

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

# FAC-001-1 – Facility Connection Requirements

***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 |  |  |  |
| **R2** |  |  | X[[3]](#footnote-3) |  |  |  |  |  |  |  |  |  |  |  |  |
| **R3** |  |  | X3 |  |  |  |  |  |  |  |  | X |  |  |  |
| **R4** |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |

**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** |  |  |  |

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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.** The Transmission Owner shall document, maintain, and publish Facility connection requirements to ensure compliance with NERC Reliability Standards and applicable Regional Entity, subregional, Power Pool, and individual Transmission Owner planning criteria and Facility connection requirements. The Transmission Owner’s Facility connection requirements shall address connection requirements for:

1.1. Generation Facilities,

1.2. Transmission Facilities, and

1.3. End-user Facilities

**M1.** The Transmission Owner shall make available (to its Compliance Enforcement Authority) evidence that it met all the requirements stated 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(s), are recommended.

Evidence Requested[[4]](#endnote-1):

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| **Provide the following evidence, or other evidence to demonstrate compliance.** |
| Copy of the published Facility connection requirements document. |

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-001-1, R1

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

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|  | (R1) Verify the Transmission Owner documented, maintained and published Facility connection requirements for the following Facilities: |
|  | (Part 1.1) Generation Facilities |
|  | (Part 1.2) Transmission Facilities |
|  | (Part 1.3) End user Facilities |
| **Note to Auditor:** | |

Auditor Notes:

R2 Supporting Evidence and Documentation

**R2.** Each applicable Generator Owner shall, within 45 days of having an executed Agreement to evaluate the reliability impact of interconnecting a third party Facility to the Generator Owner’s existing Facility that is used to interconnect to the interconnected Transmission systems (under FAC-002-1), document and publish its Facility connection requirements to ensure compliance with NERC Reliability Standards and applicable Regional Entity, subregional, Power Pool, and individual Transmission Owner planning criteria and Facility connection requirements.

**M2.**  Each Generator Owner that has an executed Agreement to evaluate the reliability impact of interconnecting a third party Facility to the Generator Owner’s existing Facility that is used to interconnect to the interconnected Transmission systems shall make available (to its Compliance Enforcement Authority) evidence that it met all requirements stated in Requirement R2.

**Registered Entity Response (Required):**

**Question:** Did entity execute an Agreement in the compliance monitoring period to evaluate the reliability impact of interconnecting a third party Facility to their existing Facility that is used to interconnect to the interconnected Transmission system?

Yes  No

If yes, provide evidence of compliance as requested below. If no, how was it ascertained that there were no such Agreements?

[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.** |
| Copy of executed Agreement of interconnecting a third party Facility to the Generator Owner’s existing Facility. |
| Copy of published Facility connection requirements within 45 days of an executed Agreement. |

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-001-1, R2

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

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|  | (R2) Verify entity published Facility connection requirements document are in accordance with R2. |
|  | (R2) Verify the entity published Facility connection requirements within 45 days of an executed Agreement. |
| **Note to Auditor:** | |

Auditor Notes:

R3 Supporting Evidence and Documentation

**R3.** Each Transmission Owner and each applicable Generator Owner (in accordance with Requirement R2) shall address the following items in its Facility connection requirements:

3.1. Provide a written summary of its plans to achieve the required system performance as described in Requirements R1 or R2 throughout the planning horizon:

3.1.1. Procedures for coordinated joint studies of new Facilities and their impacts on the interconnected Transmission systems.

3.1.2. Procedures for notification of new or modified Facilities to others (those responsible for the reliability of the interconnected Transmission systems) as soon as feasible.

3.1.3. Voltage level and MW and MVAR capacity or demand at point of connection.

3.1.4. Breaker duty and surge protection.

3.1.5. System protection and coordination.

3.1.6. Metering and telecommunications.

3.1.7. Grounding and safety issues.

3.1.8. Insulation and insulation coordination.

3.1.9. Voltage, Reactive Power, and power factor control.

3.1.10. Power quality impacts.

3.1.11. Equipment Ratings.

3.1.12. Synchronizing of Facilities.

3.1.13. Maintenance coordination.

3.1.14. Operational issues (abnormal frequency and voltages).

3.1.15. Inspection requirements for existing or new Facilities.

3.1.16. Communications and procedures during normal and emergency operating conditions.

**M3.** Each Transmission Owner and each applicable Generator Owner (in accordance with Requirement R2) shall make available (to its Compliance Enforcement Authority) evidence that it met all requirements stated in Requirement R3.

