

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

# FAC-002-2 – Facility Interconnection Studies

***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** | **IA** | **LSE** | **PA** | **PSE** | **RC** | **RP** | **RSG** | **TO** | **TOP** | **TP** | **TSP** |
| **R1** |  |  |  |  |  |  | X |  |  |  |  |  |  | X |  |
| **R2** |  |  | X |  |  |  |  |  |  |  |  |  |  |  |  |
| **R3** |  | X |  |  |  | X |  |  |  |  |  | X |  |  |  |
| **R4** |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |
| **R5** |  |  | X[[3]](#footnote-3) |  |  |  |  |  |  |  |  |  |  |  |  |

**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** |  |  |  |

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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

**R1.** Each Transmission Planner and each Planning Coordinator shall study the reliability impact of: (i) interconnecting new generation, transmission, or electricity end-user Facilities and (ii) materially modifying existing interconnections of generation, transmission, or electricity end-user Facilities. The following shall be studied:

* 1. The reliability impact of the new interconnection, or materially modified existing interconnection, on affected system(s);
  2. Adherence to applicable NERC Reliability Standards; regional and Transmission Owner planning criteria; and Facility interconnection requirements;
  3. Steady-state, short-circuit, and dynamics studies, as necessary, to evaluate system performance under both normal and contingency conditions; and
  4. Study assumptions, system performance, alternatives considered, and coordinated recommendations. While these studies may be performed independently, the results shall be evaluated and coordinated by the entities involved.

**M1.** Each Transmission Planner or each Planning Coordinator shall have evidence (such as study reports, including documentation of reliability issues) that it met all requirements in Requirement R1.

**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[[4]](#endnote-1):

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| **Provide the following evidence, or other evidence to demonstrate compliance.** |
| List of studies associated with Requirement R1 performed during the compliance monitoring period. |
| Studies and/or reports that meet the requirements in Requirement R1. |

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 FAC-002-2, R1

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

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|  | (R1) For all or a sample selected by the auditor, review evidence and verify the studies address the following: |
|  | (R1 Part 1.1) The reliability impact of the new interconnection, or materially modified existing interconnection, on affected system(s); |
|  | (R1 Part 1.2) Adherence to applicable NERC Reliability Standards; regional and Transmission Owner planning criteria; and Facility interconnection requirements; |
|  | (R1 Part 1.3) Steady-state, short-circuit, and dynamics studies, as necessary, to evaluate system performance under both normal and contingency conditions; and |
|  | (R1 Part 1.4) Study assumptions, system performance, alternatives considered, and coordinated recommendations. While these studies may be performed independently, the results shall be evaluated and coordinated by the entities involved. |
| **Note to Auditor:** For information regarding what constitutes a “material modification” refer to the Guidelines and Technical Basis section of FAC-002-2, which notes that engineering judgement is appropriate. In addition, Part 1.2 refers to “adherence to applicable NERC Reliability Standards”, which would include but not be limited to the TPL group of standards. Part 1.3 refers to performing steady-state, short-circuit, and dynamics studies, “as necessary”, to evaluate system performance as there may be some modifications which do not require all types of analysis included in Part 1.3 to be performed. | |

Auditor Notes:

R2 Supporting Evidence and Documentation

**R2.** Each Generator Owner seeking to interconnect new generation Facilities, or to materially modify existing interconnections of generation Facilities, shall coordinate and cooperate on studies with its Transmission Planner or Planning Coordinator, including but not limited to the provision of data as described in R1, Parts 1.1-1.4.

**M2.** Each Generator Owner shall have evidence (such as documents containing the data provided in response to the requests of the Transmission Planner or Planning Coordinator) that it met all requirements in Requirement R2.

**Registered Entity Response (Required):**

**Question:** Has the entity sought to interconnect new generation Facilities, or to materially modify existing interconnections of generation Facilities, during the compliance monitoring period?

Yes, the entity has sought to interconnect new generation Facilities, or to materially modify existing interconnections of generation Facilities, during the compliance monitoring period.

No, the entity has not sought to interconnect new generation Facilities, or to materially modify existing interconnections of generation Facilities, during the compliance monitoring period.

Other: [provide explanation 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.** |
| Data and information provided in response to the requests of the Transmission Planner or Planning Coordinator. |

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 FAC-002-2, R2

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

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|  | For all or a sample selected by the auditor, review evidence and verify the entity coordinated and cooperated with the Transmission Planner or Planning Coordinator. |
| **Note to Auditor:** See Question to obtain instances of applicable interconnection requests for audit testing. Select all or a sample of such requests for audit testing. The auditor should attempt to obtain reasonable assurance of the entity’s ‘No’ answer. | |

Auditor Notes:

R3 Supporting Evidence and Documentation

**R3.** Each Transmission Owner, each Distribution Provider, and each Load-Serving Entity seeking to interconnect new transmission Facilities or electricity end-user Facilities, or to materially modify existing interconnections of transmission Facilities or electricity end-user Facilities, shall coordinate and cooperate on studies with its Transmission Planner or Planning Coordinator, including but not limited to the provision of data as described in R1, Parts 1.1-1.4.

**M3.** Each Transmission Owner, each Distribution Provider, and each Load-Serving Entity shall have evidence (such as documents containing the data provided in response to the requests of the Transmission Planner or Planning Coordinator) that it met all requirements in Requirement R3.

**Registered Entity Response (Required):**

**Question:** Has the entity sought to interconnect new transmission Facilities or electricity end-user Facilities, or to materially modify existing interconnections of transmission Facilities or electricity end-user Facilities during the compliance monitoring period?

