

Project 2012-13 Nuclear Plant Interface Coordination

Mapping Document

NUC-001-2.1 to NUC-001-3

Standard: NUC-001-3		
Requirement in Approved Standard	Translation to New Standard or Other Action	Comments
R5. The Nuclear Plant Generator Operator shall operate per the Agreements developed in accordance with this standard.	Replaced with NUC-001-3 R5. Per the Agreements developed in accordance with this standard, the Nuclear Plant Generator Operator shall operate the nuclear plant to meet the Nuclear Plant Interface	The FYRT recommended R5 be revised for consistency with R4 and to clarify that nuclear plants must be operated to meet the NPIRs.

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	Requirements (NPIRs).	
R7. Per the Agreements developed in accordance with this standard, the Nuclear Plant Generator Operator shall inform the applicable Transmission Entities of actual or proposed changes to nuclear plant design, configuration, operations, limits, Protection Systems, or capabilities that may impact the ability of the electric system to meet the NPIRs.	Inserted (e.g., protective relay setpoints) after the words “nuclear power plant design”	The FYRT recommended deleting “Protection Systems” in Requirements R7 and R8 since it is a subset of the "nuclear plant design" and "electric system design" elements currently contained in R7 and R8 respectively; and adding a parenthetical clause (e.g. protective setpoints) to R7 following "nuclear plant design" and parenthetical clause (e.g. relay setpoints) to R8 following "electric system design."
R8. Per the Agreements developed in accordance with this standard, the applicable Transmission Entities shall inform the Nuclear Plant Generator Operator of actual or proposed changes to electric system design, configuration, operations, limits, Protection Systems, or capabilities that may impact the ability of the electric system to meet the NPIRs.	Inserted (e.g., protective relay setpoints) after the words “electric system design.” Deleted the words “Protection Systems”	Same comment as above.
R9. The Nuclear Plant Generator Operator and the applicable Transmission Entities shall include, as a	Inserted the following text after	The FYRT recommended that R9 be revised to clarify that all Agreements do not have to discuss each of the

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<p>minimum, the following elements within the agreement(s) identified in R2: [Violation Risk Factor: Medium] [Time Horizon:]</p> <p>9.1. Administrative elements:</p> <p>9.1.1. Definitions of key terms used in the agreement.</p> <p>9.1.2. Names of the responsible entities, organizational relationships, and responsibilities related to the NPIRs.</p> <p>9.1.3. A requirement to review the agreement(s) at least every three years. A dispute resolution mechanism.</p> <p>9.2. Technical requirements and analysis:</p> <p>9.2.1. Identification of parameters, limits, configurations, and operating scenarios included in the NPIRs and, as applicable, procedures for providing any specific data not provided within the Agreement.</p> <p>9.2.2. Identification of facilities, components, and configuration restrictions that are essential for meeting the NPIRs.</p> <p>9.2.3. Types of planning and operational analyses performed specifically to support the NPIRs, including the frequency of studies and types of Contingencies and scenarios required.</p>	<p>R2: Where multiple Agreements with a single Transmission Entity are put into effect, the R9 elements must be addressed in aggregate within the Agreements; however, each Agreement does not have to contain each element. Where Agreements with multiple Transmission Entities are required, the Nuclear Plant Generator Operator has the responsibility for</p>	<p>elements in R9, but that the sum total of the agreements need to address the elements. In addition, for clarity in Part 9.4.1, the FYRT recommended that "affecting the NPIRs" be inserted following "Provisions for communications" and "applicable unique" be inserted following ""definitions of." The phrase "load shedding programs" in Requirement subpart 9.3.7 was deleted and replaced with the phrase "any programs that reduce or shed load based on underfrequency or undervoltage." This was done to avoid potential conflicts with the Project 2008-02 Team which is attempting to make undervoltage loadshedding programs a NERC defined term.</p>

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<p>9.3. Operations and maintenance coordination</p> <p>9.3.1. Designation of ownership of electrical facilities at the interface between the electric system and the nuclear plant and responsibilities for operational control coordination and maintenance of these facilities.</p> <p>9.3.2. Identification of any maintenance requirements for equipment not owned or controlled by the Nuclear Plant Generator Operator that are necessary to meet the NPIRs.</p> <p>9.3.3. Coordination of testing, calibration and maintenance of on-site and off-site power supply systems and related components.</p> <p>9.3.4. Provisions to address mitigating actions needed to avoid violating NPIRs and to address periods when responsible Transmission Entity loses the ability to assess the capability of the electric system to meet the NPIRs. These provisions shall include responsibility to notify the Nuclear Plant Generator Operator within a specified time frame.</p>	<p>ensuring all the R9 elements are addressed in aggregate within the Agreements with the Transmission Entities. The Agreements with each Transmission Entity do not have to contain each element; however, the Agreements with the multiple Transmission Entities, in the aggregate, must address all R9 elements. The Nuclear Plant Generator</p>	

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<p>9.3.5. Provision for considering, within the restoration process, the requirements and urgency of a nuclear plant that has lost all off-site and on-site AC power.</p> <p>9.3.6. Coordination of physical and cyber security protection of the Bulk Electric System at the nuclear plant interface to ensure each asset is covered under at least one entity’s plan.</p> <p>9.3.7. Coordination of the NPIRs with transmission system Special Protection Systems and underfrequency and undervoltage load shedding programs.</p> <p>9.4. Communications and training Administrative elements:</p> <p>9.4.1. Provisions for communications between the Nuclear Plant Generator Operator and Transmission Entities, including communications protocols, notification time requirements, and definitions of terms.</p> <p>9.4.2. Provisions for coordination during an off-normal or emergency event affecting the NPIRs, including the need to provide timely information explaining the event, an estimate of when the system will be returned</p>	<p>Operator and the Transmission Entity have the responsibility to ensure the Agreement(s) with that Transmission Entity contains the elements of R9 applicable to that Transmission Entity.”</p> <p>Requirement R9.1 approved for retirement by FERC January 2014.</p>	

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<p>to a normal state, and the actual time the system is returned to normal.</p> <p>9.4.3. Provisions for coordinating investigations of causes of unplanned events affecting the NPIRs and developing solutions to minimize future risk of such events.</p> <p>9.4.4. Provisions for supplying information necessary to report to government agencies, as related to NPIRs.</p> <p>9.4.5. Provisions for personnel training, as related to NPIRs.</p>	<p>Inserted the words “affecting the NPIRs” between the words “communications” and “between” in R 9.4</p> <p>Inserted the words “applicable unique” between the words “of” and “terms”</p>	