

Request to Develop or Modify Reliability Rules and Requirements (NYSRC Policy No. 1-7)

Submit request to raymond40@aol.com via the NYSRC site www.nysrc.org

Item	Information
1. PRR No. & Title of Reliability Rule or Requirement change	PRR 131A G.2 Loss of Gas Supply – New York City
2. Rule Change Requester Information	
Name	Reliability Rules Subcommittee (RRS)
Organization	
3. New rule or revision to existing rule?	Revision
4. Need for rule change, including advantages and disadvantages	<p>The NYSRC Local Area Operation Reliability Rule G.2 requires the NYS Bulk Power System to be operated so that the loss of a single gas facility does not result in the loss of electric load within the New York City zone.</p> <p>Con Edison, as well as the NYISO, observed a significant failure rate of fuel switching events which could jeopardize the reliability of the NYS Bulk Power System as well as could result in the loss of electric load within the New York City zone. Therefore, new requirements need to be added in order to establish appropriate periodic testing requirements, for both new and old units, that have dual fuel capability. This testing will increase the likelihood of successful switching by identifying and addressing the cause of failure.</p> <p>The application of Reliability Rule G.2 relies heavily on the performance of dual fuel capable units to either 1) burn both fuels simultaneously prior to experiencing low system gas pressure or a loss of gas condition (applicable to steam electric units) or 2) automatically switch fuel from natural gas to liquid fuel whenever experiencing low system gas pressure or a loss of gas condition (applicable to simple cycle / combined cycle units).</p>
5. Related NYSRC rules	None
6. Section A – Reliability Rule Elements	
1. Reliability Rule	The NYS Bulk Power System shall be operated so that the loss of a single gas facility does not result in the loss of electric load within the New York City zone.
2. Associated NERC & NPCC Standards and Criteria	None
3. Applicability	NYISO, Market Participants
7. Section B – Requirements	
Requirements	R1. Con Edison shall have in place procedures for operating its system in accordance with G.2 and NYISO requirements. These procedures must include notification to the NYISO when actions are taken in accordance with G.2, and the reasons thereof.

	<p>R2. The NYISO shall document, maintain, and publish requirements for Con Edison to develop procedures in accordance with G.2, including notification of the NYISO when actions are taken in accordance with G.2, and the reasons thereof. The NYISO shall review and approve Con Edison procedures and required studies, including any updates to such procedures and studies.</p> <p>R3. The NYISO shall document, maintain and publish the current list of dual fuel units.</p> <p>R4. The NYISO shall have procedures requiring all dual fuel units to test their dual fuel capability.</p> <p style="padding-left: 40px;"><u>Combined Cycle units:</u></p> <p style="padding-left: 80px;">Each Combined Cycle unit shall complete a successful test of the automatic swap to a liquid fuel during each <i>Capability Period</i>.</p> <p style="padding-left: 80px;">The requirement for an annual test can be substituted by a real-time automatic fuel swap, if the most recent one was successful and it occurred in the current Capability Year.</p> <p style="padding-left: 40px;"><u>Steam Electric units:</u></p> <p style="padding-left: 80px;">Each Steam Electric unit shall successfully test that it can maintain a minimum level of oil as part of the unit fuel burn mixture for each Capability Year.</p> <p style="padding-left: 80px;">The requirement for an annual test can be substituted by a real-time burn of fuel mixture, if it occurred in the current Capability Year.</p> <p style="padding-left: 40px;">R4.1. The NYISO procedure shall identify the appropriate parameters for a test to be considered successful.</p> <p>R5. Each dual fuel unit shall develop and implement appropriate test procedures in accordance with Requirement R4 to ensure those dual fuel units are able to perform their intended functions. This test procedure shall be shared with the NYISO.</p> <p>R6. Each dual fuel unit shall test its dual fuel capability per Requirement R5.</p> <p style="padding-left: 40px;">R6.1 If a dual fuel test is not successful, the Owner shall identify the causes of the failure and immediately undertake repairs that are necessary to address the failure and keep the NYISO informed as to the progress of its dual fuel unit repairs.</p>
<p>8. Section C – Compliance Elements</p>	

