

# Reliability Standard Audit Worksheet<sup>1</sup>

## FAC-014-3 – Establish and Communicate System Operating Limits

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

**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)<sup>2</sup>:** 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

	BA	DP	GO	GOP	PA/PC	RC	RP	RSG	TO	TOP	TP	TSP
R1						X						
R2										X		
R3										X		
R4						X						
R5						X						
R6						X						

### Legend:

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

<sup>1</sup> 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 RSAW may provide 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 reserve the right to request additional evidence from the registered entity that is not included in this RSAW. This RSAW may include excerpts from FERC Orders and other regulatory references which 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.

<sup>2</sup> Compliance Assessment Date(s): The date(s) the actual compliance assessment (on-site audit, off-site spot check, etc.) occurs.

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**Findings**

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

Req.	Finding	Summary and Documentation	Functions Monitored
R1			
R2			
R3			
R4			
R5			
R6			

Req.	Areas of Concern

Req.	Recommendations

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):**

SME Name	Title	Organization	Requirement(s)

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**R1 Supporting Evidence and Documentation**

- R1.** Each Reliability Coordinator shall establish Interconnection Reliability Operating Limits (IROLs) for its Reliability Coordinator Area in accordance with its System Operating Limit Methodology (SOL Methodology).
  
- M1.** Acceptable evidence may include, but is not limited to, dated electronic or hard copy documentation to demonstrate that the Reliability Coordinator established IROLs in accordance with it SOL Methodology.

**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<sup>1</sup>:**

<b>Provide the following evidence, or other evidence to demonstrate compliance.</b>
Entity's System Operating Limit Methodology (SOL Methodology).
Evidence IROLs for the entity's Reliability Coordinator Area have been established in accordance with entity's SOL Methodology.

**Registered Entity Evidence (Required):**

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

**Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):**


**Compliance Assessment Approach Specific to FAC-014-3, R1**

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

Verify the entity has established IROLs for its Reliability Coordinator Area in accordance with its SOL Methodology.
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**Note to Auditor:**

**Auditor Notes:**

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**R2 Supporting Evidence and Documentation**

- R2.** Each Transmission Operator shall establish System Operating Limits (SOLs) for its portion of the Reliability Coordinator Area in accordance with its Reliability Coordinator’s SOL Methodology.
  
- M2.** Acceptable evidence may include, but is not limited to, dated electronic or hard copy documentation to demonstrate that the Transmission Operator established SOLs in accordance with its Reliability Coordinator’s SOL Methodology.

**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 <sup>i</sup>:**

<b>Provide the following evidence, or other evidence to demonstrate compliance.</b>
Entity’s Reliability Coordinator’s System Operating Limit Methodology (SOL Methodology).
Evidence the entity established SOLs in accordance with its Reliability Coordinator’s SOL Methodology.

**Registered Entity Evidence (Required):**

<b>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.</b>					
File Name	Document Title	Revision or Version	Document Date	Relevant Page(s) or Section(s)	Description of Applicability of Document

**Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):**


**Compliance Assessment Approach Specific to FAC-014-3, R2**

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

	Verify the entity has established SOLs in accordance with its Reliability Coordinator’s SOL Methodology.
<b>Note to Auditor:</b>	

**Auditor Notes:**

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**R3 Supporting Evidence and Documentation**

- R3.** The Transmission Operator shall provide its SOLs to its Reliability Coordinator in accordance with its Reliability Coordinator’s SOL Methodology.
  
- M3.** Acceptable evidence may include, but is not limited to, dated electronic or hard copy documentation to demonstrate that the Transmission Operator provided its SOLs in accordance with its Reliability Coordinator’s SOL Methodology.

**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 <sup>i</sup>:**

<b>Provide the following evidence, or other evidence to demonstrate compliance.</b>
Entity’s Reliability Coordinator’s System Operating Limit Methodology (SOL Methodology).
Evidence SOLs were provided to the entity’s Reliability Coordinator in accordance with the Reliability Coordinator’s SOL Methodology.

**Registered Entity Evidence (Required):**

**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

**Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):**


**Compliance Assessment Approach Specific to FAC-014-3, R3**

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

	Verify the entity provided its SOLs to its Reliability Coordinator in accordance with the Reliability Coordinator’s SOL Methodology.
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**Note to Auditor:**

**Auditor Notes:**

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**R4 Supporting Evidence and Documentation**

- R4.** Each Reliability Coordinator shall establish stability limits to be used in operations when the limit impacts more than one Transmission Operator in its Reliability Coordinator Area in accordance with its SOL Methodology.
  
