

**Reliability Standard Audit Worksheet[[1]](#footnote-1)**

NUC-001-4 – Nuclear Plant Interface Coordination

***This section to be completed by the Compliance Enforcement Authority.***

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| **Audit ID:** | Audit ID if available; or REG-NCRnnnnn-YYYYMMDD |
| **Registered Entity:**  | Registered name of entity being audited |
| **NCR Number:**  | NCRnnnnn |
|  **Compliance Enforcement Authority:** | Region or NERC performing audit |
| **Compliance Assessment Date(s)[[2]](#footnote-2):** | Month DD, YYYY, to Month DD, YYYY |
| **Compliance Monitoring Method:**  | [On-site Audit | Off-site Audit | Spot Check] |
| **Names of Auditors:**  | Supplied by CEA |

# **Applicability of Requirements**

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|  | **BA** | **DP** | **GO** | **GOP** | **PC** | **RC** | **RP** | **RSG** | **TO** | **TOP** | **TP** | **TSP** |
| **R1** |  |  | X3 | X[[3]](#footnote-3) |  |  |  |  |  |  |  |  |
| **R2** | X4 | X4 | X3,4 | X3,4 | X4 | X4 |  |  | X4 | X4 | X4 | X4 |
| **R3** | X4 | X4 | X4 | X4 | X4 | X4 |  |  | X[[4]](#footnote-4) | X4 | X4 | X4 |
| **R4** | X4 | X4 | X4 | X4 | X4 | X4 |  |  | X4 | X4 | X4 | X4 |
| **R5** |  |  | X3 | X3 |  |  |  |  |  |  |  |  |
| **R6** | X4 | X4 | X3,4 | X3,4 | X4 | X4 |  |  | X4 | X4 | X4 | X4 |
| **R7** |  |  | X3 | X3 |  |  |  |  |  |  |  |  |
| **R8** | X4 | X4 | X4 | X4 | X4 | X4 |  |  | X4 | X4 | X4 | X4 |
| **R9** | X4 | X4 | X3,4 | X3,4 | X4 | X4 |  |  | X4 | X4 | X4 | X4 |

**Legend:**

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| Text with blue background: | Fixed text – do not edit |
| Text entry area with Green background: | Entity-supplied information |
| Text entry area with white background: | Auditor-supplied information |

Findings

**(This section to be completed by the Compliance Enforcement Authority)**

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| **Req.** | **Finding** | **Summary and Documentation** | **Functions Monitored** |
| **R1** |  |  |  |
| **R2** |  |  |  |
| **R3** |  |  |  |
| **R4** |  |  |  |
| **R5** |  |  |  |
| **R6** |  |  |  |
| **R7** |  |  |  |
| **R8** |  |  |  |
| **R9** |  |  |  |

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| **Req.** | **Areas of Concern** |
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| **Req.** | **Recommendations** |
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| **Req.** | **Positive Observations** |
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Subject Matter Experts

Identify the Subject Matter Expert(s) responsible for this Reliability Standard.

**Registered Entity Response (Required; Insert additional rows if needed):**

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| **SME Name** | **Title** | **Organization** | **Requirement(s)** |
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R1 Supporting Evidence and Documentation

1. The Nuclear Plant Generator Operator shall provide the proposed NPIRs in writing to the applicable Transmission Entities and shall verify receipt.
2. The Nuclear Plant Generator Operator shall, upon request of the Compliance Enforcement Authority, provide a copy of the transmittal and receipt of transmittal of the proposed NPIRs to the responsible Transmission Entities.

**Registered Entity Response (Required):**

**Compliance Narrative:**

Provide a brief explanation, in your own words, of how you comply with this Requirement. References to supplied evidence, including links to the appropriate page, are recommended.

