

## Standard Authorization Request Form – Revised SAR

Request Date	April 15, 2013
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<b>SAR Requester Information</b>	<b>SAR Type</b> ( <i>Check a box for each one that applies.</i> )	
Individual, Group, or Committee Name Project 2007-11 Disturbance Monitoring Standard Drafting Team	<input type="checkbox"/>	New Standard
Primary Contact (if Group or Committee) Lee Pedowicz	<input checked="" type="checkbox"/>	Revision to existing Standard
Company or Group Name Northeast Power Coordinating Council	<input type="checkbox"/>	Withdrawal of existing Standard
E-mail           lpedowicz@npcc.org	<input type="checkbox"/>	Project Identified in Reliability Standards Development Plan (Project Number and Name:            )
Telephone     (212) 840-1070	<input checked="" type="checkbox"/>	Modification to NERC Glossary term or addition of new term

**Brief Description of Proposed Standard Modifications/Actions** (In three sentences or less, summarize the proposed actions a drafting team will be responsible for implementing.)

By this Standard the Drafting Team will establish the requirements for capturing power system disturbance data to enable the effective analysis of power system disturbances.

**Need** (Explain why the Standard is being developed or modified. Clearly indicate why the actions being proposed are needed for maintaining or improving bulk power system reliability, including an assessment of the reliability and market interface impacts. This is similar to the Purpose statement in a Reliability Standard.)

PRC-002 is being revised to ensure the capturing of power system data following a system disturbance. (Note that the development of PRC-002-2 under Project 2007-11 was made informal in 2011.) The emphasis will not be on what equipment may be used to capture this data, but on ensuring that the requisite data is captured. PRC-002-2 will also include the pertinent requirements of PRC-018-1 that will allow that Standard to be retired. This will improve system reliability by providing personnel with described data to enable more effective post events analyses. This information will also be used to verify system models.

**Goals** (Describe what must be accomplished in order to meet the above need. This section would become the Requirements in a Reliability Standard.)

Sufficient Sequence of Events, Fault, and Dynamic Disturbance recordings to analyze power system disturbances must be captured and accessible.

**Objectives and/or Potential Future Metrics** (Describe what the potential measure or criteria for success may be for determining the successful implementation of this request. Provide ideas for potential metrics to be developed and monitored in the future relative to this request, if any.)

To obtain adequate power system data to perform an analysis of an event on the BES.

**Detailed Description** (In three paragraphs or more, provide a detailed description of the proposed actions a drafting team will be responsible for executing so that the team can efficiently implement this request. While you will check applicability boxes on the following page, this description must include proportional identification of to whom the standard should apply among industry participants.)

Using the version of PRC-002-2 that had been developed when the Project was categorized as informal in 2011, the Drafting Team will make the revisions necessary to reflect the goal of collecting sufficient Bulk Electric System disturbance data. The revised version will be posted for industry comment, and the Standard revised and reposted as necessary. The Drafting Team will also review technical justifications for requirements in the Standard.

The Drafting Team will also be responsible for taking the steps necessary to expose industry to the content of the Standard. This will give industry the opportunity to make more informed comments, and improve the overall process.

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In the Applicability Section, responsible entity was used to include the Planning Coordinator and Reliability Coordinator functional entities as described in the NERC Functional Model. The Drafting Team recognized that among the different regions there are different entities that address Dynamic Disturbance recording. The appropriate use of responsible entity will ensure that the responsibility for collecting needed disturbance data will be recognized. For requirements for which neither the Planning Coordinator or the Reliability Coordinator is the appropriate applicable entity, the specific functional entity will be named.

The Transmission Owners and Generator Owners will be responsible for the bulk of the Requirements in this Standard. The Planning Coordinators and Reliability Coordinators will be responsible for specifying locations requiring Dynamic Disturbance data.

The drafting team is creating the following new terms: Sequence of Events Recording, Fault Recording, and Dynamic Disturbance Recording.

**OPTIONAL: Technical Analysis Performed to Support Justification** (Provide the results of any technical study or analysis performed to justify this request. Alternatively, if deemed necessary, propose a technical study or analysis that should be performed prior to a related standard development project being initiated in response to this request.)

A study of multiple systems across the continent was done to determine the locations needed to record sufficient power system data for Sequence of Events, Faults, and Dynamic Disturbances based on three phase bolted short circuit MVA thresholds.

**Reliability Functions**

<b>The Standard(s) May Apply to the Following Functions</b> (Check box for each one that applies.)		
<input type="checkbox"/>	Regional Entity	Conducts the regional activities related to planning and operations, and coordinates activities of Responsible Entities to secure the reliability of the Bulk Electric System within the region and adjacent regions.
<input checked="" type="checkbox"/>	Reliability Coordinator	Responsible for the real-time operating reliability of its Reliability Coordinator Area in coordination with its neighboring Reliability Coordinator's wide area view.
<input type="checkbox"/>	Balancing Authority	Integrates resource plans ahead of time, and maintains load-interchange-resource balance within a Balancing Authority Area and supports Interconnection frequency in real time.
<input type="checkbox"/>	Interchange Authority	Ensures communication of interchange transactions for reliability evaluation purposes and coordinates implementation of valid and balanced interchange schedules between Balancing Authority Areas.
<input checked="" type="checkbox"/>	Planning Coordinator	Assesses the longer-term reliability of its Planning Coordinator Area.
<input type="checkbox"/>	Resource	Develops a >one year plan for the resource adequacy of its

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	Planner	specific loads within a Planning Coordinator area.
<input type="checkbox"/>	Transmission Planner	Develops a >one year plan for the reliability of the interconnected Bulk Electric System within its portion of the Planning Coordinator area.
<input type="checkbox"/>	Transmission Service Provider	Administers the transmission tariff and provides transmission services under applicable transmission service agreements (e.g., the pro forma tariff).
<input checked="" type="checkbox"/>	Transmission Owner	Owens and maintains transmission facilities.
<input checked="" type="checkbox"/>	Transmission Operator	Ensures the real-time operating reliability of the transmission assets within a Transmission Operator Area.
<input type="checkbox"/>	Distribution Provider	Delivers electrical energy to the End-use customer.
<input checked="" type="checkbox"/>	Generator Owner	Owens and maintains generation facilities.
<input checked="" type="checkbox"/>	Generator Operator	Operates generation unit(s) to provide real and reactive power.
<input type="checkbox"/>	Purchasing-Selling Entity	Purchases or sells energy, capacity, and necessary reliability-related services as required.
<input type="checkbox"/>	Market Operator	Interface point for reliability functions with commercial functions.
<input type="checkbox"/>	Load-Serving Entity	Secures energy and transmission service (and reliability-related services) to serve the End-use Customer.

**Reliability and Market Interface Principles**

<b>Applicable Reliability Principles</b> (Check box for all 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 checked="" 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 checked="" type="checkbox"/>	4. Plans for emergency operation and system restoration of interconnected bulk power systems shall be developed, coordinated, maintained and implemented.
<input checked="" 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 checked="" 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.
<b>Does the proposed Standard(s) comply with all of the following Market Interface Principles?</b> (Select 'yes' or 'no' from the drop-down box.)	
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	

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***Related Standards***

<b>Standard No.</b>	<b>Explanation</b>
PRC-018-1	This Standard to be retired after PRC-002 approved.
PRC-002-NPCC-01	Redundant requirements to be removed from this Standard.

***Related Projects***

<b>Project ID and Title</b>	<b>Explanation</b>

***Regional Variances***

<b>Region</b>	<b>Explanation</b>
ERCOT	
FRCC	
MRO	
NPCC	
SERC	
RFC	
SPP	
WECC	