- M4.** Acceptable evidence may include, but is not limited to, dated electronic or hard copy documentation to demonstrate that the Reliability Coordinator established stability limits in accordance with Requirement R4.

**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 <sup>1</sup>:**

<b>Provide the following evidence, or other evidence to demonstrate compliance.</b>
Entity's System Operating Limit Methodology (SOL Methodology).
Evidence entity established stability limits to be used in operations when the limit impacts more than one Transmission Operator in its Reliability Coordinator Area in accordance with entity's SOL Methodology.

**Registered Entity Evidence (Required):**

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

**Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):**


**Compliance Assessment Approach Specific to FAC-014-3, R4**

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

	Verify the entity established stability limits to be used in operations when the limit impacts more than one Transmission Operator in its Reliability Coordinator Area in accordance with entity's SOL Methodology.
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**Note to Auditor:**

**Auditor Notes:**

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**R5 Supporting Evidence and Documentation**

**R5.** Each Reliability Coordinator shall provide:

**5.1.** Each Planning Coordinator within its Reliability Coordinator Area, SOLs for its Reliability Coordinator Area (including the subset of SOLs that are IROLs) at least once every twelve calendar months.

**5.2.** Each impacted Planning Coordinator within its Reliability Coordinator Area, the following information for each established stability limit and each established IROL at least once every twelve calendar months:

**5.2.1** The value of the stability limit or IROL;

**5.2.2.** Identification of the Facilities that are critical to the derivation of the stability limit or IROL;

**5.2.3.** The associated IROL  $T_v$  for any IROL;

**5.2.4.** The associated Contingency(ies); and

**5.2.5.** The type of limitation represented by the stability limit or IROL (e.g., voltage collapse, angular stability).

**5.3.** Each impacted Transmission Operator within its Reliability Coordinator Area, the value of the stability limits established pursuant to Requirement R4 and each IROL established pursuant to Requirement R1, in an agreed upon time frame necessary for inclusion in the Transmission Operator's Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.

**5.4.** Each impacted Transmission Operator within its Reliability Coordinator Area, the information identified in Requirement R5 Parts 5.2.2 - 5.2.5 for each established stability limit or each IROL, and any updates to that information within an agreed upon time frame necessary for inclusion in the Transmission Operator's Operational Planning Analyses.

**5.5.** Each requesting Transmission Operator within its Reliability Coordinator Area, requested SOL information for its Reliability Coordinator Area, on a mutually agreed upon schedule.

**M5.** Acceptable evidence may include, but is not limited to, dated electronic or hard copy documentation to demonstrate that the Reliability Coordinator provided the information in accordance with Requirement R5.

**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 <sup>i</sup>:**

<b>Provide the following evidence, or other evidence to demonstrate compliance.</b>
Evidence the entity provided SOLs for Reliability Coordinator Area (including the subset of SOLs that are IROLs) to each Planning Coordinator within its Reliability Coordinator Area at least once every twelve calendar months.
Evidence the entity provided the information specified in Parts 5.2.1 – 5.2.5 for each established stability limit and each established IROL to each impacted Planning Coordinator within its Reliability Coordinator Area at least once every twelve calendar months.
Evidence the entity provided the value of the stability limits established pursuant to Requirement R4 and each

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IROL established pursuant to Requirement R1, in an agreed upon time frame necessary for inclusion in the Transmission Operator's Operational Planning Analyses, Real-time monitoring, and Real-time Assessments, to each impacted Transmission Operator within its Reliability Coordinator Area.

Evidence the entity provided the information identified in Requirement R5 Parts 5.2.2 - 5.2.5 for each established stability limit or each IROL, and any updates to that information within an agreed upon time frame necessary for inclusion in the Transmission Operator's Operational Planning Analyses, to each impacted Transmission Operator within its Reliability Coordinator Area.

Evidence the entity provided requested SOL information for its Reliability Coordinator Area, on a mutually agreed upon schedule, to each requesting Transmission Operator within its Reliability Coordinator Area.

