

Standard Authorization Request Form

Title of Proposed Standard	Back-up Facilities Project 2006-04
Request Date	October 26, 2006

SAR Requestor Information	SAR Type <i>(Check a box for each one that applies.)</i>
Name Reliability Standards Development Plan: 2007 – 2009	<input type="checkbox"/> New Standard
Primary Contact Richard Schneider (To be replaced by SAR DT Chair when the SAR DT is appointed)	<input checked="" type="checkbox"/> Revision to existing Standard
Telephone 609-452-8060 Fax	<input type="checkbox"/> Withdrawal of existing Standard
E-mail Richard.schneider@nerc.net	<input type="checkbox"/> Urgent Action

<p>Purpose</p> <p>Applicable Standards: COM-001: Telecommunications EOP-008: Plans for Loss of Control Center Functionality</p> <p>The purpose of revising these standards is to:</p> <ol style="list-style-type: none"> 1. Provide an adequate level of reliability for the North American bulk power systems — the standards are complete and the requirements are set at an appropriate level to ensure reliability. 2. Ensure they are enforceable as mandatory reliability standards with financial penalties — the applicability to bulk power system owners, operators, and users, and as appropriate particular classes of facilities, is clearly defined; the purpose, requirements, and measures are results-focused and unambiguous; the consequences of violating the requirements are clear. 3. Incorporate other general improvements described in the standards development work plan (see attachments). 4. Consider stakeholder comments received during the initial development of the standards and other comments received from ERO regulatory authorities as noted in the attached review sheets. 5. Satisfy the standards procedure requirement for five-year review of the standards.

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Industry Need

As the electric reliability organization begins enforcing compliance with reliability standards under Section 215 of the Federal Power Act in the United States and applicable statutes and regulations in Canada, the industry needs a set of clear, measurable, and enforceable reliability standards. The Version 0 standards and the translation of Phase III & IV planning measures, while a good foundation, were translated from historical operating and planning policies and guides that were appropriate in an era of voluntary compliance. The Version 0 standards, Phase III & IV standards, and recent updates were put in place as a temporary starting point to start up the electric reliability organization and begin enforcement of mandatory standards. However, it is important to update the standards in a timely manner, incorporating improvements to make the standards more suitable for enforcement and to capture prior recommendations that were deferred during the Version 0 and Phase III & IV translations. The two standards in this set are both Version 0 standards.

Brief Description

A study of the backup capabilities that are needed to support reliable operations is required as part of this project.

The requirements in EOP-008 need additional specificity. The study conducted before this standard is finalized should look at the facility requirements identified in the certification standards and identify which of these are essential to reliable operations.

There are backup facility requirements in some other standards, and those requirements should be moved into this standard.

The development may include other improvements to the standards deemed appropriate by the drafting team, with the consensus of stakeholders, consistent with establishing high quality, enforceable and technically sufficient bulk power system reliability standards.

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Reliability Functions

The Standard will Apply to the Following Functions <i>(Check box for each one that applies.)</i>		
X	Reliability Authority	Ensures the reliability of the bulk transmission system within its Reliability Authority area. This is the highest Reliability Authority.
X	Balancing Authority	Integrates resource plans ahead of time, and maintains load-interchange-resource balance within its metered boundary and supports system frequency in real time.
<input type="checkbox"/>	Interchange Authority	Authorizes valid and balanced Interchange Schedules.
<input type="checkbox"/>	Planning Authority	Plans the Bulk Electric System.
<input type="checkbox"/>	Resource Planner	Develops a long-term (>one year) plan for the resource adequacy of specific loads within a Planning Authority area.
<input type="checkbox"/>	Transmission Planner	Develops a long-term (>one year) plan for the reliability of transmission systems within its portion of the Planning Authority area.
<input type="checkbox"/>	Transmission Service Provider	Provides transmission services to qualified market participants under applicable transmission service agreements
<input type="checkbox"/>	Transmission Owner	Owns transmission facilities.
X	Transmission Operator	Operates and maintains the transmission facilities, and executes switching orders.
X	Distribution Provider	Provides and operates the "wires" between the transmission system and the customer.
<input type="checkbox"/>	Generator Owner	Owns and maintains generation unit(s).
X	Generator Operator	Operates generation unit(s) and performs the functions of supplying energy and Interconnected Operations Services.
<input type="checkbox"/>	Purchasing-Selling Entity	The function of purchasing or selling energy, capacity, and all necessary Interconnected Operations Services as required.
<input type="checkbox"/>	Market Operator	Integrates energy, capacity, balancing, and transmission resources to achieve an economic, reliability-constrained dispatch.
<input type="checkbox"/>	Load-Serving Entity	Secures energy and transmission (and related generation services) to serve the end user.

