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For questions about this form or for assistance in completing the form, call Laura Hussey at 404-446-2579.

# **Standard Authorization Request Form**

Title of Proposed Standard Winter Weather Preparations				
Request Date				
SC Approval Date				
SAR Requester Information	SAR Type (Check a box for each one that applies.)			
Name Salt River Project Electric Reliability Compliance Department	New Standard			
Primary Contact Sara McCoy	Revision to existing Standard EOP-001-2b			
Telephone (602) 236-3941 Fax (602) 236-3896	☐ Withdrawal of existing Standard			
E-mail Sara.McCoy@SRPnet.com	☐ Urgent Action			

**Purpose** (Describe what the standard action will achieve in support of bulk power system reliability.)

- 1. Report generating unit capabilities based on anticipated winter weather events.
- 2. Increase reliability of generating units during winter weather events.

**Industry Need** (Provide a justification for the development or revision of the standard, including an assessment of the reliability and market interface impacts of implementing or not implementing the standard action.)

Repeated occurrences of generation shortfall in winter weather conditions in the southern US states indicate that institutionalization of extreme weather preparation and reporting of generation availability is needed.

During the 2011 SW Cold Weather event, load shed was required to meet the demand due to loss of generation. During this weather event, cold weather conditions froze critical plant instrument sensors and equipment, causing generation to trip offline or not be able to come online to generate electricity when it was critically needed. Simultaneously, BAs and TOPs were basing their operations and operations planning on uncertain generation availabilities and capacities from the GO/GOPs because the data available to them did not include availability based on severe winter weather. This uncertain information caused the BA and TOP to over-estimate the available generation, which resulted in the need to use load shedding to balance the actual available generation and load. Based on the FERC-NERC report of the Southwest Cold Weather Event of February 1-5, 2011, in many cases generation plants did not effectively utilize their cold weather maintenance practices that were in place to reliably perform under severe winter weather conditions. During the critical load time, many plants were in the mode of having to unfreeze equipment and make weather proofing modifications in real time to keep plant equipment from freezing or refreezing. This subsequently caused generation to not be available during critical peak times, causing the GO/GOPs, BA and TOP to be unaware of the state of the generation resources. In the FERC-NERC report of the Southwest Cold Weather Event of February 1-5, 2011, NERC staff has concluded there would be a reliability benefit from amending the EOP Reliability Standards to require Generator Owner/Operators to develop, maintain, and implement plans to winterize plants and units prior to extreme cold weather, in order to maximize generator output and availability.

**Brief Description** (Provide a paragraph that describes the scope of this standard action.)

- To require GO/GOPs to report generating unit capabilities based on anticipated winter weather using criteria developed by the standard drafting team using stakeholder input.
- GO/GOPs must ensure winter weather preparation plans are created, maintained, implemented and monitored as appropriate to help ensure generating units can operate to the criteria developed above. The plans shall include appropriate annual winterization measures.

**Detailed Description** (Provide a description of the proposed project with sufficient details for the standard drafting team to execute the SAR.)

The SDT should consider modifying EOP-001-2b to include GO/GOP's in Section A4; Applicability. The SDT should review the requirements and, where applicable, modify to include GO/GOP's.

Neither BA nor TOP entities can perform the necessary information gathering for identifying

and reporting generating unit capabilities based on anticipated winter weather, however, a BA and TOP need to be aware of generating unit capabilities. The drafting team should develop criteria, using stakeholder input, for determining GO/GOP capability reporting to the BA/TOP for generating units during winter weather conditions.

Initial candidate standards for consideration is: EOP-001 but this is not an exclusive list and the drafting team could recommend other standards requiring modification.

