

Request to Develop or Modify Reliability Rules and Requirements (NYSRC Policy No. 1-11)
 Submit request to Herb Schrayshuen (herb@poweradvisorsllc.com) via the NYSRC site www.nysrc.org

Formatted: Font color: Auto

Item	Information
1. PRR No. & Title of Reliability Rule or Requirement change	PRR 160-163 Modification to the underground cable operating-planning criteria Table B-2
2. Rule Change Requester Information	
Name	
Organization	
3. New rule or revision to existing rule?	Table B-2 revision
4. Need for rule change, including advantages and disadvantages	<p>Currently, Table B-2 (Planning) focuses on traditional reserves for post-contingency recovery. However, to maintain consistency with the proposed changes to Table C-2 (Operations) under Insert PRR #, 159162, the planning criteria must also recognize Emergency Response Capability HVDC and other facility types.</p> <p>Planning the system to account for downward flexibility (generation curtailment and fast-ramping ESS/HVDC) ensures that the NYS Bulk Power System is designed to handle modern thermal constraints on underground cables without over-building transmission or over-relying on load shedding in planning models. This creates a 'seamless' transition from how a project is studied in the planning phase to how it is utilized by System Operators.</p> <p>The proposed modification to the language in table B-2:</p> <ol style="list-style-type: none"> For normal transfers, no facility shall be loaded beyond its LTE rating following the most severe of Contingency Events 1 through 9 specified in Table B-1. <p>An underground cable circuit may be loaded to its STE rating following:</p> <p>Loss of Generation - provided ten (10) minute operating reserve, ten (10) minute Emergency Response Capability (including one or more of the ability to increase or decrease resource output) and/or phase angle regulation following is available to reduce the loading to its LTE rating within fifteen (15) minutes and not cause any other facility to be loaded beyond its LTE rating:- ten (10) minute operating reserve, phase angle regulation, firing angle control, or pulse width modulation.</p> <p>Loss of Transmission Facilities - provided phase angle regulation one or more of the following is available to reduce the loading to its LTE rating within fifteen (15) minutes and not cause any other facility to be loaded beyond its LTE rating:- phase angle regulation, firing angle control or pulse width modulation, or ten (10) minute operating reserve (only in the circumstance of loss of transmission facilities resulting in system generation/load imbalance in the Eastern Interconnection).</p> <p>Advantage:</p> <p>Enhances reliability by providing additional flexibility to System Operators that may prevent the shedding of load. By introducing the language, "firing angle or pulse width modulation," would allow HVDC system to participate. The language, "phase angle regulation," is already covering VFT as VFT is an equivalent to PAR with continuous phase angle regulation. The language, "ten (10) minute operating reserve," is already covering resources including ESS can be redispatched.</p>

Formatted: Font: 9 pt

Formatted: Font color: Auto

Commented [KB1]: For input from Transmission Owners: The language about 10-minute operating reserve is not new, but moved in the rule drafting. What is the interpretation as to whether generation is just allowed to move up or can it also move down?

INTERNAL

	<p>The inclusion of 'decreasing' output leverages the inherently faster downward ramp rates of thermal resources and the near instantaneous response of ESS and HVDC assets. This provides a more certain and rapid mitigation of post-contingency overloads on underground cables compared to traditional upward reserve deployment alone.</p> <p>For loss of transmission facilities that are inter-tied with HQ, which is not synchronizing with Eastern Interconnection resulted in generation/load imbalance under such circumstance is permitted, the exception language, " ten (10) minute operating reserve (only in the circumstance of loss of transmission facilities resulting in system generation/load imbalance in the Eastern Interconnection)," should cover such intention.</p> <p>Disadvantage: None</p>
5. Related NYSRC rules	
6. Section A – Reliability Rule Elements	
1. Reliability Rule	
2. Associated NERC & NPCC Standards and Criteria	No change
3. Applicability	No Change
7. Section B – Requirements	<p>Addition of glossary term:-</p> <p>Emergency Response Capability – The sum of the available capacity from Generation, Energy Storage Systems (ESS), and HVDC facilities that can be adjusted (increased or decreased) and sustained within ten (10) minutes following a contingency to restore Transmission Facility loadings to within applicable limits.</p>
8. Section C – Compliance Elements	
1. Measures	No Change
2. Levels of Non-Compliance	No Change
3. Compliance Monitoring Process (See Policy 4):	No Change
3.1 Compliance Monitoring Responsibility	No Change
3.2 Reporting Frequency	No Change
3.3 Compliance Reporting Requirements	No Change
9. Comments	
10. Date Rule Adopted	
11. PRR Revision Dates	
12. Implementation Plan	

INTERNAL