Evidence Requested[[5]](#endnote-1):

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| **Provide the following evidence, or other evidence to demonstrate compliance.**  |
| List of Transmission Entities where the Nuclear Plant Generator Operator has an executed Nuclear Plant Interface Requirement (NPIR). |
| Evidence that proposed NPIRs were communicated to applicable Transmission Entities. |
| Evidence that applicable Transmission Entities received the proposed NPIRs. |

Registered Entity Evidence (Required):

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| **The following information is requested for each document submitted as evidence. Also, evidence submitted should be highlighted and bookmarked, as appropriate, to identify the exact location where evidence of compliance may be found.** |
| **File Name** | **Document Title** | **Revision or Version** | **Document Date** | **Relevant Page(s) or Section(s)** | **Description of Applicability of Document** |
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Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):

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Compliance Assessment Approach Specific to NUC-001-4 R1

***This section to be completed by the Compliance Enforcement Authority***

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|  | Select all or a sample from the list of Transmission Entities with an NPIR, and verify the entity provided the proposed NPIRs to the Transmission Entities and that the entity verified receipt of the NPIR. |
| **Note to Auditor:** The population of Transmission Entities should be those with executed NPIRs. The auditor should verify that the proposed NPIRs were provided prior to the date the NPIR was executed.  |

Auditor Notes:

R2 Supporting Evidence and Documentation

1. The Nuclear Plant Generator Operator and the applicable Transmission Entities shall have in effect one or more Agreements[[6]](#footnote-5) that include mutually agreed to NPIRs and document how the Nuclear Plant Generator Operator and the applicable Transmission Entities shall address and implement these NPIRs.
2. The Nuclear Plant Generator Operator and each Transmission Entity shall each have a copy of the currently effective Agreement(s) which document how the Nuclear Plant Generator Operator and the applicable Transmission Entities address and implement the NPIRs available for inspection upon request of the Compliance Enforcement Authority.

**Registered Entity Response (Required):**

**Compliance Narrative:**

Provide a brief explanation, in your own words, of how you comply with this Requirement. References to supplied evidence, including links to the appropriate page, are recommended.

Evidence Requestedi:

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| **Provide the following evidence, or other evidence to demonstrate compliance.**  |
| Agreement(s) addressing implementing the NPIR(s). |

Registered Entity Evidence (Required):

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| **The following information is requested for each document submitted as evidence. Also, evidence submitted should be highlighted and bookmarked, as appropriate, to identify the exact location where evidence of compliance may be found.** |
| **File Name** | **Document Title** | **Revision or Version** | **Document Date** | **Relevant Page(s) or Section(s)** | **Description of Applicability of Document** |
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Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):

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Compliance Assessment Approach Specific to NUC-001-4 R2

***This section to be completed by the Compliance Enforcement Authority***

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|  | Review the related Agreement(s) and verify they address implementing the NPIR(s). |
| **Note to Auditor:**  |

Auditor Notes:

R3 Supporting Evidence and Documentation

1. Per the Agreements developed in accordance with this standard, the applicable Transmission Entities shall incorporate the NPIRs into their planning analyses of the electric system and shall communicate the results of these analyses to the Nuclear Plant Generator Operator.
2. Each Transmission Entity responsible for planning analyses in accordance with the Agreement shall, upon request of the Compliance Enforcement Authority, provide a copy of the planning analyses results transmitted to the Nuclear Plant Generator Operator, showing incorporation of the NPIRs. The Compliance Enforcement Authority shall refer to the Agreements developed in accordance with this standard for specific requirements.

**Registered Entity Response (Required):**

**Question:** Does the entity have any NPIRs with any Nuclear Plant Generator Operators? [ ]  Yes [ ]  No

[If Yes, provide a list of the Nuclear Plant Generator Operator(s) and proceed to the Compliance Narrative section below. If No, proceed to the Compliance Narrative section below.]

[Note: A separate spreadsheet or other document may be used. If so, provide the document reference below.]

**Registered Entity Response (Required):**

**Compliance Narrative:**

Provide a brief explanation, in your own words, of how you comply with this Requirement. References to supplied evidence, including links to the appropriate page, are recommended.

