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

I

Item	Information
1. PRR No. & Title of Reliability Rule or Requirement change	PRR 131 <u>C</u> 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	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. 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 appropriate periodic testing requirements, for both new and existing generating <u>Combined Cycle</u> units, that have the ability to automatically swap from natural gas to a liquid fuel source to guard against in the event of the sudden interruption of gas
	fuel supply or loss of gas pressure or unavailability of gas supply to the generator. interruption of gas fuel supply to the generator. This testing will provide increased assurance that latent equipment performance issues that would preclude success fuel swap are identified and corrected. The application of Reliability Rule G.2 relies heavily on the performance of <u>the</u> <u>Combined Cycle Units</u> (that are part of the Minimum Oil Burn (MOB) Program) <del>dual</del> fuel capable units to automatically <u>switch-swap</u> fuel from natural gas to liquid fuel the event of the sudden interruption of gas fuel supply or loss of gas pressure or unavailability of gas supply to the generator whenever experiencing low system gas pressure or a loss of gas condition.
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 facilit does not result in the loss of electric load within the New York City zone.
<ol> <li>Associated NERC &amp; NPCC Standards and Criteria</li> </ol>	None
3. Applicability	NYISO, Con Edison and Generator Owners of the Combined Cycle Units (that are part of the Minimum Oil Burn (MOB) Program) <del>Market ParticipantsCon Edison</del>

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.	
	the NHSO when actions are taken in accordance with 6.2, 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.	
	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	
	Cycles the dual fuel-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 aA unit toshall complete a	Formatted: No underline
	successful test of the automatic swap from natural gas to a liquid fuel	Formatted: No underline
	during each Capability Period.	Formatted: No underline
		Formatted: No underline
	The requirement for a test can be substituted by a real-time automatic fuel swap, if that fuel swap was successful and occurred	Formatted: No underline
	during the current Capability Period.	Formatted: No underline
		Formatted: No underline
	R4.2. The NYISO procedures shall identify the appropriate parameters for a	Formatted: No underline
	test to be considered successful.	Formatted: Font: Italic
		Formatted: Centered
	<u>R5. Each Generator Owner of a Combined Cycle <del>dual fuel</del> unit, which has the ability</u>	
	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 appropriate test	
	procedures in accordance with Requirement R4 to ensure those Combined Cycle	
	dual fuel 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 dual fuel 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.	
	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,	
	and shall take steps to immediately undertake remedial actions that are	
	necessary to address the ——failure and keep the NYISO and Con Edison	
	informed as to the progress of ——its remedial ——actions.	
8. Section C – Compliance Elements		
1. Measures		
	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.	
	M2. The NYISO made available and provided when requested, complete documentation for implementing G.2, in accordance with R2.	
	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 <u>dual fuel generatingCombined</u> Cycle units, which have the ability to automatically swap from natural gas to	Formatted: Justified, Indent: Left: 0", Hanging: 0.38", Line spacing: single
	a liquid fuel source the guard against thein 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.	
	M4. The NYISO certified that each Generator Owner of a dual fuel generatingCombined Cycle -unit, which has the ability to automatically swap from natural gas to a liquid fuel source in the event ofto guard against the the sudden interruption of gas fuel supply or <sub>7</sub> loss of gas pressure or unavailability of gas supply to the generator, developed and implemented appropriate test procedures in accordance with Requirement -R5.	Formatted: Justified, Indent: Left: 0", Hanging: 0.38", Line spacing: single
	M5. The NYISO certified that each Generator Owner of a dual fuel generatingCombined Cycle -unit, which has the ability to automatically swap from natural gas to a liquid fuel source in the event of the to guard against 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 <del>is</del> -was not successful; the Generator Owner identified the causes of the	
	failure and took steps to immediately undertakeook remedial actions that were necessary to address the failure and kept the NYISO and Con Edison	

		7
	informed as to progress of its remedial actions.	
		Formatted: Indent: Left: 0", First line: 0"
2. Levels of Non-Compliance		
	For Measure 1:	
	Level 1: Not applicable	
	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.	
	Level 3 Not applicable	
	Level 4: Con Edison failed to supply the <i>NYISO</i> 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 <i>NYISO</i> 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 dual	Formatted: Font: Not Italic
	fuelCombined 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	Formatted: Font: Not Italic
	were incomplete in one or more areas.	Formatted: Font: Not Italic
	······································	Formatted: Font: Not Italic
	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 dual fuel units to test their dual fuel capability, including identification of parameters for a -test to be considered successful have not been	
	identification of parameters for a -test to be considered successful have not been prepared.	
		1

	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—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 - by one or more Generator Owner - 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.	
	For Measure 5:	
	Level 1: Not applicable.	
	Level 2: Not applicable.	
	Level 3: Not applicable.	
	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.	
3. Compliance Monitoring		
Process (See Policy 4):		
3.1 Compliance	M1: NYISO/RCMS	
Monitoring Responsibility	•M2: RCMS	
	• M3: RCMS	
	• M4: NYISO/RCMS	
3.2 Reporting Frequency	<u>M5: NYISO/RCMS</u> M1: Annually	Formatted: Font: 10 pt
3.2 Reporting Frequency	M1: Annually     M2: In accordance with NYSRC Compliance Monitoring Program schedules	Formatted: Font:
	M3: In accordance with NYSRC Compliance Monitoring Program schedules,	
	M4: Annually,	Formatted: Font:
	<u>M5: Annually</u>	Formatted: Font: Formatted: Font: 10 pt
3.3 Compliance Reporting	M1: NYISO Certification of Con Edison compliance.	
Requirements	M2: NYISO Self-Certification	
	M3: NYISO Self-Certification     M4: NVISO Certification of dual fuel unit compliance	
	<ul> <li>M4: NYISO Certification of dual fuel unit compliance.</li> <li>M5: NYISO Certification of dual fuel unit compliance.</li> </ul>	Formatted: Font: 10 pt
I	MJ. NHSO Certification of dual fuel drift compliance.	Formatteu: Font. 10 pt

9. Implementation Plan	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. The	
	NYISO shall prepare appropriate procedures in accordance with R3 and R4 within 90	
	days of Executive Committee approval of PRR 131. The NYISO shall revise	
	appropriate procedures within 90 days of Executive	
	Committee approval of PRR 131A.	Formatted: Default
10. Comments		
	D. Guidelines	
	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.	
	Tork city.	
	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.	
11. Date Rule Adopted		
12. PRR Revision Dates	3/7/2016, 4/1/2016, 7/21/2016, 8/5/2016, 8/8/2016	