

Request to Develop Reliability Rules for Implementation of Rules Enhancement Plan (REP)

Item	Response
1. Rules Enhancement Plan (REP) Description	On April 11, 2013, the NYSRC Executive Committee adopted a Rules Enhancement Plan (REP) which: (1) restructures the present NYSRC Reliability Rules and supporting elements, and (2) proposes new rules and revises others to ensure they are consistent with current and pending NERC and NPCC standards and criteria, while continuing to maintain NYSRC's more stringent and specific requirements. Proposed new and revised rules are highlighted below in red-line. The REP is described in the report, <i>Rules Enhancement Plan</i> , www.nysrc.org/ , which describes the restructured rule format (PRR Lines 3-7) and the tasks for implementing the REP.
2. Reliability Rule Requester	NYSRC Reliability Rules Subcommittee (RRS)
3. REP Proposed Reliability Rule (PRR) No.	REP-18
4. Title & No. of Proposed Reliability Rule	E-R1: Establishing Operating Transfer Capabilities
5. Section A – Reliability Rule Elements	
1. Reliability Rule	<u>Normal and emergency operating transfer capabilities shall be established in order to operate the NYS Bulk Power System to a level of reliability that will not result in the loss or separation of a major portion of the system.</u>
2. Associated NERC & NPCC Standards and Criteria	NERC: FAC-01; NPCC: Directory 1
3. Applicability	NYISO
6. Section B – Requirements	
Requirements	R1. <u>Normal and emergency operating transfer capabilities shall be established to meet the respective performance requirements in Table F for the contingency events specified in Table B.</u> R2. The NYISO shall maintain procedures and systems that ensure that appropriate actions are taken when <i>thermal, voltage, and/or stability limits</i> are <u>exceeded</u> violated . The NYISO must notify the NYSRC of any changes to these procedures and systems.
7. Section C – Compliance Elements	
1. Measures	M1. The NYISO maintained procedures and systems in accordance with R1 and R2 which identify appropriate actions to be taken whenever the bulk power transmission system’s thermal, voltage, and stability limits are <u>exceeded</u> violated . Any revisions to these procedures or systems were reported to the NYSRC.
2. Levels of Non-Compliance	For M1: Level 1: Revisions to existing procedures or systems were not reported to the NYSRC. Level 2: Documentation of NYISO procedures and systems for <u>exceedance</u> violation of thermal, voltage, and stability limits was incomplete in one or more areas. Level 3: Not applicable. Level 4: Documentation of NYISO procedures and systems for <u>exceedance</u> violation of thermal, voltage, and stability limits was not provided.

3. Compliance Monitoring Process (See Policy 4):	
3.1 Compliance Monitoring Responsibility	M1: RCMS
3.2 Reporting Frequency	M1: In accordance with NYSRC Compliance Monitoring Program schedules.
3.3 Compliance Reporting Requirements	M1: Self-Certification
8. Comments	This Reliability Rule will be implemented in accordance with the NYSRC <i>Rules Enhancement Plan</i> .
9. Date Reliability Rule Adopted	
10. REP PRR Revision Dates	8/15/14, 8/28/14