Evidence Requestedi:

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| **Provide the following evidence, or other evidence to demonstrate compliance.**  |
| NPIR(s) with Nuclear Plant Generator Operators. |
| Planning analyses incorporating the NPIRs. |
| Evidence of communication of the planning analyses to the Nuclear Plant Generator Operators. |

Registered Entity Evidence (Required):

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| **The following information is requested for each document submitted as evidence. Also, evidence submitted should be highlighted and bookmarked, as appropriate, to identify the exact location where evidence of compliance may be found.** |
| **File Name** | **Document Title** | **Revision or Version** | **Document Date** | **Relevant Page(s) or Section(s)** | **Description of Applicability of Document** |
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Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):

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Compliance Assessment Approach Specific to NUC-001-4 R3

***This section to be completed by the Compliance Enforcement Authority***

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|  | Select all or a sample from the list of NPIR(s) with Nuclear Plant Operators, obtain the related planning analyses, and verify they incorporate the NPIR(s). |
|  | Verify the planning analyses were communicated to the Nuclear Plant Operators. |
| **Note to Auditor:** A possible way to determine Transmission Entities applicable to this standard is to obtain (perhaps through another CMEP compliance monitoring method such as a spot check or audit) the NPIR agreements from the nuclear Generator Owner and note the counterparties to those agreements. |

Auditor Notes:

R4 Supporting Evidence and Documentation

1. Per the Agreements developed in accordance with this standard, the applicable Transmission Entities shall
	1. Incorporate the NPIRs into their operating analyses of the electric system.
	2. Operate the electric system to meet the NPIRs.
	3. Inform the Nuclear Plant Generator Operator when the ability to assess the operation of the electric system affecting NPIRs is lost.
2. Each Transmission Entity responsible for operating the electric system in accordance with the Agreement shall demonstrate or provide evidence of the following, upon request of the Compliance Enforcement Authority:
* The NPIRs have been incorporated into the current operating analysis of the electric system. (Requirement 4.1)
* The electric system was operated to meet the NPIRs. (Requirement 4.2)
* The Transmission Entity informed the Nuclear Plant Generator Operator when it became aware it lost the capability to assess the operation of the electric system affecting the NPIRs.

**Registered Entity Response (Required):**

**Question:** Does the entity have any NPIRs with any Nuclear Plant Generator Operators? [ ]  Yes [ ]  No

[If Yes, provide a list of the Nuclear Plant Generator Operator(s) and proceed to the Compliance Narrative section below. If No, proceed to the Compliance Narrative section below.]

[Note: A separate spreadsheet or other document may be used. If so, provide the document reference below.]

**Registered Entity Response (Required):**

**Compliance Narrative:**

Provide a brief explanation, in your own words, of how you comply with this Requirement. References to supplied evidence, including links to the appropriate page, are recommended.

Evidence Requestedi:

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| **Provide the following evidence, or other evidence to demonstrate compliance.**  |
| NPIR(s) with the Nuclear Plant Generator Operator. |
| (R4 Part 4.1) Operating analyses of the electric system. |
| (R4 Part 4.2) Entity’s process for operating the electric system to meet the NPIR(s). |
| (R4 Part 4.3) Notification to the Nuclear Plant Generator Operator in instances where the ability to assess the operation of the electric system affecting the NPIRs is lost. |

Registered Entity Evidence (Required):

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| **The following information is requested for each document submitted as evidence. Also, evidence submitted should be highlighted and bookmarked, as appropriate, to identify the exact location where evidence of compliance may be found.** |
| **File Name** | **Document Title** | **Revision or Version** | **Document Date** | **Relevant Page(s) or Section(s)** | **Description of Applicability of Document** |
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Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):

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Compliance Assessment Approach Specific to NUC-001-4 R4

