

Note: A valid interpretation request is one that requests additional clarity about one or more requirements in approved NERC reliability standards, but does not request approval as to how to comply with one or more requirements.

When completed, email this form to:
laura.hussey@nerc.net
 For questions about this form or for assistance in completing the form, call Laura Hussey at 404-446-2579.

Request for an Interpretation of a Reliability Standard	
Date submitted: August 14, 2012	
Contact information for person requesting the interpretation:	
Name: Brian Evans-Mongeon	
Organization: Utility Services, Inc.	
Telephone: 802-552-4022	E-mail: brian.evans-mongeon@utilitysvcs.com
Identify the standard that needs clarification:	
Standard Number (include version number, e.g. PRC-001-1): PRC-002-NPCC-01	
Standard Title: Disturbance Monitoring	
Identify specifically what requirement needs clarification:	
Requirement Number and Text of Requirement:	
R4. Each Generator Owner shall provide Fault recording capability for Generating Plants at and above 200 MVA Capacity and connected through a generator step up (GSU) transformer to a Bulk Electric System Element unless Fault recording capability is already provided by the Transmission Owner.	
R5. Each Transmission Owner and Generator Owner shall record for Faults, sufficient electrical quantities for each monitored Element to determine the following:	
R6. Each Transmission Owner and Generator Owner shall provide Fault recording with the following capabilities:	
Identify the nature of clarification that is requested: (Check as many as applicable)	
<input type="checkbox"/> Clarify the required performance <input checked="" type="checkbox"/> Clarify the conditions under which the performance is required <input type="checkbox"/> Clarify which functional entity is responsible for performing an action in a requirement	

Clarify the reliability outcome the requirement is intended to produce

Please explain the clarification needed:

Requirement 4 states that Generating Plants at or above 200 MVA shall have fault recording capabilities unless this capability is already provided by the TO.

Requirements 5 and 6 do not specify a plant rating for Generator Owners, stating that Generator Owners shall record faults and specifications for fault recording.

Does Requirement 4 establish the qualification for Requirements 5 and 6, or are Requirements 5 and 6 stand-alone requirements for all Generator Owners?

Identify the material impact associated with this interpretation:

Identify the material impact to your organization or others, if known, caused by the lack of clarity or an incorrect interpretation of this standard.

It is our understanding that the SDT intended for Requirements 5 and 6 to follow the same qualification as Requirement 4. If this is not the case, and all registered Generator Owners are required to have fault recording capabilities, this will have a sustentative impact for all registered Generator Owners below 200 MVA within NPCC.



NORTHEAST POWER COORDINATING COUNCIL, INC.
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October 19, 2012

Mr. Guy Zito
NPCC Assistant Vice President-Standards

Re: TFSP Interpretation of Requirements 4, 5, and 6 of the NPCC Regional Reliability Standard PRC-002-NPCC-1.

Dear Mr. Zito:

As per Mr. Pedowicz's August 18, 2012 email message to the NPCC Task Force on System Protection (TFSP) and in accordance with the NPCC's Regional Reliability Standard Development Procedure, the Task Force has reviewed and provided in this letter a response to the Request for an Interpretation of Requirements 4, 5, and 6 of the NPCC Regional Reliability Standard PRC-002-NPCC-1.

Text of Requirements:

R4. Each Generator Owner shall provide Fault recording capability for Generating Plants at and above 200 MVA Capacity and connected through a generator step up (GSU) transformer to a Bulk Electric System Element unless Fault recording capability is already provided by the Transmission Owner. [Violation Risk Factor: Medium] [Time Horizon: Planning and Operations Planning]

R5. Each Transmission Owner and Generator Owner shall record for Faults, sufficient electrical quantities for each monitored Element to determine the following: [Violation Risk Factor: Medium] [Time Horizon: Planning and Operations Planning]

- 5.1 Three phase-to-neutral voltages. (Common bus-side voltages may be used for lines.)
- 5.2 Three phase currents and neutral currents.
- 5.3 Polarizing currents and voltages, if used.
- 5.4 Frequency.
- 5.5 Real and reactive power.

R6. Each Transmission Owner and Generator Owner shall provide Fault recording with the following capabilities: [Violation Risk Factor: Medium] [Time Horizon: Planning and Operations Planning]

- 6.1 Each Fault recorder record duration shall be a minimum of one (1) second.
- 6.2 Each Fault recorder shall have a minimum recording rate of 16 samples per cycle
- 6.3 Each Fault recorder shall be set to trigger for at least the following:
 - 6.3.1 Monitored phase overcurrents set at 1.5 pu or less of rated CT secondary current or Protective Relay tripping for all Protection Groups.



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6.3.2 Neutral (residual) overcurrent set at 0.2 pu or less of rated CT secondary current.

6.3.3 Monitored phase undervoltage set at 0.85 pu or greater.

6.4 Document additional triggers and deviations from the settings in 6.3.2 and 6.3.3 when local conditions dictate.

Requester's explanation of clarification needed:

Requirement 4 states that Generating Plants at or above 200 MVA shall have fault recording capabilities unless this capability is already provided by the TO.

Requirements 5 and 6 do not specify a plant rating for Generator Owners, stating that Generator Owners shall record faults and specifications for fault recording.

Does Requirement 4 establish the qualification for Requirements 5 and 6, or are Requirements 5 and 6 stand-alone requirements for all Generator Owners?

TFSP's interpretation of Requirements 4, 5, and 6 is as follows:

R4 establishes the generator owner's applicability. It specifies generating facilities that must have Fault recording capability installed. Generating plants at or above 200 MVA capacity and connected through a generator step up (GSU) transformer to a Bulk Electric System Element must have Fault recording capability installed. If Fault recording capability is already provided by the Transmission Owner, the generator owner of the generating plant does not have to duplicate the same Fault recording capability/installation.

R5 specifies what electrical quantities to record at the generating plants required to be installed with Fault recording equipment as per **R4**.

R6 specifies the minimum recording duration, the rate of recording, and trigger settings to be used for each Fault recorder required to be installed as per **R4**.

Let me know if you need further assistance on this matter.

Sincerely,

Daren

Daren Verner, Chairman
Task Force on System Protection

cc: Members, Task Force on System Protection
Mr. Lee Pedowicz – NPCC Regional Standard Process Manager
Mr. Philip Fedora - Assistant Vice President of Reliability Services