

DRAFT Reliability Standard Audit Worksheet¹

FAC-011-4 - System Operating Limits Methodology for the Operations Horizon

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)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

	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						
R7						X						
R8						X						
R9						X						

Legend:

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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 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.

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

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Text entry area with Green background:	Entity-supplied information
Text entry area with white background:	Auditor-supplied information

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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			
R7			
R8			
R9			

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)

DRAFT

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R1 Supporting Evidence and Documentation

- R1.** Each Reliability Coordinator shall have a documented methodology for establishing SOLs (i.e., SOL methodology) within its Reliability Coordinator Area.
- M1.** Acceptable evidence may include, but is not limited to, dated electronic or hard copy documentation of its 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 Requested¹:

Provide the following evidence, or other evidence to demonstrate compliance.

Methodology for establishing SOLs (i.e., SOL methodology) within the entity's 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-011-4, R1

This section to be completed by the Compliance Enforcement Authority

Verify the entity has a methodology for establishing SOLs (i.e., SOL methodology) within the entity's Reliability Coordinator Area.

Note to Auditor:

Auditor Notes:

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R2 Supporting Evidence and Documentation

- R2.** Each Reliability Coordinator shall include in its SOL methodology the method for Transmission Operators to determine the applicable owner-provided Facility Ratings are to be used in operations such that the Transmission Operator and its Reliability Coordinator use common Facility Ratings.
- M2.** Acceptable evidence may include, but is not limited to, dated electronic or hard copy documentation of its SOL methodology that addresses the items listed in Requirement R2.

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:

Provide the following evidence, or other evidence to demonstrate compliance.
Methodology for establishing SOLs (i.e., SOL methodology) within the entity’s 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-011-4, R2

This section to be completed by the Compliance Enforcement Authority

	Verify the entity’s methodology for establishing SOLs (i.e., SOL methodology) includes the method for Transmission Operators to determine the applicable owner-provided Facility Ratings to be used in operations.
	Verify the method for Transmission Operators to determine the applicable owner-provided Facility Ratings are to be used in operations such that the Transmission Operator and its Reliability Coordinator use common Facility Ratings.

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Note to Auditor:

Auditor Notes:

DRAFT

R3 Supporting Evidence and Documentation

- R3.** Each Reliability Coordinator shall include in its SOL methodology the method for Transmission Operators to determine the System Voltage Limits to be used in operations. The method shall:
- 3.1.** Require that BES buses/stations have an associated System Voltage Limits, unless its SOL methodology specifically allows the exclusion of BES buses/stations from the requirement to have an associated System Voltage Limit;
 - 3.2.** Require that System Voltage Limits respect the Facility voltage Ratings;
 - 3.3.** Require that System Voltage Limits are greater than or equal to in-service BES relay settings for undervoltage load shedding systems and Undervoltage Load Shedding Programs;
 - 3.4.** Identify the lowest allowable System Voltage Limit;
 - 3.5.** Define the method for determining common System Voltage Limits between the Reliability Coordinator and its Transmission Operators, between adjacent Transmission Operators, and between adjacent Reliability Coordinators within an Interconnection.
- M3.** Acceptable evidence may include, but is not limited to, dated electronic or hard copy documentation of its SOL methodology that addresses the items listed 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 Requested¹:

Provide the following evidence, or other evidence to demonstrate compliance.
Methodology for establishing SOLs (i.e., SOL methodology) within the entity’s 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):

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Compliance Assessment Approach Specific to FAC-011-4, R3

This section to be completed by the Compliance Enforcement Authority

	Verify the entity’s SOL methodology includes the method for Transmission Operators to determine the System Voltage Limits to be used in operations.
	Verify the method for Transmission Operators to determine the System Voltage Limits to be used in operations:
	(3.1) Requires that BES buses/stations have an associated System Voltage Limits, unless its SOL methodology specifically allows the exclusion of BES buses/stations from the requirement to have an associated System Voltage Limit
	(3.2) Requires that System Voltage Limits respect the Facility voltage Ratings
	(3.3) Require that System Voltage Limits are greater than or equal to in-service BES relay settings for undervoltage load shedding systems and Undervoltage Load Shedding Programs
	(3.4) Identifies the lowest allowable System Voltage Limit
	(3.5) Defines the method for determining common System Voltage Limits between the Reliability Coordinator and its Transmission Operators, between adjacent Transmission Operators, and between adjacent Reliability Coordinators within an Interconnection
Note to Auditor:	

Auditor Notes:



