

Standard Authorization Request (SAR)

Complete and please email this form, with attachment(s) to: sarcomm@nerc.net

The North American Electric Reliability Corporation (NERC) welcomes suggestions to improve the reliability of the bulk power system through improved Reliability Standards.

Requested information			
SAR Title:	Critical Infrastructure Protection (CIP) Reliability Standard CIP-002-5.1a – Cyber Security – BES Cyber System Categorization		
Date Submitted:	April 24, 2018		
SAR Requester			
Name:	Jordan Mallory		
Organization:	NERC		
Telephone:	404.446.2589	Email:	Jordan.mallory@nerc.net
SAR Type (Check as many as apply)			
<input type="checkbox"/> New Standard	<input type="checkbox"/> Imminent Action/ Confidential Issue (SPM Section 10)	<input type="checkbox"/> Variance development or revision	<input type="checkbox"/> Other (Please specify)
<input checked="" type="checkbox"/> Revision to Existing Standard			
<input type="checkbox"/> Add, Modify or Retire a Glossary Term			
<input type="checkbox"/> Withdraw/retire an Existing Standard			
Justification for this proposed standard development project (Check all that apply to help NERC prioritize development)			
<input type="checkbox"/> Regulatory Initiation	<input type="checkbox"/> NERC Standing Committee Identified	<input checked="" type="checkbox"/> Enhanced Periodic Review Initiated	<input type="checkbox"/> Industry Stakeholder Identified
<input type="checkbox"/> Emerging Risk (Reliability Issues Steering Committee) Identified			
<input type="checkbox"/> Reliability Standard Development Plan			
Industry Need (What Bulk Electric System (BES) reliability benefit does the proposed project provide?):			
<p>The purpose of this SAR is to transfer an issue currently within the scope of Project 2015-09 (Establish and Communicate System Operating Limits) to Project 2016-02 (Modifications to CIP Standards). Transferring the issue to Project 2016-02 will simplify the standards development process for stakeholders such that only one standard drafting team (SDT) is modifying Reliability Standard CIP-002, as explained below.</p> <p>As set out in its associated SAR, the purpose of Project 2015-09 is to revise the requirements in the Facilities Design, Connections, and Maintenance (FAC) group of standards for determining and communicating System Operating Limits (SOLs) to eliminate overlap with approved Transmission Planning (TPL) requirements, enhancing consistency with Transmission Operations (TOP) and Interconnection Reliability Operations (IRO) standards, and addressing issues with determining and communicating SOLs and Interconnection Reliability Operating Limits (IROLs).</p>			

Requested information

As relevant to this SAR, the SDT for Project 2015-09 is proposing to retire FAC-010-3 to eliminate overlap between the FAC standards and Reliability Standard TPL-001-4. With the retirement of FAC-010-3, Planning Coordinators and Transmission Planners would no longer be required to have a System Operating Limit (SOL) methodology to identify SOLs and IROLs.

Reliability Standard CIP-002-5.1a (Impact Rating Criterion 2.6 in Attachment 1), however, references IROLs identified by Planning Coordinators and Transmission Planners. The Project 2015-09 SDT concluded that there is a need to modify CIP-002-5.1a to account for the retirement of FAC-010-3 and the elimination of a requirement for planners to identify SOLs and IROLs. The Project 2015-09 SDT developed draft language to replace the reference to such IROLs in Criterion 2.6 with other language that would allow Planning Coordinators and Transmission Planners to identify Facilities that otherwise do not meet the criteria in Section 2 of Attachment 1 but pose a higher risk to reliability such that its BES Cyber Systems should be protected as Medium Impact. In addition, the Project 2015-09 SDT recommends revising the IROLs reference in Impact Rating Criterion 2.9 in Attachment 1 to CIP-002-5.1a.

Because the Project 2016-02 SDT is already modifying CIP-002-5.1a, this SAR would provide the Project 2016-02 SDT the authority to include the revisions provided by the Project 2015-09 SDT into the draft of CIP-002 to consolidate the comment period and ballot. The consolidated approach will avoid any confusion of having each SDT post the same standard for separate comment periods and ballots with different sets of changes.

Purpose or Goal (How does this proposed project provide the reliability-related benefit described above?):

For the reasons discussed above, with the proposed retirement of FAC-010-3, the Project 2015-09 SDT identified a need to modify CIP-002-5.1a.

Project Scope (Define the parameters of the proposed project):

The Project 2016-02 SDT, which is currently making modifications to CIP-002-5.1a, will include modifications to the IROL language located in the Impact Rating Criteria of the CIP-002-5.1a provided by the Project 2015-09 SDT.

Detailed Description (Describe the proposed deliverable(s) with sufficient detail for a drafting team to execute the project. If you propose a new or substantially revised Reliability Standard or definition, provide: (1) a technical justification¹ which includes a discussion of the reliability-related benefits of developing a new or revised Reliability Standard or definition, and (2) a technical foundation document (e.g. research paper) to guide development of the Standard or definition):

The Project 2015-09 SDT is proposing to revise the SOL/IROL-related FAC standards to reflect the notion that SOLs and IROLs should be developed and used in the operations horizon and not the planning horizon. To that end, the Project 2015-09 SDT proposes to retire the FAC-010-3 Reliability Standard, eliminating the requirement for Planning Coordinators to have a methodology for establishing SOLs for

¹ The NERC Rules of Procedure require a technical justification for new or substantially revised Reliability Standards. Please attach pertinent information to this form before submittal to NERC.

Requested information

use in the planning horizon, as well as the corresponding requirements in the FAC-014-2 Reliability Standard related to the establishment and communication of planning horizon SOLs and IROLs.

