Unofficial Comment Form
Project 2007-06 System Protection Coordination
4th Draft of PRC-027-1

Please DO NOT use this form for commenting. Please use the electronic comment form to submit comments on the 4th draft of the standard PRC-027-1: Protection System Coordination for Performance During Faults. Comments must be submitted by 8 p.m. Eastern December 18, 2013. If you have questions please contact Al McMeekin or by telephone at 803-530-1963.

http://www.nerc.com/pa/Stand/Pages/Project-2007-06-System-Protection-Coordination.aspx

Background Information:
The Project 2007-06 System Protection Coordination Standard Drafting Team (SPCSDT) posted the third draft of Reliability Standard PRC-027-1 “Protection System Coordination for Performance During Faults” for comment from June 4, 2013 to July 3, 2013. The drafting team considered all stakeholder comments and suggestions and revised the draft standard. The following is a summary of changes the drafting team made:

- Changed the term “Interconnected Element” to “Interconnecting Element”
- Re-arranged the definition of “Interconnecting Element” for clarity and spelled out “Bulk Electric System” rather than using the acronym “BES”
- Modified the definition of “Protection System Coordination Study” replacing the words “that demonstrates” with “documenting that” and “desired” with “intended”
- Changed the word “desired” to “intended” in the Purpose
- Added the parenthetical phrase “(that own Protection Systems identified in the Facilities section 4.2 below)” to Applicability section 4.1.3 “Distribution Provider”
- The “Other Aspects of Coordination of Protection Systems Addressed by Other Projects” section was moved from the “Background” section to the “Roadmap” section of the standard
- Removed the technical justification for not conducting the Fault current review specified in Requirement R2 and the associated Measure M3
- Modified Requirement 4 and split it into two Requirements, R4 and R5 for clarity
- Requirement R5 mandates that any identified coordination issues be addressed prior to the implementation of any changes or additions to the Protection System(s) associated with the Interconnecting Element
- The VSLs were modified for consistency with the revised requirements
- The Guidelines and Technical Basis section was modified to reflect corresponding changes in the standard
- The Process Flow Chart was updated to reflect changes made to the standard
- The Figures and associated descriptions were modified to provide more clarity
In June of 2013, the Project 2007-06 System Protection Coordination Standard Drafting Team (SPCSDT) posted Draft 3 of PRC-027-1 for comment and ballot. The SPCSDT is recommending retirement of Requirements R2 and R3 of PRC-001-2 because the reliability objectives of those two requirements are addressed in the new Reliability Standard PRC-027-1 — Protection System Coordination for Performance During Faults, leaving only one requirement in PRC-001-3. Attempting to provide clarity, the SPCSDT included PRC-001-3 in the June posting with a revised Applicability section and a measure for the lone Requirement R1. However, since that posting, the Independent Experts Review Panel (Independent Experts) released its Final Report and Requirements Scoring Spreadsheet which reviewed and assessed the content and quality of the NERC Reliability Standards. The Independent Experts concluded that PRC-001-2, Requirement R1 contains ambiguous language and suggested that it be incorporated into the PER standards. The Independent Experts further suggested that all of the training requirements in NERC’s Reliability Standards be consolidated. Because Requirement R1 of PRC-001-3 was identified as appropriate in another body of standards and will be included in the review for consolidation, the requirement will remain unchanged pending ongoing work to implement the Independent Experts recommendations. NERC standards staff is currently reviewing how to address these recommendations and industry concerns with Requirement R1. Consequently, a draft of PRC-001-3 reflecting only the removal of Requirements R2 and R3, and updated pro forma language for the “Effective Date” and “Compliance” sections of the standard is included with this fourth posting of PRC-027-1.

Note: The SPCSDT is not soliciting comments on PRC-001-3 because of the limited changes discussed above.

The SPCSDT is soliciting stakeholder feedback on draft 4 of PRC-027-1 during a 45-day formal comment period with parallel ballot.

Question
Enter comments in simple text format. Bullets, numbers, and special formatting will not be retained.
1. Please provide any issues you have with this draft of PRC-027-1 along with a proposed solution.

Comments: The Purpose statement “To coordinate Protection Systems for Interconnecting Elements such that Protection System components operate in the intended sequence during Faults” is confusing. Are the protection systems involved specifically for the Interconnecting Element, or between Facilities connected by an Interconnecting Element? It also inappropriate because the standard does not address Protection System coordination among operating entities.

According to the NERC White Paper “Power Plant and Transmission System Protection Coordination”, stator ground protection may need to be coordinated with transmission system faults. Stator ground is a generator protection – so is that in scope of the PSCS specified in the standard since this protection is a generator protection, not an Interconnecting Element protection?
For Part 3.1, it is not clear what is meant by “Details..... associated with the Interconnecting Element or at other Facilities.....” What is the burden of proof associated with this requirement? In the long term planning horizon, is it implied this assessment be made through short circuit studies? It would be proper to associate Part 3.1 solely with changes/additions “either at an existing or new Facility associated with the Interconnecting Element.....”. Changes at other Facilities could mean 1, 2 or 3 busses away and we believe if these changes were significant, they would manifest themselves in a significant change in Fault current levels. Furthermore, in an audit, the burden of proof lies with the owner to show these changes “at other Facilities” don’t affect coordination. Suggest the following change to the wording: “Details for any proposed change or addition listed below; either at an existing or new Facility associated with the Interconnecting Element; or at other Facilities when the proposed change modifies the conditions used in the coordination of Protection Systems associated with the Interconnecting Element(s) where such changes result in a change of 10% or greater in either single line-to-ground or three-phase fault current as defined in R2.2.”

The Process Flow chart in the Applications Guidelines of the standard needs to be revised to reflect the revisions in the standard.