R4 Supporting Evidence and Documentation

- R4.** Each Reliability Coordinator shall include in its SOL methodology the method for determining the stability limits to be used in operations. The method shall:
 - 4.1.** Specify stability performance criteria, including any margins applied. The criteria shall, at a minimum, include the following:
 - 4.1.1.** steady-state voltage stability;
 - 4.1.2.** transient voltage response;
 - 4.1.3.** angular stability; and
 - 4.1.4.** System damping.
 - 4.2.** Require that stability limits are established to meet the criteria specified in Part 4.1 for the Contingencies identified in Requirement R5 applicable to the establishment of stability limits that are expected to produce more severe System impacts on its portion of the BES.
 - 4.3.** Describe how the Reliability Coordinator establishes stability limits when there is an impact to more than one Transmission Operator in its Reliability Coordinator Area or other Reliability Coordinator Areas.
 - 4.4.** Describe how instability risks are identified, considering levels of transfers, Load and generation dispatch, and System conditions including any changes to System topology such as Facility outages.
 - 4.5.** Describe the level of detail that is required for the study model(s); including the portion modeled of the Reliability Coordinator Area, and the critical modeling details from other Reliability Coordinator Areas, necessary to determine different types of stability limits.
 - 4.6.** Describe the allowed uses of Remedial Action Schemes and other automatic post-Contingency mitigation actions in establishing stability limits used in operations.
 - 4.7.** State that the use of underfrequency load shedding (UFLS) programs and Undervoltage Load Shedding Programs are not allowed in the establishment of stability limits.
- M4.** Acceptable evidence may include, but is not limited to, dated electronic or hard copy documentation of its SOL methodology that addresses the items listed in 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 Requestedⁱ:

Provide the following evidence, or other evidence to demonstrate compliance.
Methodology for establishing SOLs (i.e., SOL methodology) within the entity’s 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.

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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-011-4, R4

This section to be completed by the Compliance Enforcement Authority

	Verify the entity’s SOL methodology includes the method for determining the stability limits to be used in operations.
	Verify the method for determining the stability limits to be used in operations:
	(4.1) Specifies stability performance criteria, including any margins applied, and includes at a minimum:
	(4.1.1) steady-state voltage stability;
	(4.1.2) transient voltage response;
	(4.1.3) angular stability; and
	(4.1.4) System damping.
	(4.2) Requires that stability limits are established to meet the criteria specified in Part 4.1 for the Contingencies identified in Requirement R5 applicable to the establishment of stability limits that are expected to produce more severe System impacts on its portion of the BES.
	(4.3) Describes how the Reliability Coordinator establishes stability limits when there is an impact to more than one Transmission Operator in its Reliability Coordinator Area or other Reliability Coordinator Areas.
	(4.4) Describes how instability risks are identified, considering levels of transfers, Load and generation dispatch, and System conditions including any changes to System topology such as Facility outages;
	(4.5) Describes the level of detail that is required for the study model(s); including the portion modeled of the Reliability Coordinator Area, and the critical modeling details from other Reliability Coordinator Areas, necessary to determine different types of stability limits.
	(4.6) Describes the allowed uses of Remedial Action Schemes and other automatic post-Contingency mitigation actions in establishing stability limits used in operations; the planned use of underfrequency load shedding (UFLS) is not allowed in the establishment of stability limits.
	(4.7) States that the use of underfrequency load shedding (UFLS) programs and Undervoltage Load Shedding Programs are not allowed in the establishment of stability limits.

Note to Auditor:

Auditor Notes:

R5 Supporting Evidence and Documentation

R5. Each Reliability Coordinator shall identify in its SOL methodology the set of Contingency events for use in performing Operational Planning Analysis (OPAs) and Real-time Assessments (RTAs). The SOL methodology for each set shall:

5.1. Specify the following single Contingency events:

5.1.1. Loss of any of the following either by single phase to ground or three phase Fault (whichever is more severe) with Normal Clearing, or without a Fault:

- generator;
- transmission circuit;
- transformer;
- shunt device; or
- single pole block in a monopolar or bipolar high voltage direct current system.

5.2. Specify additional single or multiple Contingency events or types of Contingency events, if any.

5.3. Describe the method(s) for identifying which, if any, of the Contingency events provided by the Planning Coordinator or Transmission Planner in accordance with FAC-014-3, Requirement R7 to use in determining stability limits.

