

Unofficial Comment Form for 3rd Draft of PRC-005-2 – Protection System Maintenance [Project 2007-17]

Please **DO NOT** use this form to submit comments on the 3rd draft of the standard for Protection System Maintenance and Testing. Comments must be submitted by **December 17, 2010**. If you have questions please contact Al McMeekin at al.mcmeekin@nerc.net or by telephone at 803-530-1963.

http://www.nerc.com/filez/standards/Protection_System_Maintenance_Project_2007-17.html

Background Information:

The Protection System Maintenance and Testing Standard Drafting Team (PSMT SDT) has made substantial changes to the third posting of PRC-005-2 based on comments received from the industry. The changes include:

- Adding more definitions of terms used in the body of the standard.
- Revisions to the standard and tables to remove complexity.
- Revisions to the implementation period.
- Revisions to the Supplemental Reference and the FAQ documents.
- Revisions to the Measures, Time Horizons, Violation Risk Factors (VRFs) and Violation Security Levels (VSLs).

The PSMT SDT would like to receive industry comments on this standard.

You do not have to answer all questions. Enter All Comments in Simple Text Format.

Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

1. The SDT has restructured the tables to improve clarity, but did not appreciably change the content. Do you agree that the restructured tables are clearer? If not, please provide specific suggestions for improvement.

Yes

No

Comments:

2. The SDT has modified the VSLs, VRFs and Time Horizons with this posting. Do you agree with the changes? If not, please provide specific suggestions for improvement.

Yes

No

Comments:

3. The SDT has provided the “Supplementary Reference” document to provide supporting discussion for the Requirements within the standard. Do you have any specific suggestions for improvements?

Yes

No

Comments:

4. The SDT has provided the “Frequently-Asked Questions” (FAQ) document to address anticipated questions relative to the standard. Do you have any specific suggestions for improvements?

Yes

No

Comments:

5. If you have any other comments on this Standard that you have not already provided in response to the prior questions, please provide them here.

Comments:

In the Purpose statement delete “affecting” and replace it with “protecting”. The purpose of the standard deals with systems that protect the BES.

In sections R1 and R4.2.1 delete “applied on” as unneeded and potentially confusing. The goal is to cover Protection Systems designed to protect the BES.

The NSRS believes that Article 1.4 needs to be deleted from the standard. It is redundant and serves not purpose.

The NSRS believes that Article 1.5 needs to be deleted from the standard. There is a major concern on what an “acceptable parameter” is and how it would be interpreted by the Regional Entities.

The NSRS believes that Article 4.2 needs to be deleted from the standard. There is no need for this article if Article 1.5 is deleted.

Section 4.2 Applicable Facilities:

We are concerned with this paragraph being interpreted differently by the various regions and thereby causing a large increase in scope for Distribution Provider protection systems beyond the reach of UFLS or UVLS.

4.2.1 Protection Systems applied on, or designed to provide protection for, the BES.

The description is vague and open for different interpretations for what is “applied on” or “designed to provide protection”. According to the November 17, 2010 Draft Supplementary Reference page 4, the Standard will not apply to sub-transmission and distribution circuits, but will apply to any Protection System that is designed to detect a fault on the BES and take action in response to the fault. The Standard Drafting Team does not feel that Protection Systems designed to protect distribution substation equipment are included in the scope of this standard; **however, this will be impacted by the Regional Entity interpretations of “protecting” the BES.** Most distribution protection systems will not react to a fault on the BES, but are caught up in the interpretation due to tripping a breaker(s) on the BES.

Section F Supplemental Reference Documents:

The references listed in this section refer to 2009 dates and do not match with the 2010 reference documents supplied for comment.

Table 1-4 Component Type Station dc Supply:

- “Any dc supply for a UFLS or UVLS system” - This should not tied to the same testing interval as control circuits. The dc supply system is significantly different from control circuits and should have a maximum maintenance period as other dc supplies do.
- Replace the words “perform as designed” on page 14 of Table 1-4 with “operate within defined tolerances.”

Table 1-5 Component Type Control Circuitry:

- This table allows for **unmonitored trip coils** for UFLS or UVLS breakers to have “**no periodic maintenance**”. “Unmonitored control circuitry associated with protective functions” should also have an exclusion for UFLS and UVLS circuitry that would allow for “no periodic maintenance”.
- There is a concern that requiring the electrical testing and maintenance of Electromechanical trip or Auxiliary devices will force entire bus outages to be scheduled, which will compromise the BES reliability more by forcing utilities across the US to unnecessarily take multiple non-faulted BES elements out of service. Such testing is also likely to introduce human error that will cause outages such as items outlined in the NERC lessons learned” and therefore such testing will result in more outages than actual failures.