

**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](http://www.nysrc.org)**

| Item  | Information   |
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| 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  | <b>Martin Paszek and David Allen</b>  |
| Organization  | <b>Con Edison and RRS Chair</b>   |
| 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 | <p>The current New York State automatic UFLS program implementation (under PRC-006-5 and PRC-006-NPCC-2) relies on Transmission Owners (TOs) to <del>meet aggregate load shed targets, implement an automatic UFLS program on an island basis, with the UFLS performance attributes specified in Attachment C of PRC-006-NPCC-2. This includes specific percentage of load to shed at specified frequency thresholds.</del> Historically, TOs meet these targets by utilizing wide-area distribution feeders. This "feeder-level" approach lacks precision and frequently results in the disconnection of <del>Essential Community Services</del> <del>essential community services</del>—such as hospitals, police stations, and fire departments—because they are co-located on the same distribution infrastructure as residential and commercial consumers.</p> <p>Concurrently, there is a significant increase in <del>Large Load Facilities</del> <del>large load facilities</del> (e.g., data centers, large-scale industrial processors, etc.) <del>connecting to entering the BPS via dedicated infrastructure-interconnection queue.</del> These facilities <del>represent, with limited exception, are</del> concentrated blocks of non-essential <del>community services load</del> demand that <del>the Transmission Owners have often been excluded from not included in their selection of loads included in their implementation of the automatic UFLS "feeder-trip" rotation program.</del></p> <p><del>In accordance with established UFLS Criteria (i.e., 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 specific loads or feeders for the locations of the UFLS relays.</del></p> <p>This rule change is necessary to <del>mandate that the NYISO and TOs ensure Transmission owners</del> incorporate these <del>Large Load Facilities</del> <del>large load facilities</del> into their <del>implementation of the UFLS program through Interconnection Agreements and Technical Design Requirements.</del> By requiring <del>these large load facilities to install autonomous automatic UFLS relaying and placing them at the front of the tripping hierarchy (Stage 1),</del> the grid can achieve the required MW relief while shielding critical life-safety infrastructure from unnecessary outages <del>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.</del></p> <p><b>Advantages</b><br/> <del>The TO's would continue to have flexibility in their specific implementation of the UFLS design requirements.</del></p> <p>Protection of Public Health and Safety: <del>Minimizes the risk of power loss to hospitals and emergency services by utilizing</del> <del>Continues to prioritize the use of non-essential large-</del></p> |

**Commented [KB1]:** Essential Community Services is not a defined term in the reliability rules, nor is this PRR recommending this as a defined term. As such, I have adjusted the capitalization accordingly.

**Commented [KB2]:** Question for Transmission Owners: What in this PRR would change the Transmission Owner's approach to feeder identification? It is unclear how this proposed rule changes the utilization of wide-area distribution feeders and the need to disconnect essential community services as a last resort.