***This section to be completed by the Compliance Enforcement Authority***

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|  | (R4 Part 4.1) Select all or a sample from the list of NPIR(s) with Nuclear Plant Operators, obtain the related operating analyses, and verify they incorporate the NPIR(s). |
|  | (R4 Part 4.2) Verify the entity operated the electric system to meet the NPIRs. |
|  | (R4 Part 4.3) For instances where the entity lost the ability to assess the operation of the electric system affecting an NPIR, verify the entity informed the Nuclear Plant Generator Operator. |
| **Note to Auditor:** Depending on the risk of noncompliance with this requirement to the reliability of the Bulk Electric System (BES), the auditor may attempt to identify potential instances where the entity may have lost the ability to assess the operation of the electric system affecting an NPIR and verify the applicable Nuclear Plant Generator Operator was informed. Potential instances can be gleaned from inquiries of Nuclear Plant Generator Operators or from auditor analysis of events occurring on the BES in the entity’s area, in cases where the risk of noncompliance to the BES is higher. In cases where such risk is lower, inquiry of the entity regarding the occurrence of such events may be appropriate.A possible way to determine Transmission Entities applicable to this standard is to obtain (perhaps through another CMEP compliance monitoring method such as a spot check or audit) the NPIR agreements from the nuclear Generator Owner and note the counterparties to those agreements. |

Auditor Notes:

R5 Supporting Evidence and Documentation

1. Per the Agreements developed in accordance with this standard, the Nuclear Plant Generator Operator shall operate the nuclear plant to meet the NPIRs.
2. The Nuclear Plant Generator Operator shall, upon request of the Compliance Enforcement Authority, demonstrate or provide evidence that the nuclear power plant is being operated consistent with the NPIRs.

**Registered Entity Response (Required):**

**Compliance Narrative:**

Provide a brief explanation, in your own words, of how you comply with this Requirement. References to supplied evidence, including links to the appropriate page, are recommended.

Evidence Requestedi:

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| **Provide the following evidence, or other evidence to demonstrate compliance.**  |
| NPIR(s) with the Transmission Entities. |

Registered Entity Evidence (Required):

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| **The following information is requested for each document submitted as evidence. Also, evidence submitted should be highlighted and bookmarked, as appropriate, to identify the exact location where evidence of compliance may be found.** |
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Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):

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Compliance Assessment Approach Specific to NUC-001-4 R5

***This section to be completed by the Compliance Enforcement Authority***

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|  | Verify the entity operated the nuclear plant to meet the NPIRs. |
| **Note to Auditor:** Depending on the risk of noncompliance with this requirement to the reliability of the Bulk Electric System (BES), the auditor may attempt to identify potential instances where the entity may not have operated its nuclear plant to meet a NPIR. Potential instances can be gleaned from inquiries of Transmission Entities or from auditor analysis of events occurring on the BES in the entity’s area, in cases where the risk of noncompliance to the BES is higher. In cases where such risk is lower, inquiry of the entity regarding its processes of operating nuclear plants to meet NPIRs should suffice. |

Auditor Notes:

R6 Supporting Evidence and Documentation

1. Per the Agreements developed in accordance with this standard, the applicable Transmission Entities and the Nuclear Plant Generator Operator shall coordinate outages and maintenance activities which affect the NPIRs.

1. The Transmission Entities and Nuclear Plant Generator Operator shall, upon request of the Compliance Enforcement Authority, provide evidence of the coordination between the Transmission Entities and the Nuclear Plant Generator Operator regarding outages and maintenance activities which affect the NPIRs.

**Registered Entity Response (Required):**

**Question:** Does the entity have any NPIRs with any Nuclear Plant Generator Operators? [ ]  Yes [ ]  No

[If Yes, provide a list of the Nuclear Plant Generator Operator(s) and proceed to the Compliance Narrative section below. If No, proceed to the Compliance Narrative section below.]

[Note: A separate spreadsheet or other document may be used. If so, provide the document reference below.]

**Registered Entity Response (Required):**

**Compliance Narrative:**

Provide a brief explanation, in your own words, of how you comply with this Requirement. References to supplied evidence, including links to the appropriate page, are recommended.