M5. Acceptable evidence may include, but is not limited to, dated electronic or hard copy documentation of its SOL methodology that addresses the items listed in 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 ⁱ:

Provide the following evidence, or other evidence to demonstrate compliance.
Methodology for establishing SOLs (i.e., SOL methodology) within the entity’s 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
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Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):

Compliance Assessment Approach Specific to FAC-011-4, R5

This section to be completed by the Compliance Enforcement Authority

	Verify the SOL methodology includes identifying the set of Contingency events for use in performing Operational Planning Analysis (OPAs) and Real-time Assessments (RTAs).
	(5.1) Verify the SOL methodology for each set includes specification of the following single Contingency events:
	(5.1.1) Loss of any of the following either by single phase to ground or three phase Fault (whichever is more severe) with Normal Clearing, or without a Fault: <ul style="list-style-type: none"> • generator; • transmission circuit; • transformer; • shunt device; or • single pole block in a monopolar or bipolar high voltage direct current system.
	(5.2) Verify the SOL methodology for each set specifies additional single or multiple Contingency events or types of Contingency events, if any.
	(5.3) Verify the SOL methodology for each set describes the method(s) for identifying which, if any, of the Contingency events provided by the Planning Coordinator or Transmission Planner in accordance with FAC-014-3, Requirement R7 to use in determining stability limits.
Note to Auditor:	

Auditor Notes:

R6 Supporting Evidence and Documentation

- R6.** Each Reliability Coordinator shall include the following performance framework in its SOL methodology to determine SOL exceedances when performing Real-time monitoring, Real-time Assessments, and Operational Planning Analyses:
- 6.1.** System performance for no Contingencies demonstrates the following:
 - 6.1.1.** Steady state flow through Facilities are within Normal Ratings; however, Emergency Ratings may be used when System adjustments to return the flow within its Normal Rating could be executed and completed within the specified time duration of those Emergency Ratings.
 - 6.1.2.** Steady state voltages are within normal System Voltage Limits; however, emergency System Voltage Limits may be used when System adjustments to return the voltage within its normal System Voltage Limits could be executed and completed within the specified time duration of those emergency System Voltage Limits.
 - 6.1.3.** Predetermined stability limits are not exceeded.
 - 6.1.4.** Instability, Cascading or uncontrolled separation that adversely impact the reliability of the Bulk Electric System does not occur.³
 - 6.2.** System performance for the single Contingencies listed in Part 5.1 demonstrates the following:
 - 6.2.1.** Steady State post-Contingency flow through Facilities within applicable Emergency Ratings. Steady state post-Contingency flow through a Facility must not be above the Facility’s highest Emergency Rating.
 - 6.2.2.** Steady state post-Contingency voltages are within emergency System Voltage Limits.
 - 6.2.3.** The stability performance criteria defined in the Reliability Coordinator’s SOL methodology are met.³
 - 6.2.4.** Instability, Cascading or uncontrolled separation that adversely impact the reliability of the Bulk Electric System does not occur.³
 - 6.3.** System performance for applicable Contingencies identified in Part 5.2 demonstrates that: instability, Cascading, or uncontrolled separation that adversely impact the reliability of the Bulk Electric System does not occur.
 - 6.4.** In determining the System’s response to any Contingency identified in Requirement R5, planned manual load shedding is acceptable only after all other available System adjustments have been made.
- M6.** Acceptable evidence may include, but is not limited to, dated electronic or hard copy documentation of its SOL methodology that addresses the items listed in Requirement R6.

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 ¹:

Provide the following evidence, or other evidence to demonstrate compliance.

³ Stability evaluations and assessments of instability, Cascading, and uncontrolled separation can be performed using real-time stability assessments, predetermined stability limits or other offline analysis techniques.

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Methodology for establishing SOLs (i.e., SOL methodology) within the entity’s 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-011-4, R6

This section to be completed by the Compliance Enforcement Authority

	Verify the entity’s SOL methodology includes the following performance framework to determine SOL exceedances when performing Real-time monitoring, Real-time Assessments, and Operational Planning Analyses:
	(6.1) System performance for no Contingencies, and demonstration of items 6.1.1., 6.1.2., 6.1.3., and 6.1.4.
	(6.2) System performance for the single Contingencies listed in Part 5.1, and demonstration of items 6.2.1., 6.2.2., 6.2.3., and 6.2.4..
	(6.3) System performance for applicable Contingencies identified in Part 5.2, and demonstration that: instability, Cascading, or uncontrolled separation that adversely impact the reliability of the Bulk Electric System does not occur.
	(6.4) In determining the System’s response to any Contingency identified in Requirement R5, planned manual load shedding is acceptable only after all other available System adjustments have been made.

