Unofficial Comment Form

Project 2015-10 Single Points of Failure – TPL-001

**Do not** use this form for submitting comments. Use the [electronic form](https://sbs.nerc.net/) to submit comments on the **Project 2015-10 Single Points of Failure Standard Authorization Request (SAR)**. Comments must be submitted by **8 p.m. Eastern, Thursday, December 17, 2015**.

Documents and information about this project are available on the [project page](http://www.nerc.com/pa/Stand/Pages/Project-2015-10-Single-Points-of-Failure-TPL-001.aspx). If you have questions, contact [Katherine Street](mailto:Katherine.Street@nerc.net) (via email) or by telephone at (404)-446-9702.

## Background Information

This posting is soliciting informal comment on the SAR.

The purpose of the proposed project is to draft a SAR to address the findings of the System Protection and Control Subcommittee (SPCS) and the System Modeling and Analysis Subcommittee (SAMS) assessment of protection system single points of failure, conducted in response to FERC Order No. 754,[[1]](#footnote-1) including analysis of data from the NERC Rules of Procedure Section 1600 Request for Data or Information. The assessment confirms the existence of a reliability risk associated with single points of failure in protection systems that warrants further action.

As such, regarding single points of failure in protection systems, the SPCS and the SAMS proposed the following recommendations for modifying NERC Reliability Standard TPL-001-4 (Transmission System Planning Performance Requirements) through the NERC standards development process identified in the NERC Rules of Procedure:

* For Table 1 – Steady State & Stability Performance Planning Events, Category P5:
  + Replace “relay” with “component of a Protection System,” and
  + Add superscript “13” to reference footnote 13 for the replaced term under the “Category” column.
* For Table 1 – Steady State & Stability Performance Extreme Events, under the Stability column, No. 2:
  + Remove the phrase “or a relay failure” from items a, b, c, and d to create distinct events only for stuck breakers.
  + Append four new events for the same items a, b, c, and d in the above bulleted item to create distinct events replacing “a relay failure” with “a component failure of a Protection System.”
* Replace footnote 13 in TPL-001-4 with, “The components from the definition of “Protection System” for the purposes of this standard include (1) protective relays that respond to electrical quantities, (2) single-station DC supply that is not monitored for both low voltage and open circuit, with alarms centrally monitored (i.e., reported within 24 hours of detecting an abnormal condition to a location where corrective action can be initiated), and (3) DC control circuitry associated with protective functions through the trip coil(s) of the circuit breakers or other interrupting devices.”[[2]](#footnote-2)
* Modify TPL-001-4 (Part 4.5) so that extreme event assessments must include evaluation of the three-phase faults the described component failures of a Protection System13 that produce the more severe system impacts. For example, add a new second sentence that reads “[t]he list shall consider each of the extreme events in Table 1 – Steady State & Stability Performance Extreme Events; Stability column item number 2.”

## Questions

1. Do you agree with the scope and objectives of the SAR? If not, please explain why you do not agree and, if possible, **provide specific language revisions that would make it acceptable to you**.

Yes

No

Comments:

1. If you have any other comments on this SAR that you haven’t already mentioned above, please provide them here:

Comments:

1. In Order No. 754, the Commission expressed its concern that there was an issue concerning the study of a single point of

   failure on protection systems. To address this issue, the Commission directed FERC staff to meet with NERC and its appropriate

   subject matter experts to explore this reliability concern. The Commission also directed NERC to submit an informational filing

   within six months explaining whether there is a further system protection issue that needs to be addressed and if so, what forum and process should be used to address it and what priority it should be afforded. *See Interpretation of Transmission Planning Reliability Standard*, Order No. 754, 136 FERC ¶ 61,186 at PP 19-20 (2011). [↑](#footnote-ref-1)
2. See Order 754 (NERC website) Requests for Clarifications and Responses ([http://www.nerc.com/pa/Stand/Order%20754%20DL/Order\_  
   754-Requests\_for\_Clarification\_and\_Responses\_July2013.pdf](http://www.nerc.com/pa/Stand/Order%20754%20DL/Order_754-Requests_for_Clarification_and_Responses_July2013.pdf)). [↑](#footnote-ref-2)