Evidence Requestedi:

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| **Provide the following evidence, or other evidence to demonstrate compliance.**  |
| NPIRs with the Transmission Entities or the Nuclear Plant Generator Operator. |
| List of maintenance activities and outages affecting the NPIRs occurring over the audit period. |
| Evidence that maintenance activities and outages affecting the NPIR were coordinated. |

Registered Entity Evidence (Required):

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| **The following information is requested for each document submitted as evidence. Also, evidence submitted should be highlighted and bookmarked, as appropriate, to identify the exact location where evidence of compliance may be found.** |
| **File Name** | **Document Title** | **Revision or Version** | **Document Date** | **Relevant Page(s) or Section(s)** | **Description of Applicability of Document** |
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Compliance Assessment Approach Specific to NUC-001-4 R6

***This section to be completed by the Compliance Enforcement Authority***

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|  | For a sample of maintenance activities and outages that affected the NPIR, verify that the maintenance activity or outage was appropriately coordinated in accordance with Requirement R6. |
| **Note to Auditor:** A possible way to determine Transmission Entities applicable to this standard is to obtain (perhaps through another CMEP compliance monitoring method such as a spot check or audit) the NPIR agreements from the nuclear Generator Owner and note the counterparties to those agreements. |

Auditor Notes:

R7 Supporting Evidence and Documentation

1. 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 (e.g., protective relay setpoints), configuration, operations, limits, or capabilities that may impact the ability of the electric system to meet the NPIRs.
2. The Nuclear Plant Generator Operator shall provide evidence that it informed the applicable Transmission Entities of changes to nuclear plant design (e.g., protective relay setpoints), configuration, operations, limits, or capabilities that may impact the ability of the Transmission Entities to meet the NPIRs.

**Registered Entity Response (Required):**

**Compliance Narrative:**

Provide a brief explanation, in your own words, of how you comply with this Requirement. References to supplied evidence, including links to the appropriate page, are recommended.

Evidence Requestedi:

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| **Provide the following evidence, or other evidence to demonstrate compliance.**  |
| List of actual and proposed changes to nuclear plant design, configuration, operations, limits, or capabilities that may impact the ability of the electric system to meet the NPIRs. |
| Evidence of communication with Transmission Entities. |

Registered Entity Evidence (Required):

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| **The following information is requested for each document submitted as evidence. Also, evidence submitted should be highlighted and bookmarked, as appropriate, to identify the exact location where evidence of compliance may be found.** |
| **File Name** | **Document Title** | **Revision or Version** | **Document Date** | **Relevant Page(s) or Section(s)** | **Description of Applicability of Document** |
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Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):

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Compliance Assessment Approach Specific to NUC-001-4 R7

***This section to be completed by the Compliance Enforcement Authority***

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|  | For all or a sample of actual or proposed changes, verify that the change was communicated to the Transmission Entity with a related NPIR. |
| **Note to Auditor:** In order to establish a population to sample, the auditor may determine the types of changes that would impact the ability of the electric system to meet the NPIRs and inquire of the entity whether any such changes occurred during the audit period. In addition, auditors may also obtain sample items through inquiries of Transmission Entities with related NPIRs regarding changes made and whether they were communicated. Also, auditor analysis of events in the entity’s area may reveal changes that were not communicated. |

Auditor Notes:

R8 Supporting Evidence and Documentation

1. 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 (e.g., protective relay setpoints), configuration, operations, limits, or capabilities that may impact the ability of the electric system to meet the NPIRs.
2. The Transmission Entities shall each provide evidence that the entities informed the Nuclear Plant Generator Operator of changes to electric system design (e.g., protective relay setpoints), configuration, operations, limits, or capabilities that may impact the ability of the Nuclear Plant Generator Operator to meet the NPIRs.

**Registered Entity Response (Required):**

**Question:** Does the entity have any NPIRs with any Nuclear Plant Generator Operators? [ ]  Yes [ ]  No

[If Yes, provide a list of the Nuclear Plant Generator Operator(s) and proceed to the Compliance Narrative section below. If No, proceed to the Compliance Narrative section below.]

[Note: A separate spreadsheet or other document may be used. If so, provide the document reference below.]