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|  | <p>loads as the primary <del>source of frequency relief</del> participants in the UFLS implementation by the Transmission Owners.</p> <p>Engineering Precision: Allows for "surgical" load shedding of concentrated MW blocks at the point of interconnection, rather than the broad, indiscriminate tripping of entire zip codes.</p> <p>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.</p> <p><b>Disadvantages</b><br/> <del>None</del><br/> <u>If a UFLS relay is triggered, the monetary loss from some large load facilities may be significant.</u></p>  |
| 5. Related NYSRC rules                           | Not Applicable  |
| <b>6. Section A – Reliability Rule Elements</b>  |   |
| 1. Reliability Rule                              | The NYS Bulk Power System shall be designed and planned such that <del>Large Load Facilities</del> <u>large load facilities</u> contribute to frequency stability and resilience through mandatory participation in the automatic Under-Frequency Load Shedding (UFLS) program. <del>This design requirement ensures that concentrated, non-essential loads are prioritized for shedding during extreme frequency excursions to minimize the risk of disconnecting Essential Community Services (e.g., hospitals, fire and police stations, and critical municipal infrastructure).</del>   |
| 2. Associated NERC & NPCC Standards and Criteria | PRC-006 and PRC-006-NPCC  |
| 3. Applicability                                 |   |
| <b>7. Section B – Requirements</b>               |   |
|  | <p><del>R1. The NYISO shall establish statewide criteria requiring that Non-Essential Large Load Facilities (≥25 MW) be integrated into the NYCA UFLS program as a condition for interconnection.</del></p> <p>R2. Transmission Owners (TOs) shall update their technical requirements and Interconnection Agreements to mandate that <del>these large load facilities</del> <u>be integrated into their UFLS program and</u> install and maintain autonomous Under-Frequency relaying.</p> <p>R3. <del>TOs shall prioritize these Large Load Facilities</del> <u>Transmission Owners shall include large load facilities by assigning them to Stage 1 (59.35 Hz) of the UFLS program, and other stages as needed, to meet the UFLS performance attributes specified in PRC-006-5 and PRC-006-NPCC-2.</u></p> <p><del>R4. This ensures these non-essential loads are shed prior to the activation of distribution feeders serving Essential Community Services (hospitals, fire, police).</del></p> <p><del>R4. The TO shall verify the operational readiness of these relays via certified test results provided by the facility owner on an annual basis.</del></p> |
| <b>8. Section C – Compliance Elements</b>        |   |
| 1. Measures                                      | <u>M1. NYISO Criteria Documentation (Relates to R1): The NYISO shall provide a copy of its</u>  |

**Commented [KB3]:** Is this a correct statement for all transmission owners?

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**Commented [KB4]:** Question for Transmission Owners: It is unclear why there is a need to prioritize Stage 1. If the stage does not matter, is there then any need for R3?

**Commented [KB5]:** A survey of other UFLS relays is not done for compliance purposes today. It is unclear what reliability benefit is gained from this requirement specific to large loads.

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|  | <p><del>established statewide criteria or technical procedures that mandate the integration of Non-Essential Large Load Facilities (&gt; 25 MW) into the NYCA UFLS program. This documentation must explicitly state that such participation is a condition for interconnection.</del></p> <p>M2. TO Technical Requirements &amp; Agreements (Relates to R2): Each Transmission Owner (TO) shall provide evidence (such as a standard Interconnection Agreement template, a technical bulletin, or a filed Tariff change) showing that it has mandated the installation and maintenance of <del>autonomous</del>automatic Under-Frequency relaying for <del>Large Load Facilities</del>large load facilities.</p> <p><del>M3. UFLS Program Tables &amp; Mapping (Relates to R3): Each TO shall provide its annual UFLS program table or mapping document to the NYISO/NYSRC. This evidence must demonstrate that identified Non-Essential Large Load Facilitiesnon-essential large load facilities are assigned to Stage 1 (59.3 Hz) of the shedding hierarchy, prioritizing them over feeders serving Essential Community Servicesessential community services.</del></p> <p><del>M4. Annual Verification Records (Relates to R4): Each TO shall provide a summary report or a sample of certified relay test results collected from Large Load Facilities within the previous calendar year. This report shall serve as evidence that the TO is actively verifying the operational readiness of the required equipment on an annual basis.</del></p> |
| 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  |
| <b>9. Comments</b>                               | This first 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 "Review of Under Frequency Load Shed Programs in Consideration of Rapidly Changing Resource Mix and Integration of Large Loads" via a single Statewide implementation. After initial discussion and input from the RRS members occurs, additional input from the Large Load Working Group will be solicited before the Reliability Rules Subcommittee seeks feedback from the EC or takes any action on the PRR.  |
| <b>10. Date Rule Adopted</b>                     |  |
| <b>11. PRR Revision Dates</b>                    | May 12, 2026   |
| <b>12. Implementation Plan</b>                   | Effective <del>Upon</del> in Interconnection Agreements following EC Approval <del>of this PRR.</del>  |

**Commented [KB6]:** See the comment above regarding R3.