**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.** |
| Copy of published Facility connection requirements. |

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-001-1, R3

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

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|  | Verify the entity provided the following in its Facility connection requirements document: |
|  | (Part 3.1). A written summary of its plans to achieve the required system performance as described in Requirements R1 or R2 throughout the planning horizon: |
|  | (Part 3.1.1)Procedures for coordinated joint studies of new Facilities and their impacts on the interconnected Transmission systems. |
|  | (Part 3.1.2) Procedures for notification of new or modified Facilities to others (those responsible for the reliability of the interconnected Transmission systems) as soon as feasible. |
|  | (Part 3.1.3) Voltage level and MW and MVAR capacity or demand at point of connection. |
|  | (Part 3.1.4) Breaker duty and surge protection. |
|  | (Part 3.1.5) System protection and coordination. |
|  | (Part 3.1.6) Metering and telecommunications. |
|  | (Part 3.1.7) Grounding and safety issues. |
|  | (Part 3.1.8) Insulation and insulation coordination. |
|  | (Part 3.1.9) Voltage, Reactive Power, and power factor control. |
|  | (Part 3.1.10) Power quality impacts. |
|  | (Part 3.1.11) Equipment Ratings. |
|  | (Part 3.1.12) Synchronizing of Facilities. |
|  | (Part 3.1.13) Maintenance coordination. |
|  | (Part 3.1.14) Operational issues (abnormal frequency and voltages). |
|  | (Part 3.1.15) Inspection requirements for existing or new Facilities. |
|  | (Part 3.1.16) Communications and procedures during normal and emergency operating conditions. |
| **Note to Auditor:** | |

Auditor Notes:

R4 Supporting Evidence and Documentation

**R4.** The Transmission Owner shall maintain and update its Facility connection requirements as required. The Transmission Owner shall make documentation of these requirements available to the users of the transmission system, the Regional Entity, and ERO on request (five business days).

**M4.** The Transmission Owner shall make available (to its Compliance Enforcement Authority) evidence that it met all the requirements stated in Requirement R4.

**Registered Entity Response (Required):**

**Question**: Did the entity receive a request for their Facility connection requirements from users of the transmission system, Regional Entity or ERO**.**   Yes  No

If yes, see evidence requested below. If No, how did entity ascertain there were no requests made within the compliance monitoring period?

[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.** |
| Copy of published Facility connection requirements |
| Evidence of response to request for the Facility connection requirements within 5 business days of request |

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-001-1, R4

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

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|  | Verify the entity maintained and updated its Facility connection requirements as required. |
|  | Verify the entity responded to requests for the Facility connection requirements within 5 business days |
| **Note to Auditor** | |

Auditor Notes:

Additional Information:



Reliability Standard

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.

Regulatory Language

Regulatory Background

FAC-001-0 was approved by the Commission in Order No. 693 on March 16, 2007.[[5]](#footnote-4) NERC subsequently proposed a modification to the Standard to address a reliability gap for generator interconnection facilities for the majority of generator owners and generator operators. FAC-001-1 was approved in Order No. 785 on September 19, 2013.[[6]](#footnote-5)

FERC Orders

Order No. 785

**P 23**  In the order approving FAC-001-1, FERC stated, “We approve proposed Reliability Standard FAC-001-1, as it will enhance reliability by expanding the obligation to develop and make available facility connection requirements to generators who have executed an agreement to interconnect with a third party, which will assist in the transmission planning process.” Regarding the applicability of FAC-001-1, FERC stated, “FAC-001-1 would apply as soon as an agreement to evaluate the reliability impact of an interconnection is executed, whether the generator owner is required to do so by regulatory order or has entered into such an agreement without such a regulatory mandate.”

Order No. 693

P 678 In the approval of FAC-001-0, FERC stated, “Reliability Standard FAC-001-0 is intended to ensure that transmission owners establish facility connection and performance requirements to avoid adverse impacts to the Bulk-Power System.”

Revision History

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| --- | --- | --- | --- |
| **Version** | **Date** | **Reviewers** | **Revision Description** |
| 1 | 10/14/2014 | RSAW Task Force, NERC Compliance, CMFG, ECEMG | New Document |
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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. Generator Owner with an executed Agreement to evaluate the reliability impact of interconnecting a third party Facility to the Generator Owner’s existing Facility that is used to interconnect the interconnected 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)
5. *Mandatory Reliability Standards for the Bulk‐Power System*, 118 FERC ¶ 61,218 (March 16, 2007) (“Order 693”). [↑](#footnote-ref-4)
6. *Generator Requirements at the Transmission interface*, 144 FERC ¶61,221 (September 19, 2013) (“Order 785”). [↑](#footnote-ref-5)