<p>1. Measures</p>	<p>M1. The NYISO certified that Con Edison submitted, when requested, documents, reports, and analyses in accordance with NYISO requirements and R1 requirements for implementing G.2.</p> <p>M2. The NYISO made available and provided when requested, complete documentation for implementing G.2, in accordance with R2.</p> <p>M3. The NYISO documented, maintained and published the current list of dual fuel units.</p> <p>M4. The NYISO had in place procedures requiring all dual fuel units to test their dual fuel capability, including identification of parameters for a test to be considered successful.</p> <p>M5. Each dual fuel unit developed and implemented appropriate test procedures in accordance with Requirement R4 to ensure those dual fuel units are able to perform their intended functions.</p> <p>M6. Each dual fuel unit tested its dual fuel capability per Requirement R5. In addition, If a dual fuel test is was not successful; the Owner identified the causes of the failure and immediately undertook repairs that were necessary to address the failure and kept the NYISO informed as to progress of its dual fuel unit repairs.</p>
<p>2. Levels of Non-Compliance</p>	<p>For Measure 1:</p> <p>Level 1: Not applicable</p> <p>Level 2: Con Edison transmitted requested information to the <i>NYISO</i>, but the submitted documents, reports, and analyses did not meet R1 and <i>NYISO</i> requirements in one or more areas.</p> <p>Level 3 Not applicable</p> <p>Level 4: Con Edison failed to supply the <i>NYISO</i> with requested documents, reports, and analyses in accordance with R1 and <i>NYISO</i> requirements.</p> <p>For Measure 2:</p> <p>Level 1: Not applicable.</p> <p>Level 2: <i>NYISO</i> documentation in accordance with R2 was provided when requested, but was incomplete in one or more areas.</p> <p>Level 3: Not applicable.</p> <p>Level 4: The required <i>NYISO</i> documentation in accordance with R2 was not provided when requested.</p>

For Measure 3:

Level 1: Not applicable.

Level 2: *NYISO* documentation in accordance with Requirement R3 was provided when requested, but was incomplete in one or more areas.

Level 3: Not applicable.

Level 4: The required *NYISO* documentation in accordance with Requirement R3 was not provided when requested.

For Measure 4:

Level 1: Not applicable.

Level 2: *NYISO* procedures requiring all dual fuel units to test their dual fuel capability, including identification of parameters for a test to be considered successful have been prepared, but were incomplete in one or more areas.

Level 3: Not applicable.

Level 4: *NYISO* procedures requiring all dual fuel units to test their dual fuel capability, including identification of parameters for a test to be considered successful have not been prepared.

For Measure 5:

Level 1: Not applicable.

Level 2: The *NYISO* certified that the required test procedure that was provided was complete, but was not submitted to the *NYISO* by the specified time by one or more dual fuel units.

Level 3: The *NYISO* certified that the required test procedure was submitted to the *NYISO* on time, but was incomplete in one or more areas for one or more dual fuel units.

Level 4: The *NYISO* certified that the required test procedure from one or more dual fuel units was not submitted to the *NYISO*.

	<p>For Measure 6:</p> <p>Level 1: Not applicable.</p> <p>Level 2: Not applicable.</p> <p>Level 3: Not applicable.</p> <p>Level 4: The NYISO certified that the required dual fuel test has not been performed, or the required test has been unsuccessfully performed and the Owner is not progressing with unit repairs.</p>
3. Compliance Monitoring Process (See Policy 4):	
3.1 Compliance Monitoring Responsibility	<ul style="list-style-type: none"> • M1: NYISO/RCMS • M2: RCMS • M3: RCMS • M4: RCMS • M5: NYISO/RCMS • M6: NYISO/RCMS
3.2 Reporting Frequency	<ul style="list-style-type: none"> • M1: Annually • M2: In accordance with NYSRC Compliance Monitoring Program schedules • M3: Annually • M4: Annually • M5: Annually • M6: Annually
3.3 Compliance Reporting Requirements	<ul style="list-style-type: none"> • M1: NYISO Certification of Con Edison compliance. • M2: NYISO Self-Certification • M3: NYISO Self-Certification • M4: NYISO Self-Certification • M5: NYISO Certification of dual fuel unit compliance. • M6: NYISO Certification of dual fuel unit compliance.
9. Implementation Plan	The NYISO shall revise appropriate procedures within 90 days of Executive Committee approval of PRR 131A.
10. Comments	<p>D. Guidelines</p> <p>There are applications, approved by the NYISO for implementing this Reliability Rule, which specify minimum oil burn requirements for select generators in New York City.</p> <p>From time to time, changes in system conditions and other circumstances may render existing applications inadequate, or may require alternate applications. Con Edison with NYISO review and approval, shall determine whether revised or additional applications are necessary to meet this Reliability Rule and associated measurements. Any changes must be reviewed by the NYSRC for compliance with the Reliability Rules.</p>

11. Date Rule Adopted	
12. PRR Revision Dates	