### Reliability Functions

Reliability Assurer					
Assurer operations, and coordinates activities of Responsible Entities to secure the reliability of the bulk power system within a Reliability Assurer Area and adjacent areas.  Reliability Coordinator Coordinator Area in coordination with its neighboring Reliability Coordinator's wide area view.  Balancing Authority Interchange Pauthority Authority Interchange-resource balance within a Balancing Authority Area and supports Interconnection frequency in real time. Ensures communication of interchange transactions for reliability evaluation purposes and coordinates implementation of valid and balanced interchange schedules between Balancing Authority Areas.  Planning Coordinator Area.  Planning Assesses the longer-term reliability of its Planning Coordinator Area.  Pesource Planner Develops a >one year plan for the resource adequacy of its specific loads within its portion of the Planning Coordinator's Area.  Transmission Owns and maintains transmission facilities.  Owns and maintains transmission Operator Area.  Transmission Ensures the real-time operating reliability of the transmission assets within a Transmission Operator Area.  Transmission Develops a >one year plan for the reliability of the interconnected Bulk Electric System within the Transmission Planner Area.  Administers the transmission tariff and provides transmission services under applicable transmission service agreements (e.g., the pro forma tariff).  Distribution Provider Delivers electrical energy to the End-use customer.  Owns and maintains generation facilities.  Generator Owner Operator Operates generation unit(s) to provide real and reactive power.  Purchasing-Selling Entity Purchases or sells energy, capacity, and necessary reliability-related services in services on service (and reliability-related services) to serve the End-use Customer.	The Standard will Apply to the Following Functions (Check box for each one that applies.)				
Coordinator   Coordinator Area in coordination with its neighboring Reliability Coordinator's wide area view.		,	operations, and coordinates activities of Responsible Entities to secure the reliability of the bulk power system within a Reliability		
Authority interchange-resource balance within a Balancing Authority Area and supports Interconnection frequency in real time.  Interchange Authority Ensures communication of interchange transactions for reliability evaluation purposes and coordinates implementation of valid and balanced interchange schedules between Balancing Authority Areas.  Planning Coordinator Area.  Planning Coordinator Area.  Develops a > one year plan for the resource adequacy of its specific loads within its portion of the Planning Coordinator's Area.  Transmission Owner Owns and maintains transmission facilities.  Transmission Develops a > one year plan for the resource adequacy of its specific loads within its portion of the Planning Coordinator's Area.  Transmission Operator Operator Area.  Transmission Develops a > one year plan for the reliability of the transmission assets within a Transmission Operator Area.  Transmission Develops a > one year plan for the reliability of the interconnected Bulk Electric System within the Transmission Planner Area.  Administers the transmission tariff and provides transmission service under applicable transmission service agreements (e.g., the pro forma tariff).  Distribution Provider Delivers electrical energy to the End-use customer.  Generator Owner Operator Operates generation unit(s) to provide real and reactive power. Operator Serving Purchases or sells energy, capacity, and necessary reliability-related services as required.  Load-Serving Secures energy and transmission service (and reliability-related services) to serve the End-use Customer.		9	Coordinator Area in coordination with its neighboring Reliability		
Authority evaluation purposes and coordinates implementation of valid and balanced interchange schedules between Balancing Authority Areas.  Planning Coordinator Assesses the longer-term reliability of its Planning Coordinator Area.  Resource Planner Develops a >one year plan for the resource adequacy of its specific loads within its portion of the Planning Coordinator's Area.  Transmission Owner Develops a >one year plan for the resource adequacy of its specific loads within its portion of the Planning Coordinator's Area.  Transmission Owner Develops a >one year plan for the reliability of the transmission assets within a Transmission Operator Area.  Transmission Planner Develops a >one year plan for the reliability of the interconnected Bulk Electric System within the Transmission Planner Area.  Administers the transmission tariff and provides transmission service under applicable transmission service agreements (e.g., the pro forma tariff).  Distribution Provider Delivers electrical energy to the End-use customer.  Powner Owns and maintains generation facilities.  Owner Operator Operates generation unit(s) to provide real and reactive power.  Purchases or sells energy, capacity, and necessary reliability-related services as required.  Load-Secures energy and transmission service (and reliability-related services) to serve the End-use Customer.			interchange-resource balance within a Balancing Authority Area		
Coordinator         Area.           □         Resource Planner         Develops a >one year plan for the resource adequacy of its specific loads within its portion of the Planning Coordinator's Area.           □         Transmission Owner         Owns and maintains transmission facilities.           □         Transmission Operator         Ensures the real-time operating reliability of the transmission assets within a Transmission Operator Area.           □         Transmission Planner         Develops a >one year plan for the reliability of the interconnected Bulk Electric System within the Transmission Planner Area.           □         Transmission Service Provider         Administers the transmission tariff and provides transmission services under applicable transmission service agreements (e.g., the pro forma tariff).           □         Distribution Provider         Delivers electrical energy to the End-use customer.           □         Generator Owner         Owns and maintains generation facilities.           □         Operates generation unit(s) to provide real and reactive power.           □         Purchasing-Selling Entity         Purchases or sells energy, capacity, and necessary reliability-related services as required.           □         Load-Serving         Secures energy and transmission service (and reliability-related services) to serve the End-use Customer.			evaluation purposes and coordinates implementation of valid and balanced interchange schedules between Balancing Authority		
