

Consideration of Comments

Project 2015-10 (TPL-001-4) Single Points of Failure

Executive Summary

The Project 2015-10 Standards Authorization Request (SAR) drafting team (DT) thanks everyone who submitted comments on the TPL-001-4 SAR. The SAR was posted for an additional 30-day informal comment period from May 26, 2016, through June 24, 2016. The reason it was posted a second time was to provide industry with the expanded scope of the SAR, which added the two outstanding FERC directives from FERC Order No. 786 and to update the MOD references in the TPL standard.

Comments received covered the System Protection and Control Subcommittee (SPCS) and System Analysis and Modeling Subcommittee (SAMS) Report of FERC Order No. 754, the two FERC directives from Order No. 786, updating the MOD references, a couple of errata changes to the SAR, and a few miscellaneous questions. The SAR DT had a conference call on June 30, 2016, to discuss comments received. The SAR DT made a few minor errata type changes (spelling corrections and moved a couple of sentences around to provide clarity to the purpose of the SAR). In conclusion to the SAR DT conference call, the SAR DT determined that the SAR would be considered final. A redline and clean version of the final SAR are posted on the [project page](#).

There were a good amount of comments received providing justification for the directives, etc. Those comments will be passed to the standards drafting team (SDT) for consideration. Comments received that were not added to the scope of this project, will be addressed during the enhanced periodic review of this standard.

Summary of Comments Received

Below provides a high level summary of comments received for project 2015-10 Single Points of Failure SAR, and the SAR DTs responses. Due to the comment period being informal, the SAR DT is not required to respond to comments. The SAR DT thanks everyone for their time and effort in submitting comments.

SPCS and SAMS Report – FERC Order No. 754

Multiple commenters were concerned with the wording change from “address” to “consider” in regards to the SPCS/SAMS report recommendations. The comments suggested that the SDT should follow the recommendation identified and documented by SPCS/SAMS report and that further “consideration” by the SDT is not necessary to meet the FERC directives. There were also comments that included recommendations for changes in specific SPCS/ SAMS recommendations.

The SAR DT concluded that leaving the word “consider” in the SAR would allow the SDT to consider all comments received.

FERC Order No. 786 – Two FERC Directives

The purpose of the SAR DT was to develop the scope for Project 2015-10. The SAR DT concluded that the two FERC directives need to remain a part of the scope, whether that is addressing the directives, providing an equally efficient and effective alternative, or providing justification as to why the directive has already been addressed or is no longer needed. In addition to these three options, FERC directed NERC to consider spare equipment. While some commenters argued that this is not a directive, it is a directive that needs discussion/consideration and a response provided to the Federal Energy Regulatory Commission (FERC).

Spare Equipment Directive:

Many commenters stated that there is very little risk or no risk if stability analysis is not performed for the unavailability of long lead time equipment. The reasoning was based on the following factors: if there is an outage of long lead time equipment, system operations will operate around any problem that might be indicated by their analysis, that the impact of the unavailability of long lead time equipment for TPL-001-4 Category P0, P1 and most P2 conditions is already captured as part of the Category P6 stability analysis, and/or because TPL-001-4 already requires entities to perform stability analyses for the P3 through P7 categories, which produce the same contingency results that stability analysis for P0 and P1 categories would produce assuming unavailability of long-lead-time equipment.

Several commenters had suggestions if the Standard Drafting Team pursued making changes suggested by the directive:

- NERC should complete efforts on the Cost Effectiveness Pilot-2016 to establish a reasonable and supportable threshold for the types of equipment that should be subject to the spare equipment requirement based on probability of failure or some other metric to be determined. Requiring stability assessment of all equipment with a lead time of one year or more without regard to probability of failure would result in significant administrative, capital and operations and maintenance costs without reasonable justification of the reliability benefit that would be realized by those costs.
- As for the newly proposed language pertaining to Spare Equipment Strategy for TPL-001-4, if implemented, suggest that the drafting team create an additional requirement for this topic and include it the Standard in a new subsection in Requirement 2 section 2.4. It is felt that adding this language into one of the existing requirements will only cause confusion for the industry and it would tie it to Requirement 4 section 4.4 which would lead to the industry developing a contingency list expected to produce more severe system impacts for this stability Spare Equipment Strategy Analysis.
- The SDT should limit their response to the directive to only substation power transformers before including other BES Elements.

Duration less than 6 months directive:

Many comments stated that operational studies are already being performed in seasonal assessments, current day and next day studies.

Many comments quoted IRO-017-1, which will be enforceable April 1, 2017; IRO-017-1 R4 requires the Planning Coordinator and Transmission Planner (not TOP) develop solutions for identified issues or conflicts resulting from planned outages in its Planning Assessments for the Near-Term Planning Horizon.

In addition, other comments received indicated the team should consider the following: 1) many comments believed that outages lasting one day would be inappropriate, 2) should off-peak studies be the only seasons required for outage studies, 3) coincide with IRO-017-1 R4, should the outage studies be only in the Near-Term Planning Horizon, and address which planning events have to be included in the outage studies. Example: P1, P2.1, P3 and select EHV planning events.

The SAR DT appreciates all comments received and will ensure the SDT (once formed) receives these comments for consideration.

MOD References

There was general consensus about updating the references to MOD-010 and MOD-012 in Requirement R1 needing to be replaced with MOD-032 due to July 2016 retirement of those standards.

Cost Effectiveness Survey

Many commenters pointed to comments submitted for the cost effectiveness survey. The SAR DT will ensure that the SDT receives all responses for consideration during the modification of TPL-001-4.