rule now is exacerbated by the current understanding that any prospective modifications to PRC-006 and PRC-006-NPCC that require large load facility participation in UFLS programs may be delayed. <u>Disadvantages</u> None.
5. Related NYSRC rules	Not Applicable
6. Section A – Reliability Rule Elements	
1. Reliability Rule	The NYS Bulk Power System shall be designed and planned such that large load facilities contribute to frequency stability and resilience through mandatory participation in the automatic Under-Frequency Load Shedding (UFLS) program.
2. Associated NERC & NPCC Standards and Criteria	PRC-006 and PRC-006-NPCC
3. Applicability	
7. Section B – Requirements	R1. New large load facilities greater than or equal to 50 MW (aggregated at a single electrical location) shall be integrated into the NYCA UFLS program as a condition for interconnection provided the load does not directly serve critical and essential government and community services, such as hospitals, fire and police stations, and critical municipal infrastructure. R1.1. Transmission Owners shall update, as needed, their technical requirements (including, but not limited to interconnection requirements) to apply a smaller megawatt threshold for the integration of new large loads in its UFLS program, if the TO determines a lower value is needed for its system to meet the NERC and NPCC standards found in PRC-006 and PRC-006-NPCC. R2. NYISO shall establish statewide criteria necessary to ensure participation of these large loads identified in R1 and R1.1 of this rule in the NYCA automatic UFLS program. R3. Transmission Owners shall update, as needed, their technical requirements (including but not limited to interconnection requirements) to mandate that new large load facilities identified in R1 and R1.1 of this rule install and maintain automatic Under-Frequency relaying. R4. Transmission Owners shall incorporate the NYISO criteria established pursuant to R2. and their own technical requirements (including but not limited to interconnection requirements) pursuant to R1 and R3 along with the large load facility's UFLS obligations into their standard Interconnection Agreements that are executed or modified after the effective date of this rule as a pre-condition of interconnection. R5. Transmission Owners shall ensure large load facilities are prioritized for shedding either prior to or concurrent with the activation of distribution feeders as determined

	by the interconnecting TO's engineering studies to meet PRC-006 and PRC-006-NPCC compliance targets. R6. Transmission Owners shall verify the operational readiness of these automatic Under-Frequency relays pursuant to the periodicity specified in the TO's technical requirements (including but not limited to interconnection requirements) provided that the frequency of relay testing meets or exceeds the requirements of PRC-005. Verification shall be based on certified tests conducted pursuant to each large load facility's executed interconnection agreement.
8. Section C – Compliance Elements	
1. Measures	M1. Transmission Owner Large Load MW Threshold(Relates to R1.1): A Transmission Owner that has determined new large loads below the 50 MW threshold provided in R1 must participate in its UFLS program for its system to meet the requirements of PRC-006 and PRC-006-NPCC shall (a) provide documentation (e.g., analysis or study report) supporting the lower threshold that it has specified and (b) provide documentation, such as a standard interconnection agreement template, technical bulletin, and/or a filed Tariff change, demonstrating that this lower megawatt value is clearly identified in its technical requirements (including, but not limited to interconnection requirements). M2. NYISO Criteria Documentation (Relates to R2): NYISO shall provide a copy and have posted on its website the necessary statewide criteria it has established that supports the mandated integration of new large load facilities, identified pursuant to R1 and R1.1 of this rule, into the NYCA automatic UFLS program as a condition for interconnection that is clearly reflected in the load's executed Interconnection Agreement. M3. TO Technical Requirements (Relates to R3): Each Transmission Owner (TO) shall provide evidence, such as a technical bulletin, or a filed Tariff change showing that it has mandated the installation and maintenance of automatic Under-Frequency relaying for new large load facilities identified pursuant to R1 and R1.1 of this rule. M4. TO Interconnection Agreements (Relates to R4): Each Transmission Owner shall annually (a) provide its standard Interconnection Agreement template that has incorporated the NYISO criteria, its technical requirements, and the necessary terms and conditions requiring that the large loads identified pursuant to R1 and R1.1 of this rule participate in the automatic UFLS program, and (b) certify that new or modified interconnection agreements executed with such large loads during the prior twelve (12) months include all such provisions. M5. UFLS Program Tables & Mapping (Relates to R5): Each TO shall provide its annual UFLS program table or mapping document to the NYISO and to NYSRC that demonstrate that large load facilities, identified pursuant to R1 and R1.1 of this rule, are prioritized for shedding prior to or concurrent with the activation of distribution feeders consistent with the interconnecting TO's engineering studies relied upon to demonstrate compliance with PRC-006 and PRC-006-NPCC. M6. Annual Verification Records (Relates to R6): Each TO shall provide a summary report and/or a sample of certified relay test results collected from all large load facilities that participated in their automated UFLS program within the previous calendar year. This report shall serve as evidence that the TO is actively verifying the operational readiness of the required equipment.
2. Levels of Non-Compliance	TBD
3. Compliance Monitoring Process (See Policy 4):	TBD
3.1 Compliance Monitoring Responsibility	TBD
3.2 Reporting Frequency	TBD

3.3 Compliance Reporting Requirements	TBD
9. Comments	This fourth draft of the proposed rule aims to implement the recommendations developed by the Reliability Rules Subcommittee and the Under Frequency Load Shed Working Group in its July 30, 2025 White Paper <i>“Review of Under Frequency Load Shed Programs in Consideration of Rapidly Changing Resource Mix and Integration of Large Loads”</i> via a single Statewide implementation along with important feedback and considerations discussed at the June 4, and July 9, 2026 RRS meetings, at the June 17, 2026 Large Load Working Group, at the July 17, 2026 Executive Committee meeting, at the July 22, 2026 RRS closed session, and subsequent comments.
10. Date Rule Adopted	
11. PRR Revision Dates	May 12, 2026. June 5, 2026, July 1, 2026, July 9, 2026, July 19, 2026, July 22, 2026, and July 30, 2026
12. Implementation Plan	Effective for <i>applicable load entities and Transmission Owners</i> executing <i>Interconnection Agreements</i> following <i>EC approval of this Reliability Rule</i> .