Planner specific loads within its portion of the Planning Coordinator's Area.  □ Transmission Owns and maintains transmission facilities.  □ Transmission Operator assets within a Transmission Operator Area.  □ Transmission Planner Bulk Electric System within the Transmission Planner Area.  □ Transmission Service Provider Provider Distribution Provider Delivers electrical energy to the End-use customer.  □ Generator Owns and maintains generation facilities.  □ Operates generation unit(s) to provide real and reactive power.  □ Purchasing-Selling Entity Purchases or sells energy, capacity, and necessary reliability-related services) to serve the End-use Customer.					
Owner           ☐         Transmission Operator         Ensures the real-time operating reliability of the transmission assets within a Transmission Operator Area.           ☐         Transmission Planner         Develops a >one year plan for the reliability of the interconnected Bulk Electric System within the Transmission Planner Area.           ☐         Transmission Service Provider         Administers the transmission tariff and provides transmission services under applicable transmission service agreements (e.g., the pro forma tariff).           ☐         Distribution Provider         Delivers electrical energy to the End-use customer.           ☐         Generator Owner         Owns and maintains generation facilities.           ☐         Operates generation unit(s) to provide real and reactive power.           ☐         Purchasing-Selling Entity         Purchases or sells energy, capacity, and necessary reliability-related services as required.           ☐         Load-Secures energy and transmission service (and reliability-related services) to serve the End-use Customer.					
Operator assets within a Transmission Operator Area.  □ Transmission Planner Develops a >one year plan for the reliability of the interconnected Bulk Electric System within the Transmission Planner Area.  □ Transmission Service Provider Provider Administers the transmission tariff and provides transmission service agreements (e.g., the pro forma tariff).  □ Distribution Provider Delivers electrical energy to the End-use customer.  □ Generator Owner Operator Operator Operator Purchasing-Selling Entity Purchases or sells energy, capacity, and necessary reliability-related services to serve the End-use Customer.			Owns and maintains transmission facilities.		
Planner       Bulk Electric System within the Transmission Planner Area.         □       Transmission Service Provider       Administers the transmission tariff and provides transmission service agreements (e.g., the pro forma tariff).         □       Distribution Provider       Delivers electrical energy to the End-use customer.         □       Generator Owner       Owns and maintains generation facilities.         □       Generator Operator       Operates generation unit(s) to provide real and reactive power.         □       Purchasing-Selling Entity       Purchases or sells energy, capacity, and necessary reliability-related services as required.         □       Load-Serving       Secures energy and transmission service (and reliability-related services) to serve the End-use Customer.					
Service services under applicable transmission service agreements (e.g., the pro forma tariff).  Distribution Provider  Delivers electrical energy to the End-use customer.  Owns and maintains generation facilities.  Owner  Operator Operator Operator Operator  Purchasing-Selling Entity  Purchases or sells energy, capacity, and necessary reliability-related services as required.  Secures energy and transmission service (and reliability-related services) to serve the End-use Customer.					
Provider  ☐ Generator Owns and maintains generation facilities.  ☐ Generator Operator  ☐ Purchasing-Selling Entity  ☐ Load-Serving  ☐ Provider  ☐ Owns and maintains generation facilities.  ☐ Operates generation unit(s) to provide real and reactive power.  ☐ Purchases or sells energy, capacity, and necessary reliability-related services as required.  ☐ Secures energy and transmission service (and reliability-related services) to serve the End-use Customer.		Service	services under applicable transmission service agreements (e.g.,		
Owner  Generator Operates generation unit(s) to provide real and reactive power.  Purchasing-Selling Entity  Purchases or sells energy, capacity, and necessary reliability-related services as required.  Load-Serving  Secures energy and transmission service (and reliability-related services) to serve the End-use Customer.			Delivers electrical energy to the End-use customer.		
Operator  Purchasing- Selling Entity  Purchases or sells energy, capacity, and necessary reliability- related services as required.  Load- Serving  Secures energy and transmission service (and reliability-related services) to serve the End-use Customer.			Owns and maintains generation facilities.		
Selling Entity related services as required.  Load- Serving Services as required.  Load- Serving Services as required.  Secures energy and transmission service (and reliability-related services) to serve the End-use Customer.			Operates generation unit(s) to provide real and reactive power.		
Serving services) to serve the End-use Customer.					

### Reliability and Market Interface Principles

Applicable Reliability Principles (Check box for all 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.		
	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.		
		e proposed Standard comply with all of the following Market Interface es? (Select 'yes' or 'no' from the drop-down box.)		
<ol> <li>A reliability standard shall not give any market participant an unfair competitive advantage. Yes</li> </ol>				
2. <i>F</i>	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			
i	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			

Standards A	Authorization	Request	<b>Form</b>
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Standard No.	Explanation

#### Related SARs

SAR ID	Explanation

## Regional Variances

Region	Explanation
ERCOT	
FRCC	
MRO	
NPCC	
SERC	
RFC	
SPP	
WECC	