Table F
Operating Transfer Capabilities – Performance Requirements

Type of Assessment	Performance Requirements for Thermal, Voltage and Stability Assessments
Thermal	<p style="text-align: center;">a. Pre-Contingency Criteria</p> <ol style="list-style-type: none"> 1. For normal transfers, no transmission facility shall be loaded beyond its <i>normal rating</i>. 2. For <i>emergency</i> transfers, no transmission facility shall be loaded beyond its <i>normal rating</i>. However, a facility may be loaded up to the <i>LTE rating</i> pre-contingency if the <i>STE rating</i> is reduced accordingly. <p style="text-align: center;">b. Post-Contingency Criteria</p> <ol style="list-style-type: none"> 1. For normal transfers, no facility shall be loaded beyond its <i>LTE rating</i> following the most severe of contingencies "a" through "g" specified in Table B in Reliability Rule Section B. An underground cable circuit may be loaded to its <i>STE rating</i> following: <u>Loss of Generation</u> - provided <i>ten (10) minute operating reserve</i> and/or phase angle regulation is available to reduce the loading to its <i>LTE rating</i> within fifteen (15) minutes and not cause any other facility to be loaded beyond its <i>LTE rating</i>. <u>Loss of Transmission Facilities</u> - provided phase angle regulation is available to reduce the loading to its <i>LTE rating</i> within fifteen (15) minutes and not cause any other facility to be loaded beyond its <i>LTE rating</i>. For contingencies "b", "c", "e", "f", and "g" in Table B that are not confined to the loss of a single <i>element</i>, <i>transmission owners</i> may request the <i>NYISO</i> for an exception to allow the post-contingency flow on a facility up to its <i>STE rating</i>. This is permissible provided operating measures are available to reduce the flow below the <i>LTE rating</i> within fifteen (15) minutes and not cause any other facility to be loaded beyond its <i>LTE rating</i>. Operating exceptions shall be well documented, including <i>NYISO</i> comments, and must be approved by the <i>NYSRC</i>. 2. For <i>emergency</i> transfers, no facility shall be loaded beyond its <i>STE rating</i> following the more severe of contingencies "a" or "d" listed in Table B. The <i>STE rating</i> is based on an assumed pre-loading equal to the <i>normal rating</i>. A limiting facility may be loaded up to the <i>LTE rating</i>, pre-contingency, if the <i>STE rating</i> is reduced accordingly.
Voltage	<p><i>Reactive power</i> shall be maintained within the <i>NYS Bulk Power System</i> in order to maintain voltages within applicable pre-disturbance and post-disturbance limits, for both normal and <i>emergency</i> transfers, as specified below:</p> <p style="text-align: center;">a. Pre-Contingency Criteria</p> <p>For both normal and <i>emergency</i> transfers, no bus voltage will be below its pre-contingency low <i>voltage limit</i> nor be above its pre-contingency high <i>voltage limit</i>. The pre-contingency voltage on a bus is permitted to operate below its pre-contingency low <i>voltage limit</i> or above its pre-contingency</p>

	<p>high <i>voltage limit</i> if all corrective actions short of <i>load shedding</i> have been taken and conditions are not indicative of system problems, or sufficient time and <i>resources</i> exist to take corrective action to prevent voltage collapse should a <i>contingency</i> occur.</p> <p style="text-align: center;">b. Post-Contingency Criteria</p> <p>No bus voltage will fall below its post-contingency low <i>voltage limit</i> nor rise above its post-contingency high <i>voltage limit</i>. For normal transfers, contingencies "a" through "g" specified in Table B are applicable. For <i>emergency</i> transfers, contingencies "a" through "g" specified in Table B are applicable</p>
Stability	<p>System <i>stability</i> transfer limits shall be consistent with the Reliability Rules and all applicable guidelines and procedures in the NYISO Transmission Planning Guideline #3-1, "Guideline for Stability Analysis and Determination of Stability-Based Transfer Limits".</p> <p>a. For normal transfers, <i>stability</i> of the <i>NYS Bulk Power System</i> shall be maintained during and after the most severe of contingencies "a" through "g" specified in Table B. The <i>NYS Bulk Power System</i> must also be stable if the faulted <i>element</i> as described in Table B is re-energized by <i>delayed reclosing</i> before any manual system adjustment, unless specific alternate procedures are documented.</p> <p>b. For <i>emergency</i> transfers, when firm load cannot be served, <i>stability</i> of the <i>NYS Bulk Power System</i> shall be maintained during and after contingencies "a" through "g" specified in Table B. The <i>NYS bulk power system</i> must also be stable if the faulted <i>element</i> as described in Table B is re-energized by <i>delayed reclosing</i> before any manual system adjustment.</p>