**Registered Entity Response (Required):**

**Compliance Narrative:**

Provide a brief explanation, in your own words, of how you comply with this Requirement. References to supplied evidence, including links to the appropriate page, are recommended.

Evidence Requestedi:

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| **Provide the following evidence, or other evidence to demonstrate compliance.**  |
| List of actual and proposed changes to electric system design, configuration, operations, limits, or capabilities that may impact the ability of the electric system to meet the NPIRs. |
| Evidence of communication with Nuclear Plant Operators. |

Registered Entity Evidence (Required):

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| --- |
| **The following information is requested for each document submitted as evidence. Also, evidence submitted should be highlighted and bookmarked, as appropriate, to identify the exact location where evidence of compliance may be found.** |
| **File Name** | **Document Title** | **Revision or Version** | **Document Date** | **Relevant Page(s) or Section(s)** | **Description of Applicability of Document** |
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Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):

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Compliance Assessment Approach Specific to NUC-001-4 R8

***This section to be completed by the Compliance Enforcement Authority***

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|  | For all or a sample of actual or proposed changes, verify that change was communicated to Nuclear Plant Operators with related NPIR. |
| **Note to Auditor:** In order to establish a population to sample, the auditor may determine the types of changes that would impact the ability of the electric system to meet the NPIRs and inquire of the entity whether any such changes occurred during the audit period. In addition, auditors may also obtain sample items through inquiries of Nuclear Plant Operators with related NPIRs regarding changes made and whether they were communicated. Also, auditor analysis of events in the entity’s area may reveal changes that were not communicated.A possible way to determine Transmission Entities applicable to this standard is to obtain (perhaps through another CMEP compliance monitoring method such as a spot check or audit) the NPIR agreements from the nuclear Generator Owner and note the counterparties to those agreements. |

Auditor Notes:

R9 Supporting Evidence and Documentation

1. The Nuclear Plant Generator Operator and the applicable Transmission Entities shall include the following elements in aggregate within the Agreement(s) identified in 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. The Nuclear Plant Generator Operator and the Transmission Entity are responsible for ensuring all the R9 elements are addressed in aggregate within the Agreements.
* Where Agreements with multiple Transmission Entities are required, the Nuclear Plant Generator Operator is responsible for 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. For each Agreement(s), the Nuclear Plant Generator Operator and the Transmission Entity are responsible to ensure the Agreement(s) contain(s) the elements of R9 applicable to that Transmission Entity. :
	1. Retired. *[Note: Part 9.1 was retired under the Paragraph 81 project. The NUC SDT proposes to leave this Part blank to avoid renumbering Requirement parts that would impact existing agreements throughout the industry.]*
	2. Technical requirements and analysis:
		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.
		2. Identification of facilities, components, and configuration restrictions that are essential for meeting the NPIRs.
		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.
	3. Operations and maintenance coordination
		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.
		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.
		3. Coordination of testing, calibration and maintenance of on-site and off-site power supply systems and related components.
		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.
		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.
		6. Coordination of physical and cyber security protection at the nuclear plant interface to ensure each asset is covered under at least one entity’s plan.
		7. Coordination of the NPIRs with transmission system Remedial Action Schemes and any programs that reduce or shed load based on underfrequency or undervoltage.
	4. Communications and training Administrative elements:
		1. Provisions for communications affecting the NPIRs between the Nuclear Plant Generator Operator and Transmission Entities, including communications protocols, notification time requirements, and definitions of applicable unique terms.
		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 to a normal state, and the actual time the system is returned to normal.
		3. Provisions for coordinating investigations of causes of unplanned events affecting the NPIRs and developing solutions to minimize future risk of such events.
		4. Provisions for supplying information necessary to report to government agencies, as related to NPIRs.
		5. Provisions for personnel training, as related to NPIRs.

**M9.** The Nuclear Plant Generator Operator shall have a copy of the Agreement(s) addressing the elements in Requirement 9 available for inspection upon request of the Compliance Enforcement Authority. Each Transmission Entity shall have a copy of the Agreement(s) addressing the elements in Requirement 9 for which it is responsible available for inspection upon request of the Compliance Enforcement Authority.

