

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

FERC Order No. 754

The Study of Single Point of Failure

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RELIABILITY | ACCOUNTABILITY



- Summary of FERC Order No. 754 (Order 754)
- FERC Technical Conference outcomes
 - Consensus points
 - Problem statement
 - Approaches
- Request for Interpretation
- Data request
- Informational filing
- Next steps

- Order 754¹
 - Commission's approval of Project Interpretation of TPL-002-0b, R1.3.10 — PacifiCorp (Project 2009-14²)
 - Commission has a concern
 - Study of a single point of failure on protection systems (P.19)
 - Commission issued a directive (P.20)
 - FERC staff to meet with NERC and appropriate Subject Matter Experts
 - Explore the reliability concern
 - NERC to make an informational filing in six months (March 15, 2012)
 - What forum to address the issue
 - What priority based on current initiatives

¹ <http://www.ferc.gov/whats-new/comm-meet/2011/091511/E-4.pdf>

² <http://www.nerc.com/filez/standards/Project2009-14 Interpretation TPL-002-0 PacifiCorp.html>

- Performance-based issue, not full redundancy issue
- Existing approved standards address requirements to assess single point of failure
- Assessments of single point of failure of non-redundant primary protection (including backup) systems need to be sufficiently comprehensive
- Lack of sufficiently comprehensive assessments of non-redundant primary protection systems is a reliability concern

- *“The group perceives a reliability concern regarding the comprehensive assessment of potential protection system failures by registered entities. The group agrees on the need to study if a gap exists regarding the study and resolution of a single point of failure on protection systems.”*

- Request For Interpretation – A small group should develop a proposal to be presented to the joint System Analysis and Modeling Subcommittee (SAMS)/System Protection and Control Subcommittee (SPCS) committees
- Data Request – A small group should develop a proposal to the joint SAMS/SPCS committees
- Project 2009-07 – To be considered later after the review of the first two bullets above

- Confirm extent to which TPL-003-0a and TPL-004-0 require assessment of single points of failure
- Standards Committee Executive Committee
 - Accepted the request on February 3, 2012
 - Directed drafting team formation
 - High priority in addressing the order
- Team is currently drafting an interpretation
- Post for comment (mid-July 2012)

- Assess whether there is a reliability concern associated with the assessment of single points of failure on Protection Systems that is not specifically addressed by existing standards
- Previously posted for comment in December 2011
- Comments submitted by 56 individuals and groups
 - Comments reviewed by NERC and the SAMS/SPCS
 - Responses to comments to be posted soon

- Next steps:
 - SAMS/SPCS conclusions
 - Method and Reporting Template require modification
 - Improve clarity and mitigate burden on responding entities
 - Add examples to promote understanding and consistency in responses
 - Allow additional time; the schedule will be extended to two years with a staged approach by substation kV for reporting
 - Consider a second posting before releasing to the NERC Board of Trustees
 - Post for comment (early May 2012)

- NERC prepared an informational filing as directed in Order 754
 - Submitted on-time (March 15, 2012)
 - Provided a status report on the three approaches identified at the Technical Conference
 - Request for Interpretation (Project 2012-INT-02)
 - Data Request (Order 754)
 - Reliability of Protection Systems (Reliability Standard Project 2009-07)

- To receive Order 754 or Request for Interpretation notices please contact Scott Barfield-McGinnis at:
 - Scott.Barfield@nerc.net or (404) 446-9689
- For project status, visit the NERC Project page at:
 - http://www.nerc.com/filez/standards/order_754.html
 - <http://www.nerc.com/filez/standards/2012-INT-02 Interpretation TPL-003-0a and TPL-004-0 SPCS.html>

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