

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 131C 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, NYISO and NYSRC RRS, observed a significant failure rate of fuel switching events of the Combined Cycle Units (that are part of the Minimum Oil Burn (MOB) Program) 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 periodic testing requirements, for both new and existing Combined Cycle units, that have the ability to automatically swap from natural gas to a liquid fuel source in the event of the sudden interruption of gas fuel supply or loss of gas pressure or unavailability of gas supply to the generator. This testing will provide increased assurance that latent equipment performance issues that would preclude successful fuel swap are identified and corrected.</p> <p>The application of Reliability Rule G.2 relies heavily on the performance of the Combined Cycle Units (that are part of the Minimum Oil Burn (MOB) Program) to automatically swap fuel from natural gas to liquid fuel in the event of the sudden interruption of gas fuel supply or loss of gas pressure or unavailability of gas supply to the generator.</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, Con Edison and Generator Owners of the Combined Cycle Units (that are part of the Minimum Oil Burn (MOB) Program).
7. Section B – Requirements	
Requirements	

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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.

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.

R3. The NYISO shall document, maintain and publish the current list of dual fuel units that are part of the Minimum Oil Burn (MOB) program.

R4. The NYISO shall have procedures requiring all Generating Owners of Combined Cycle units, which have the ability to automatically swap from natural gas to a liquid fuel source in the event of the sudden interruption of gas fuel supply or loss of gas pressure or unavailability of gas supply to the generator, to test to ensure those units are able to perform their intended functions.

R4.1. The NYISO procedures shall require a unit to complete a successful test of the automatic swap from natural gas to a liquid fuel during each Capability Period.

The requirement for a test can be substituted by a real-time automatic fuel swap, if that fuel swap was successful and occurred during the current Capability Period.

R4.2. The NYISO procedures shall identify the appropriate parameters for a test to be considered successful.

R5. Each Generator Owner of a Combined Cycle unit, which has the ability to automatically swap from natural gas to a liquid fuel source in the event of the sudden interruption of gas fuel supply or loss of gas pressure or unavailability of gas supply to the generator, shall develop and implement test procedures in accordance with Requirement R4 to ensure those Combined Cycle units are able to perform their intended functions. These procedures shall be provided to the NYISO and Con Edison.

R6. Each Generator Owner of a Combined Cycle unit, which has the ability to automatically swap from natural gas to a liquid fuel source in the event of the sudden interruption of gas fuel supply or loss of gas pressure or unavailability of gas supply to the generator, shall test its dual fuel capability per Requirements R4 and R5.

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	<p>R6.1 If the automatic swap from natural gas to a liquid fuel test is not successful, the Generator Owner shall identify the causes of the failure, shall take steps to undertake remedial actions that are necessary to resolve the failure and keep the NYISO and Con Edison informed as to the progress of its remedial actions.</p>
8. Section C – Compliance Elements	
1. Measures	<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 a current list of dual fuel generating units that are part of the Minimum Oil Burn (MOB) program in accordance with R3. The NYISO also had in place procedures, in accordance with R4, requiring all Generator Owners of Combined Cycle units, which have the ability to automatically swap from natural gas to a liquid fuel source in the event of the sudden interruption of gas fuel supply or loss of gas pressure or unavailability of gas supply to the generator, to test to ensure those units are able to perform their intended functions, including identification of parameters for a test to be considered successful.</p> <p>M4. The NYISO certified that each Generator Owner of a Combined Cycle unit, which has the ability to automatically swap from natural gas to a liquid fuel source in the event of the sudden interruption of gas fuel supply or loss of gas pressure or unavailability of gas supply to the generator, developed and implemented test procedures in accordance with Requirement R5.</p> <p>M5. The NYISO certified that each Generator Owner of a Combined Cycle unit, which has the ability to automatically swap from natural gas to a liquid fuel source in the event of the sudden interruption of gas fuel supply or loss of gas pressure or unavailability of gas supply to the generator, tested its dual fuel capability per Requirements R4, R5 and R6. In addition, per requirement R6.1, if a dual fuel test was not successful; the Generator Owner identified the causes of the failure and took steps to undertake remedial actions that were necessary to resolve the failure and kept the NYISO and Con Edison informed as to progress of its remedial actions.</p>
2. Levels of Non-Compliance	<p>For Measure 1:</p> <p>Level 1: Not applicable</p> <p>Level 2: Con Edison transmitted requested information to the NYISO, but the submitted documents, reports, and analyses did not meet R1 and NYISO requirements in one or more areas.</p> <p>Level 3 Not applicable</p>

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Level 4: Con Edison failed to supply the NYISO with requested documents, reports, and analyses in accordance with R1 and NYISO requirements.

For Measure 2:

Level 1: Not applicable.

Level 2: NYISO documentation in accordance with R2 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 R2 was not provided when requested.

For Measure 3:

Level 1: Not applicable.

Level 2: NYISO procedures requiring all Generator Owners of Combined Cycle units, which have the ability to automatically swap from natural gas to a liquid fuel source in the event of the sudden interruption of gas fuel supply or loss of gas pressure or unavailability of gas supply to the generator 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 Generator Owners of Combined Cycle units, which have the ability to automatically swap from natural gas to a liquid fuel source in the event of the sudden interruption of gas fuel supply or loss of gas pressure or unavailability of gas supply to the generator to test their dual fuel capability, including identification of parameters for a test to be considered successful have not been prepared.

For Measure 4:

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 one or more Generator Owner.

Level 3: The NYISO certified that the required test procedure was submitted to the NYISO - by one or more Generator Owner - on time, but was incomplete in one or more areas.

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

For Measure 5:

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	<p><u>Level 1: Not applicable.</u></p> <p><u>Level 2: Not applicable.</u></p> <p><u>Level 3: Not applicable.</u></p> <p><u>Level 4: The NYISO certified that the required dual fuel test (1) has not been performed, or (2) the required test has been unsuccessfully performed and the Generator Owner is not progressing with remedial actions.</u></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: NYISO/RCMS • M5: NYISO/RCMS
3.2 Reporting Frequency	<ul style="list-style-type: none"> • M1: Annually • M2: In accordance with NYSRC Compliance Monitoring Program schedules • M3: In accordance with NYSRC Compliance Monitoring Program schedules • M4: Annually • M5: 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 Certification of dual fuel unit compliance. • M5: NYISO Certification of dual fuel unit compliance.
9. Implementation Plan	<p><u>A NYISO Tariff change will be required before the rule changes in this PRR can be implemented. Following NYSRC Executive Committee approval of PRR 131C, the NYISO shall pursue the tariff revisions necessary to establish the authority needed to comply with this rule change. Within 60 days of receiving FERC approval for the Tariff change, the NYISO shall submit evidence to the NYSRC RCMS that the NYISO has modified its appropriate procedures to comply with PRR 131C rule changes.</u></p>
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>

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11. Date Rule Adopted	
12. PRR Revision Dates	<u>3/7/2016, 4/1/2016, 7/21/2016, 8/5/2016, 8/8/2016, 9/1/2016</u>