**Registered Entity Response (Required):**

**Compliance Narrative:**

Provide a brief explanation, in your own words, of how you comply with this Requirement. References to supplied evidence, including links to the appropriate page, are recommended.

Evidence Requestedi:

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| **Provide the following evidence, or other evidence to demonstrate compliance.**  |
| Agreement(s) addressing the elements in Requirement R9 for which the entity is responsible. |

Registered Entity Evidence (Required):

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| **The following information is requested for each document submitted as evidence. Also, evidence submitted should be highlighted and bookmarked, as appropriate, to identify the exact location where evidence of compliance may be found.** |
| **File Name** | **Document Title** | **Revision or Version** | **Document Date** | **Relevant Page(s) or Section(s)** | **Description of Applicability of Document** |
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Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):

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Compliance Assessment Approach Specific to NUC-001-4 R8

***This section to be completed by the Compliance Enforcement Authority***

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|  | Verify that either the multiple Agreements with a single Transmission Entity, or multiple Agreements with multiple Transmission Entities, address the following in the aggregate in accordance with Requirement R9: |
|  | (Part 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. |
|  | (Part 9.2.2) Identification of facilities, components, and configuration restrictions that are essential for meeting the NPIRs. |
|  | (Part 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. |
|  | (Part 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. |
|  | (Part 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.  |
|  | (Part 9.3.3) Coordination of testing, calibration, and maintenance of on-site and off-site power supply systems and related components.  |
|  | (Part 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.  |
|  | (Part 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.  |
|  | (Part 9.3.6) Coordination of physical and cyber security protection at the nuclear plant interface to ensure each asset is covered under at least one entity’s plan. |
|  | (Part 9.3.7) Coordination of the NPIRs with transmission system Remedial Action Schemes and any programs that reduce or shed load based on underfrequency or undervoltage. |
|  | (Part 9.4.1) Provisions for communications affecting the NPIRs between the Nuclear Plant Generator Operator and Transmission Entities, including communications protocols, notification time requirements, and definitions of applicable unique terms. |
|  | (Part 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 to a normal state, and the actual time the system is returned to normal. |
|  | (Part 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. |
|  | (Part 9.4.4) Provisions for supplying information necessary to report to government agencies, as related to NPIRs. |
|  | (Part 9.4.5) Provisions for personnel training, as related to NPIRs. |
| **Note to Auditor:** A possible way to determine Transmission Entities applicable to this standard is to obtain (perhaps through another CMEP compliance monitoring method such as a spot check or audit) the NPIR agreements from the nuclear Generator Owner and note the counterparties to those agreements. |

Auditor Notes:

Additional Information:



Reliability Standard

The full text of NUC-001-4 may be found on the NERC Web Site (www.nerc.com) under “Program Areas & Departments”, “Reliability Standards.”

In addition to the Reliability Standard, there is an applicable Implementation Plan available on the NERC Web Site.

In addition to the Reliability Standard, there is background information available on the NERC Web Site.

Capitalized terms in the Reliability Standard refer to terms in the NERC Glossary, which may be found on the NERC Web Site.

Sampling Methodology

Sampling is essential for auditing compliance with NERC Reliability Standards since it is not always possible

or practical to test 100% of either the equipment, documentation, or both, associated with the full suite of enforceable standards. The Sampling Methodology Guidelines and Criteria (see NERC website), or sample guidelines, provided by the Electric Reliability Organization help to establish a minimum sample set for monitoring and enforcement uses in audits of NERC Reliability Standards.

Regulatory Language

By [Letter Order in Docket No. RD20-4-000 on October 30, 2020](http://nercdotcomstage/FilingsOrders/us/FERCOrdersRules/RD20-4-000_AD_Signature.pdf), FERC approved proposed Reliability Standard NUC-001-4 as part of the project to align Reliability Standards with Registration.

