Standard Authorization Request (SAR)

Complete and submit this form, with attachment(s) to the NERC Help Desk. Upon entering the Captcha, please type in your contact information, and attach the SAR to your ticket. Once submitted, you will receive a confirmation number which you can use to track your request.

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:	Extreme Cold Weather Preparedness		
Date Submitted:	September 20, 2019		
SAR Requester			
Name:	Michael Desselle, VP Process Integrity/Chief Compliance and Administrative Officer		
Organization:	Southwest Power Pool, Inc.		
Telephone:	(501) 614-3206	Email:	mdesselle@spp.org
SAR Type (Check as many as apply)			
☒ New Standard ☒ Revision to Existing Standard ☐ Add, Modify or Retire a Glossary Term ☐ Withdraw/retire an Existing Standard		☐ Imminent Action/ Confidential Issue (SPM Section 10) ☐ Variance development or revision ☐ Other (Please specify)	
Justification for this proposed standard development project (Check all that apply to help NERC prioritize development)			
☒ Regulatory Initiation ☐ Emerging Risk (Reliability Issues Steering Committee) Identified ☐ Reliability Standard Development Plan		☐ NERC Standing Committee Identified ☐ Enhanced Periodic Review Initiated ☒ Industry Stakeholder Identified	
Industry Need (What Bulk Electric System (BES) reliability benefit does the proposed project provide?):			
To enhance the reliability of the BES during cold weather events by ensuring Generator Owners, Generator Operators, Reliability Coordinators, and Balancing Authorities prepare for extreme cold weather conditions.			
Purpose or Goal (How does this proposed project provide the reliability-related benefit described above?):			
To ensure optimal reliability by preparing generation for extreme cold weather performance and ensure situational awareness in both planning and operations by applicable registered entities.			
Project Scope (Define the parameters of the proposed project):			
The project scope will address Recommendation 1 in the 2019 FERC and NERC Staff Report: The South-Central United States Cold Weather BES Event of January 17, 2018; and will include the development of			

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a new or revised NERC Reliability Standard to consider such activities as winterization activities on generating units, winter-specific and plant-specific operator awareness training, and processes to ensure situational awareness for the registered functions.
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 justification[1] 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):
Technical justification can be found in the findings and recommendations contained in the *2019 FERC and NERC Staff Report: The South Central United States Cold Weather Bulk Electric System Event of January 17, 2018*, July 2019 at the following link: https://www.ferc.gov/legal/staff-reports/2019/07-18-19-ferc-nerc-report.pdf. The deliverable will be new or revised Reliability Standards to promote reliability of the BES during extreme cold weather. 1. Generator Owner/Generator Operator develops winterization plans, procedures, and winter-specific and plant-specific operator awareness training. Additional elements to consider may include: a. Generating unit availability; b. Parameters around operating temperatures; c. Implementing freeze protection measures and technologies; d. Performing periodic adequate maintenance and inspection of freeze protection measures and technologies; and e. Ensuring gas-fueled generating units' Reliability Coordinator and Balancing Authority are provided notification of firm transportation capacity for natural gas supply. 2. Generator Owner/Generator Operator communicates with the Balancing Authorities and Reliability Coordinators associated parameters for generating unit availability for extreme cold weather performance. 3. Generator Owners/Generator Operator communicates with the Balancing Authorities and Reliability Coordinators when expected temperatures are forecasted within the determined generating unit availabilities, expected availability of the generating units for the appropriate next day operating horizon. 4. Balancing Authority use of the information provided by the Generator Owner/Generator Operator to perform Operational Planning Analysis, and determine the expected availability and contingency reserves for the appropriate next day operating horizon.

[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
Cost Impact Assessment, if known (Provide a paragraph describing the potential cost impacts associated with the proposed project):
Cost impact is unknown. However, a question should 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):
Each BES facility considered here may have numerous unique characteristics based on factors such as construction, technical configuration, geographic differences, etc. The substantive differences may require flexibility for each generation resource to develop the appropriate plans to implement during extreme cold weather events.
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, Generator Operator, Generator Owner, Reliability Coordinator
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.
The *2019 FERC and NERC Staff Report: The South Central United States Cold Weather Bulk Electric System Event of January 17, 2018*, July 2019 was publicly noticed and shared with regulators and industry.
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)?

[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.

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The proposed deliverables, as well as other proposed requirements applicable to Generator Owners, Generator Operators, Balancing Authorities and Reliability Coordinators, that may result from this project should be reviewed to ensure any conflicts or overlap with current requirements are mitigated. For example, IRO-010-2 and TOP-003-3 may address some of these aspects already. These standards require the Reliability Coordinator (IRO-010-2) and Balancing Authority (TOP-003-3) to maintain documented data specifications that include a list of data and information they need to support the Operational Planning Analyses, Real-time monitoring, and Real-time Assessments. Applicable Registered Entities, which include Transmission Operators, Balancing Authorities, Generator Operators, Generator Owners, Transmission Owners, and Distribution Providers, are then required to provide the data per the data specifications.
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.
A number of recommendations contained in the following FERC and NERC reports could be utilized by the standard drafting team: *2019 FERC and NERC Staff Report: The South Central United States Cold Weather Bulk Electric System Event of January 17, 2018*, July 2019 *Polar Vortex Review*, September 2014 *Report on Outages and Curtailments During the Southwest Cold Weather Event of February 1-5, 2011: Causes and Recommendations,* August 2011

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.	
☒	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.
☒	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.
☒	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.
☒	4. Plans for emergency operation and system restoration of interconnected bulk power systems shall be developed, coordinated, maintained, and implemented.

Reliability Principles	
☒	5. Facilities for communication, monitoring, and control shall be provided, used and maintained for the reliability of interconnected bulk power systems.
☐	6. Personnel responsible for planning and operating interconnected bulk power systems shall be trained, qualified, and have the responsibility and authority to implement actions.
☐	7. The security of the interconnected bulk power systems shall be assessed, monitored, and maintained on a wide area basis.
☐	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
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
None	

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SAR Status Tracking (Check off as appropriate).	
☐ Draft SAR reviewed by NERC Staff ☐ Draft SAR presented to SC for acceptance ☐ DRAFT SAR approved for posting by the SC	☐ Final SAR endorsed by the SC ☐ SAR assigned a Standards Project by NERC ☐ 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
3	February 22, 2019	Standards Information Staff	Added instructions to submit via Help Desk