The Project 2015-09 SDT reviewed the Reliability Standards that this proposed change would impact and determined to propose corresponding changes to those standards. Among others, the Project 2015-09 SDT identified CIP-002-5.1a, Attachment 1, Criteria 2.6 and 2.9 as requiring modifications. The Project 2015-09 SDT proposes the following changes:

- 2.6.** Generation at a single plant location or Transmission Facilities at a single station or substation location that are identified by its ~~Reliability Coordinator~~, Planning Coordinator, or Transmission Planner as ~~critical to the derivation of Interconnection Reliability Operating Limits (IROLs)an element of each Contingency event included in the Planning Assessment that result in System instability, Cascading, or uncontrolled separation and their associated contingencies.~~
- 2.9.** Each Remedial Action Scheme (RAS) or automated switching System that operates BES Elements, that, if destroyed, degraded, misused or otherwise rendered unavailable, would ~~result in System instability, Cascading or uncontrolled separationcause one or more Interconnection Reliability Operating Limits (IROLs) violations for failure to operate as designed or cause a reduction in one or more IROLs if destroyed, degraded, misused, or otherwise rendered unavailable.~~

More information on the rationale for the revisions proposed by the FAC SDT is located on the [Project 2015-09 project page](#).

Cost Impact Assessment, if known (Provide a paragraph describing the potential cost impacts associated with the proposed project):

No additional cost outside of the time and resources needed to serve on the SDT are expected. However, a question will be asked during the SAR comment period to ensure all aspects are considered.

Please describe any unique characteristics of the BES facilities that may be impacted by this proposed standard development project (e.g. Dispersed Generation Resources):

None

To assist the NERC Standards Committee in appointing a drafting team with the appropriate members, please indicate to which Functional Entities the proposed standard(s) should apply (e.g. Transmission Operator, Reliability Coordinator, etc. See the most recent version of the NERC Functional Model for definitions):

Balancing Authority, certain Distribution Providers, Generator Operator, Generator Owner, Reliability Coordinator, Transmission Operator, Transmission Owner

Requested information
Do you know of any consensus building activities ² in connection with this SAR? If so, please provide any recommendations or findings resulting from the consensus building activity.
No consensus building has been completed to date, although the subject of this SAR has been developed by the Project 2015-09 SDT under its SAR.
Are there any related standards or SARs that should be assessed for impact as a result of this proposed project? If so which standard(s) or project number(s)?
The Project 2016-02 SDT is currently working on addressing Federal Energy Regulatory Commission directives and the issues identified in the Version 5 Transition Advisory Group document as set forth in its associated SAR .
Are there alternatives (e.g. guidelines, white paper, alerts, etc.) that have been considered or could meet the objectives? If so, please list the alternatives.

NA

Reliability Principles	
Does this proposed standard development project support at least one of the following Reliability Principles (Reliability Interface Principles)? Please check all those that apply.	
<input checked="" type="checkbox"/>	1. Interconnected bulk power systems shall be planned and operated in a coordinated manner to perform reliably under normal and abnormal conditions as defined in the NERC Standards.
<input type="checkbox"/>	2. The frequency and voltage of interconnected bulk power systems shall be controlled within defined limits through the balancing of real and reactive power supply and demand.
<input checked="" type="checkbox"/>	3. Information necessary for the planning and operation of interconnected bulk power systems shall be made available to those entities responsible for planning and operating the systems reliably.
<input type="checkbox"/>	4. Plans for emergency operation and system restoration of interconnected bulk power systems shall be developed, coordinated, maintained and implemented.
<input type="checkbox"/>	5. Facilities for communication, monitoring and control shall be provided, used and maintained for the reliability of interconnected bulk power systems.
<input type="checkbox"/>	6. Personnel responsible for planning and operating interconnected bulk power systems shall be trained, qualified, and have the responsibility and authority to implement actions.
<input type="checkbox"/>	7. The security of the interconnected bulk power systems shall be assessed, monitored and maintained on a wide area basis.
<input type="checkbox"/>	8. Bulk power systems shall be protected from malicious physical or cyber attacks.

Market Interface Principles	
Does the proposed standard development project comply with all of the following Market Interface Principles ?	Enter (yes/no)
1. A reliability standard shall not give any market participant an unfair competitive advantage.	yes
2. A reliability standard shall neither mandate nor prohibit any specific market structure.	yes

² Consensus building activities are occasionally conducted by NERC and/or project review teams. They typically are conducted to obtain industry inputs prior to proposing any standard development project to revise, or develop a standard or definition.

Market Interface Principles	
3. A reliability standard shall not preclude market solutions to achieving compliance with that standard.	yes
4. A reliability standard shall not require the public disclosure of commercially sensitive information. All market participants shall have equal opportunity to access commercially non-sensitive information that is required for compliance with reliability standards.	yes

Identified Existing or Potential Regional or Interconnection Variances	
Region(s)/ Interconnection	Explanation
NA	

For Use by NERC Only

SAR Status Tracking (Check off as appropriate)	
<input checked="" type="checkbox"/> Draft SAR reviewed by NERC Staff	<input type="checkbox"/> Final SAR endorsed by the SC
<input type="checkbox"/> Draft SAR presented to SC for acceptance	<input type="checkbox"/> SAR assigned a Standards Project by NERC
<input type="checkbox"/> DRAFT SAR approved for posting by the SC	<input type="checkbox"/> SAR denied or proposed as Guidance document

Version History

Version	Date	Owner	Change Tracking
1	June 3, 2013		Revised
1	August 29, 2014	Standards Information Staff	Updated template
2	January 18, 2017	Standards Information Staff	Revised
2	June 28, 2017	Standards Information Staff	Updated template