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Reliability and Market Interface Principles

Applicable Reliability Principles <i>(Check box for all that apply.)</i>	
X	1. Interconnected bulk electric 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 electric systems shall be controlled within defined limits through the balancing of real and reactive power supply and demand.
<input type="checkbox"/>	3. Information necessary for the planning and operation of interconnected bulk electric 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 electric systems shall be developed, coordinated, maintained and implemented.
X	5. Facilities for communication, monitoring and control shall be provided, used and maintained for the reliability of interconnected bulk electric systems.
<input type="checkbox"/>	6. Personnel responsible for planning and operating interconnected bulk electric systems shall be trained, qualified, and have the responsibility and authority to implement actions.
<input type="checkbox"/>	7. The security of the interconnected bulk electric systems shall be assessed, monitored and maintained on a wide area basis.
Does the proposed Standard comply with all of the following Market Interface Principles? <i>(Select 'yes' or 'no' from the drop-down box.)</i>	
1. The planning and operation of bulk electric systems shall recognize that reliability is an essential requirement of a robust North American economy. Yes	
2. An Organization Standard shall not give any market participant an unfair competitive advantage. Yes	
3. An Organization Standard shall neither mandate nor prohibit any specific market structure. Yes	
4. An Organization Standard shall not preclude market solutions to achieving compliance with that Standard. Yes	
5. An Organization 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	

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Related Standards

Standard No.	Explanation

Related SARs

SAR ID	Explanation

Regional Differences

Region	Explanation
ERCOT	
FRCC	
MRO	
NPCC	
SERC	
RFC	
SPP	
WECC	

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Standard Review Form Project 2006-04 Back-up Facilities		
Standard #	COM-001-0	Comments
Title	Telecommunications	Okay
Purpose		Not sure that we need to include entities in Purpose.
Applicability		Not sure about inclusion of NERCNet
Requirements	<i>Conditions</i>	Interconnection is capitalized.
	<i>Who?</i>	Okay
	<i>Shall do what?</i>	R1.4 – should spell out applicability and extent for redundancy R2 – provide periodicity of testing R4 – cite communication protocol such as two-part communications R6 – probably doesn't belong here CESDT: R1 duplicated by COM-002 R1 R2 – 'special attention' R3 – 'provide a means' & 'ability to investigate'
	<i>Result or Outcome</i>	Missing
Measures		CESDT addressing but: <ul style="list-style-type: none"> • 4M for 6R • Still lacks measurability
To Do List	<p>FERC NOPR</p> <ul style="list-style-type: none"> o Include Measures and Levels of Non-Compliance; o Include generator operators and distribution provider as applicable entities; and o Include requirements for communication facilities for use during emergency situations. <p>FERC staff report</p> <ul style="list-style-type: none"> o Lacks adequacy, redundancy and routing requirements o Generation owners missing o Expect new standard in November <p>V0 Industry Comments</p> <ul style="list-style-type: none"> o Redundant with Policy 5A, R1 o Many players missing o Apply R1 to all but smallest entities <p>VRF comments</p> <ul style="list-style-type: none"> o R6 – administrative requirement 	
Misc. Items		Compliance not specified but appears in CESDT version

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Standard Review Form		
Project 2006-04 Back-up Facilities		
Standard #	EOP-008-0	Comments
Title	Plans for Loss of Control Center Functionality	Okay but could probably drop 'Plans for'.
Purpose		Okay
Applicability		Isn't the reliability entity the TSP and not the TO as per the FM?
Requirements	<i>Conditions</i>	Okay
	<i>Who?</i>	Okay
	<i>Shall do what?</i>	Grammar error in R1.2
	<i>Result or Outcome</i>	Missing
Measures		Measure doesn't define required evidence.
To Do List	<p>FERC NOPR</p> <ul style="list-style-type: none"> o Include a Requirement that all reliability coordinators have full backup control centers since they are essential to Bulk-Power System reliability. o Provision for backup capabilities should be an explicit Requirement. Such backup capability, at a minimum, must: (1) be independent of the primary control center; (2) be capable of operating for a prolonged period of time; and (3) provide for a minimum set of tools and facilities to replicate the critical reliability functions of the primary control center. <p>FERC staff report</p> <ul style="list-style-type: none"> o Distinction between providing plans and proving capabilities o Independence from primary control center <p>Regional Fill-in-the-Blank Team Comments</p> <ul style="list-style-type: none"> o No comments <p>V0 Industry Comments</p> <ul style="list-style-type: none"> o How does staff know control center is lost? o How is backup control achieved? o Max. time to restore capabilities <p>VRF comments</p> <ul style="list-style-type: none"> o R1 - Not having a written plan does not directly cause or contribute to bulk electric system instability, separation, or a cascading sequence of failures, or could place the bulk electric system at an unacceptable risk of instability, separation, or cascading o R1.1 - Not having a written plan is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to bulk electric system instability, separation, or cascading failures, nor to hinder restoration to a normal condition. 	