Yes, the entity has sought to interconnect new transmission Facilities or electricity end-user Facilities, or to materially modify existing interconnections of transmission Facilities or electricity end-user Facilities during the compliance monitoring period.

No, the entity has not sought to interconnect new transmission Facilities or electricity end-user Facilities, or to materially modify existing interconnections of transmission Facilities or electricity end-user Facilities during the compliance monitoring period.

Other: [provide explanation 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.** |
| Data and information provided in response to the requests of the Transmission Planner or Planning Coordinator. |

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 FAC-002-2, R3

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

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|  | For all or a sample selected by the auditor, review evidence and verify the entity coordinated and cooperated with the Transmission Planner or Planning Coordinator. |
| **Note to Auditor:** See Question to obtain instances of applicable interconnection requests for audit testing. Select all or a sample of such requests for audit testing. The auditor should attempt to obtain reasonable assurance of the entity’s ‘No’ answer. | |

Auditor Notes:

R4 Supporting Evidence and Documentation

**R4.** Each Transmission Owner shall coordinate and cooperate with its Transmission Planner or Planning Coordinator on studies regarding requested new or materially modified interconnections to its Facilities, including but not limited to the provision of data as described in R1, Parts 1.1-1.4.

**M4.** Each Transmission Owner shall have evidence (such as documents containing the data provided in response to the requests of the Transmission Planner or Planning Coordinator) that it met all requirements in Requirement R4.

**Registered Entity Response (Required):**

**Question:** Has the entity received any request(s) regarding new or materially modified interconnections to its Facilities that were studied during the compliance monitoring period?

Yes, the entity has received request(s) regarding new or materially modified interconnections to its Facilities that were studied during the compliance monitoring period?

No, the entity has not received request(s) regarding new or materially modified interconnections to its Facilities that were studied during the compliance monitoring period?

Other: [provide explanation 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.** |
| Data and information provided in response to the requests of the Transmission Planner or Planning Coordinator. |

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 FAC-002-2, R4

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

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|  | For all or a sample selected by auditor, review evidence and verify entity coordinated and cooperated with Transmission Planner or Planning Coordinator. |
| **Note to Auditor:** See Question to obtain instances of applicable interconnection requests for audit testing. Select all or a sample of such requests for audit testing. The auditor should attempt to obtain reasonable assurance of the entity’s ‘No’ answer. | |

Auditor Notes:

R5 Supporting Evidence and Documentation

**R5.** Each applicable Generator Owner shall coordinate and cooperate with its Transmission Planner or Planning Coordinator on studies regarding requested interconnections to its Facilities, including but not limited to the provision of data as described in R1, Parts 1.1-1.4.

**M5.** Each applicable Generator Owner shall have evidence (such as documents containing the data provided in response to the requests of the Transmission Planner or Planning Coordinator) that it met all requirements in Requirement R5.

**Registered Entity Response (Required):**

**Question:** Has the entity received any request(s) to interconnect to its Facilities that were studied during the compliance monitoring period?

Yes, the entity has received request(s) to interconnect to its Facilities that were studied during the compliance monitoring period.

No, the entity has not received request(s) to interconnect to its Facilities that were studied during the compliance monitoring period.

Other: [provide explanation 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.** |
| Data and information provided in response to the requests of the Transmission Planner or Planning Coordinator. |

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 FAC-002-2, R5

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

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|  | For all or a sample selected by auditor, review evidence and verify entity coordinated and cooperated with the Transmission Planner or Planning Coordinator. |
| **Note to Auditor:** See Question to obtain instances of applicable interconnection requests for audit testing. Select a sample of such requests for audit testing. The auditor should attempt to obtain reasonable assurance of the entity’s ‘No’ answer. | |

Auditor Notes:

Additional Information:



Reliability Standard

The full text of FAC-002-2 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

[**North American Electric Reliability Corp.., Docket No. RD14-12-000 (Nov. 6, 2014) (letter order).** Order approving proposed Reliability Standards Reliability Standards FAC-001-2 (Facility Interconnection Requirements) and FAC-002-2 (Facility Interconnection Studies).](http://www.nerc.com/FilingsOrders/us/FERCOrdersRules/FAC%20Approval%20Letter%20Order.pdf)

Page 2. In approving FAC-001-2, the Commission noted that: “Proposed Reliability Standard FAC-002-2 requires each transmission planner and each planning coordinator to study the reliability impact of interconnecting new—or materially modifying existing-- generation, transmission, or electricity end-user facilities on affected systems. In particular, proposed Reliability Standard FAC-002-2 requires transmission planners and planning coordinators to perform steady-state, short-circuit, and dynamic studies to evaluate system performance under both normal and contingency conditions. In addition, proposed Reliability Standard FAC-002-2 requires each generator owner seeking to interconnect, each transmission owner, each distribution provider, and each load-serving entity that is seeking to interconnect new--or materially modifying existing--transmission facilities or end-user facilities to coordinate and cooperate on studies with its transmission planner and planning coordinator.”

Revision History for RSAW

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| --- | --- | --- | --- |
| **Version** | **Date** | **Reviewers** | **Revision Description** |
| 1 | 06/10/2014 | NERC Compliance | New Document |
| 2 | 11/23/2015 | NERC Compliance Assurance, RSAW Task Force | Revised for consistency with the final approved standard. |
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1. NERC developed this Reliability Standard Audit Worksheet (RSAW) language in order 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 Generator Owner: Generator Owner with a fully executed Agreement to conduct a study on the reliability impact of interconnecting a third party Facility

   to the Generator Owner’s existing Facility that is used to interconnect to the Transmission systems. [↑](#footnote-ref-3)
4. 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)