Note to Auditor:

Auditor Notes:

R7 Supporting Evidence and Documentation

- R7.** Each Reliability Coordinator shall include in its SOL methodology a risk-based approach for determining how SOL exceedances identified as part of Real-time monitoring and Real-time Assessments must be communicated and if so, the timeframe that communications must occur. The approach shall include:
- 7.1.** A requirement that the following SOL exceedances will always be communicated, within a timeframe identified by the Reliability Coordinator.
 - 7.1.1.** IROL exceedances;
 - 7.1.2.** SOL exceedances of stability limits;
 - 7.1.3.** Post-contingency SOL exceedances that are identified to have a validated risk of instability, Cascading Outages, and uncontrolled separation;
 - 7.1.4.** Pre-contingency SOL exceedances of Facility Ratings; and
 - 7.1.5.** Pre-contingency SOL exceedances of normal low System Voltage Limits.
 - 7.2.** A requirement that the following SOL exceedances must be communicated, if not resolved within 30 minutes, within a timeframe identified by the Reliability Coordinator.
 - 7.2.1.** Post-contingency SOL exceedances of Facility Ratings and emergency System Voltage limits, and
 - 7.2.2.** Pre-contingency SOL exceedances of normal high System Voltage Limits.
- M7.** Acceptable evidence may include, but is not limited to dated electronic or hard copy documentation of its SOL methodology that addresses the items listed in Requirement R7.

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 Requested¹:

Provide the following evidence, or other evidence to demonstrate compliance.
Methodology for establishing SOLs (i.e., SOL methodology) within the entity’s 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

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

Compliance Assessment Approach Specific to FAC-011-4, R7

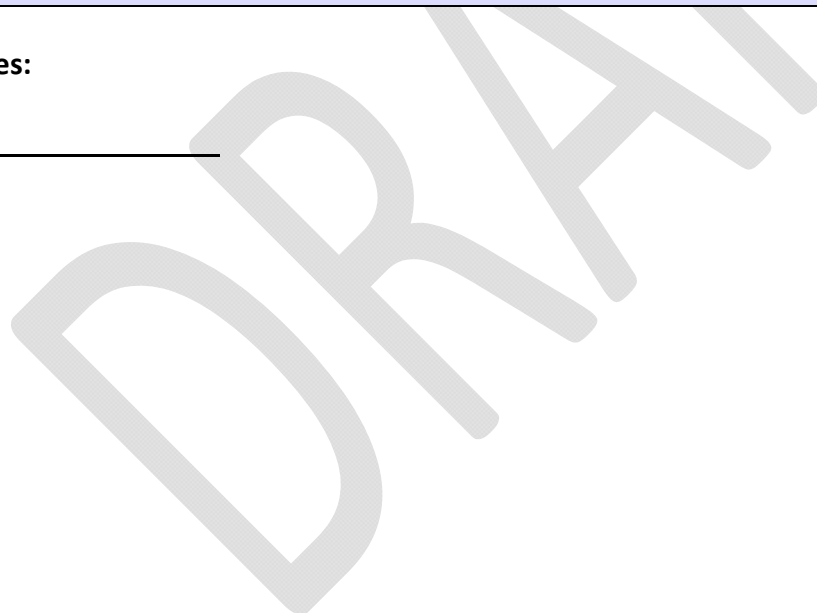
This section to be completed by the Compliance Enforcement Authority

	Verify the entity’s SOL methodology includes the risk based approach for Transmission Operators to communicate SOL exceedances identified as part of Real-time monitoring and Real-time Assessments to its Reliability Coordinator(s).
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	Verify the entity’s SOL methodology includes the risk based approach for Reliability Coordinators to communicate SOL exceedances identified as part of Real-time monitoring and Real-time Assessments to its affected Transmission Operator(s).
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Note to Auditor: The approach for R7.1 must be communicated and thus must have a timeframe identified that communications must occur. The approach for R7.2, for SOL exceedances identified as part of 7.2.1 and 7.2.2. that have not been resolved within 30 minutes, must have a timeframe identified that communications must occur.

Auditor Notes:



R8 Supporting Evidence and Documentation

- R8.** Each Reliability Coordinator shall include in its SOL methodology:
- 8.1.** A description of how to identify the subset of SOLs that qualify as Interconnection Reliability Operating Limits (IROLs).
 - 8.2.** Criteria for determining when exceeding a SOL qualifies as exceeding an IROL and criteria for developing any associated IROL Tv.
- M8.** Acceptable evidence may include, but is not limited to, dated electronic or hard copy documentation of its SOL methodology that addresses the items listed in Requirement R8.