**Registered Entity Evidence (Required):**

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

**Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):**


**Compliance Assessment Approach Specific to FAC-014-3, R5**

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

	(5.1) Verify the entity provided SOLs for its Reliability Coordinator Area (including the subset of SOLs that are IROLs) to each Planning Coordinator within its Reliability Coordinator Area at least once every twelve calendar months.
	(5.2) Verify the entity provided the following information for each established stability limit and each established IROL to each impacted Planning Coordinator within its Reliability Coordinator Area at least once every twelve calendar months:
	(5.2.1) The value of the stability limit or IROL
	(5.2.2) Identification of the Facilities that are critical to the derivation of the stability limit or IROL;
	(5.2.3) The associated IROL T <sub>v</sub> for any IROL;
	(5.2.4) The associated Contingency(ies); and
	(5.2.5) The type of limitation represented by the stability limit or IROL (e.g., voltage collapse, angular stability).
	(5.3) Verify the entity provided the value of the stability limits established pursuant to Requirement R4 and each IROL established pursuant to Requirement R1, in an agreed upon time frame necessary for inclusion in the Transmission Operator's Operational Planning Analyses, Real-time monitoring, and Real-

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	time Assessments, to each impacted Transmission Operator within its Reliability Coordinator Area.
	(5.4) Verify the entity provided the information identified in Requirement R5 Parts 5.2.2 - 5.2.5 for each established stability limit or each IROL, and any updates to that information within an agreed upon time frame necessary for inclusion in the Transmission Operator's Operational Planning Analyses, to each impacted Transmission Operator within its Reliability Coordinator Area.
	(5.5) Verify the entity provided each requesting Transmission Operator within its Reliability Coordinator Area, requested SOL information for its Reliability Coordinator Area, on a mutually agreed upon schedule.
<b>Note to Auditor:</b>	

**Auditor Notes:**

<p style="text-align: center; font-size: 48px; opacity: 0.2; transform: rotate(-30deg);">DRAFT</p>
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**R6 Supporting Evidence and Documentation**

**R6.** Each Reliability Coordinator that is impacted by an IROL shall provide Transmission Owners and Generation Owners within its Reliability Coordinator Area a list of Facilities owned by that entity that are critical to the derivation of the IROL.

**M6.** Acceptable evidence may include, but is not limited to, dated electronic or hard copy documentation to demonstrate that the Reliability Coordinator provided the list of Facilities in accordance with Requirement R6.

**Registered Entity Response (Required):**

**Question:** Is the entity impacted by IROL(s)?  Yes  No

If Yes, provide a list of IROL(s) for which the entity is impacted. If No, explain how the entity made this determination.

[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 Requested <sup>i</sup>:**

<b>Provide the following evidence, or other evidence to demonstrate compliance.</b>
A list of Facilities that are critical to the derivation of each IROL, including identification of the Transmission Owner or Generator Owner that owns each Facility.
Evidence the entity provided Transmission Owners and Generation Owners within its Reliability Coordinator Area a list of Facilities owned by that entity that are critical to the derivation of the IROL.

**Registered Entity Evidence (Required):**

<b>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.</b>					
File Name	Document Title	Revision or Version	Document Date	Relevant Page(s) or Section(s)	Description of Applicability of Document

**Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):**

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**Compliance Assessment Approach Specific to FAC-014-3, R6**

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

	For all, or sample of, Facilities that are critical to the derivation of an IROL, verify the entity provided Transmission Owners and Generation Owners within its Reliability Coordinator Area a list of Facilities owned by that entity that are critical to the derivation of the IROL.
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<b>Note to Auditor:</b>
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**Auditor Notes:**

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**Additional Information:**

**Reliability Standard**

*The RSAW developer should provide the following information without hyperlinks. Update the information below as appropriate.*

The full text of STD-OXX-N may be found on the NERC Web Site ([www.nerc.com](http://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 [If developer deems reference applicable]**

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 [Developer to ensure RSAW has been provided to NERC Legal for links to appropriate Regulatory Language – See example below]**

E.g. FERC Order No. 742 paragraph 34: “Based on NERC’s.....”

E.g. FERC Order No. 742 Paragraph 55, Commission Determination: “We affirm NERC’s.....”

**Selected Glossary Terms [If developer deems applicable]**

The following Glossary terms are provided for convenience only. Please refer to the NERC web site for the current enforceable terms.

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**Revision History for RSAW**

Version	Date	Reviewers	Revision Description
1	10/10/2017	NERC Compliance Assurance, RSAW Task Force	New Document

<sup>i</sup> 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.

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