[**North American Electric Reliability Corp.., Docket No. RD14-12-000 (Nov. 6, 2014) (letter order).** Order approving proposed Reliability Standards Reliability Standard NUC-001-3](http://www.nerc.com/FilingsOrders/us/FERCOrdersRules/NUC%20Approval%20Letter%20Order.pdf).

Page 1. In approving FAC-001-2, the Commission noted that: “Proposed Reliability Standard NUC-001-3 requires coordination between nuclear plant generator operators and transmission entities for the purpose of ensuring safe operation and shutdown of nuclear power plants. The proposed Reliability Standard NUC-001-3 indicates that it is applicable to all nuclear plant generator operators and all transmission entities (including transmission operators, transmission owners, transmission planners, transmission service providers, balancing authorities, reliability coordinators, planning coordinators, distribution providers, load-serving entities, generator owners, and generator operators) that are responsible for providing services related to nuclear plant interface requirements.”

Revision History for RSAW

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| **Version** | **Date** | **Reviewers** | **Revision Description** |
| 1 | 03/18/2021 | NERC Compliance Assurance, RSAW Task Force | New Document |

1. NERC developed this Reliability Standard Audit Worksheet (RSAW) language to facilitate NERC’s and the Regional Entities’ assessment of a registered entity’s compliance with this Reliability Standard. The NERC RSAW language is written to specific versions of each NERC Reliability Standard. Entities using this RSAW should choose the version of the RSAW applicable to the Reliability Standard being assessed. While the information included in this RSAW provides some of the methodology that NERC has elected to use to assess compliance with the requirements of the Reliability Standard, this document should not be treated as a substitute for the Reliability Standard or viewed as additional Reliability Standard requirements. In all cases, the Regional Entity should rely on the language contained in the Reliability Standard itself, and not on the language contained in this RSAW, to determine compliance with the Reliability Standard. NERC’s Reliability Standards can be found on NERC’s website. Additionally, NERC Reliability Standards are updated frequently, and this RSAW may not necessarily be updated with the same frequency. Therefore, it is imperative that entities treat this RSAW as a reference document only, and not as a substitute or replacement for the Reliability Standard. It is the responsibility of the registered entity to verify its compliance with the latest approved version of the Reliability Standards, by the applicable governmental authority, relevant to its registration status.

The NERC RSAW language contained within this document provides a non‑exclusive list, for informational purposes only, of examples of the types of evidence a registered entity may produce or may be asked to produce to demonstrate compliance with the Reliability Standard. A registered entity’s adherence to the examples contained within this RSAW does not necessarily constitute compliance with the applicable Reliability Standard, and NERC and the Regional Entity using this RSAW reserves the right to request additional evidence from the registered entity that is not included in this RSAW. Additionally, this RSAW includes excerpts from FERC Orders and other regulatory references. The FERC Order cites are provided for ease of reference only, and this document does not necessarily include all applicable Order provisions. In the event of a discrepancy between FERC Orders and the language included in this document, FERC Orders shall prevail. [↑](#footnote-ref-1)
2. Compliance Assessment Date(s): The date(s) the actual compliance assessment (on-site audit, off-site spot check, etc.) occurs. [↑](#footnote-ref-2)
3. Applicable to Generator Operators of nuclear plants. The Nuclear Plant Generator Operator includes any Generator Operator or Generator Owner that is a Nuclear Plant Licensee responsible for operation of a nuclear facility licensed to produce commercial power. [↑](#footnote-ref-3)
4. Defined as Transmission Entities in Section 4.2 of the Standard providing services related to Nuclear Plant Interface Requirements. [↑](#footnote-ref-4)
5. Items in the Evidence Requested section are suggested evidence that may, but will not necessarily, demonstrate compliance. These items are not mandatory and other forms and types of evidence may be submitted at the entity’s discretion. [↑](#endnote-ref-1)
6. Agreements may include mutually agreed upon procedures or protocols in effect between entities or between departments of a vertically integrated system. [↑](#footnote-ref-5)