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 Requested¹:

Provide the following evidence, or other evidence to demonstrate compliance.
Methodology for establishing SOLs (i.e., SOL methodology) within the entity’s 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-011-4, R8

This section to be completed by the Compliance Enforcement Authority

Verify the entity’s SOL methodology includes a description of how to identify the subset of SOLs that qualify as Interconnection Reliability Operating Limits (IROLs).
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	Verify the entity's SOL methodology includes criteria for determining when exceeding a SOL qualifies as exceeding an IROL and criteria for developing any associated IROL Tv.
Note to Auditor:	

Auditor Notes:

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R9 Supporting Evidence and Documentation

- R9.** Each Reliability Coordinator shall provide its SOL methodology to:
- 9.1.** Each Reliability Coordinator that requests and indicates it has a reliability-related need within 30 days of a request.
 - 9.2.** Each of the following entities prior to the effective date of the SOL methodology:
 - 9.2.1.** Each adjacent Reliability Coordinator within the same Interconnection;
 - 9.2.2.** Each Planning Coordinator and Transmission Planner that is responsible for planning any portion of the Reliability Coordinator Area;
 - 9.2.3.** Each Transmission Operator within its Reliability Coordinator Area; and
 - 9.2.4.** Each Reliability Coordinator that has requested to receive updates and indicated it had a reliability-related need.
- M9.** Acceptable evidence may include, but is not limited to, dated electronic or hard copy documentation such as emails with receipts, registered mail receipts, or postings to a secure web site with accompanying notification(s).

Registered Entity Response (Required):

Question: Has the entity made any changes to its SOL methodology during the audit period that modify the effective date of the SOL methodology? Yes No

If Yes, provide a list of changes including the date the change became effective. 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.]

Question: Has the entity received a request for its SOL methodology from a Reliability Coordinator that indicated it has a reliability-related need for the SOL methodology? Yes No

If Yes, provide a list of requests received. 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 Requested¹:

Provide the following evidence, or other evidence to demonstrate compliance.
Methodology for establishing SOLs (i.e., SOL methodology) within the entity’s Reliability Coordinator Area.
Evidence the SOL methodology and any changes to the SOL methodology were provided to each adjacent Reliability Coordinator within an Interconnection, and each Reliability Coordinator that requests and indicates

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it has a reliability-related need.
Evidence the SOL methodology and any changes to the SOL methodology were provided to each Planning Coordinator and Transmission Planner that is responsible for planning any portion of the Reliability Coordinator Area.
Evidence the SOL methodology and any changes to the SOL methodology were provided to each Transmission Operator within the entity’s 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-011-4, R9

This section to be completed by the Compliance Enforcement Authority

	(9.1) Verify that the entity provided its SOL methodology to each Reliability Coordinator that requested and indicated it had a reliability-related need within 30 days of a request.
	(9.2.1) Verify entity provided, prior to the effective date of the SOL methodology, its SOL methodology to each adjacent Reliability Coordinator within the same Interconnection.
	(9.2.2) Verify entity provided, prior to the effective date of the SOL methodology, its SOL methodology to each Planning Coordinator and Transmission Planner that is responsible for planning any portion of the Reliability Coordinator Area.
	(9.2.3) Verify entity provided, prior to the effective date of the SOL methodology, its SOL methodology to each Transmission Operator within its Reliability Coordinator Area.
	(9.2.4) Verify entity provided, prior to the effective date of the SOL methodology, its SOL methodology to each Reliability Coordinator that has requested to receive updates and indicated it had a reliability-related need.
Note to Auditor: 30 days will be interpreted as 30 “calendar” days since “business” days was not identified as a qualifier.	

Auditor Notes:

Additional Information:

Reliability Standard

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

The full text of FAC-011-4-N 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 [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.

DRAFT NERC Reliability Standard Audit Worksheet

Revision History for RSAW

Version	Date	Reviewers	Revision Description
1	XX/XX/XXXX	RSAW Working Group	New Document

Revision History for RSAW Template

Version	Date	Reviewers	Revision Description
0.9	11/6/2013	RSAW Working Group	Initial Draft
1.0	11/20/2013	CMFG	First Review
1.1	12/1/2014	RSAW TF, CMFG	Minor text changes
1.2	2/17/2014	Jerry Hedrick	Removed Internal Controls approach for additional consideration
1.3	4/9/2014	CIP-014-1 RSAW DT; RSAW TF	Changed the footnote on Evidence Requested to an Endnote. Moved example language from multiple areas to Developer's Guide.
3.0	1/20/2017		Deleted IA, LSE, PSE columns from Applicability; changed PA column to PA/PC. Updated page footer with new template version.
4.0	7/7/2020	NERC Compliance Assurance, RSAW Task Force	Updated for draft 3 on the project page

ⁱ 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.