

Order 754 – Data Request

The study of Single Point of Failure

January 5, 2012

RELIABILITY | ACCOUNTABILITY



- **NERC Antitrust Guidelines**

- It is NERC's policy and practice to obey the antitrust laws and to avoid all conduct that unreasonably restrains competition. This policy requires the avoidance of any conduct that violates, or that might appear to violate, the antitrust laws. Among other things, the antitrust laws forbid any agreement between or among competitors regarding prices, availability of service, product design, terms of sale, division of markets, allocation of customers or any other activity that unreasonably restrains competition. It is the responsibility of every NERC participant and employee who may in any way affect NERC's compliance with the antitrust laws to carry out this commitment.

- **NERC Disclaimer**

- Participants are reminded that this meeting is public. Notice of the meeting was posted on the NERC website and widely distributed. Participants should keep in mind that the audience may include members of the press and representatives of various governmental authorities, in addition to the expected participation by industry stakeholders.

- Summary of FERC Order 754
- October 24-25, 2011 FERC Technical Conference
- SPCS/TIS Joint Meeting Outcomes
 - Request for Data or Information
- RoP, Section 1600 background
 - Authority
 - Criteria
- Data Request
- Posted for Informal Comment
- Questions and Answers Session

- Order 754¹
 - Commission's approval of Project Interpretation of TPL-002-0b — PacifiCorp (Project 2009-14²)
 - Commission has a concern (P19)
 - Study of a single point of failure on protection systems
 - Commission issued a directive (P20)
 - FERC staff to meet with NERC and appropriate SMEs
 - Explore the reliability concern
 - NERC to make an informational filing in six months (March 15, 2012)
 - Explain whether there is a further system protection issue and, if so:
 - 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](http://www.nerc.com/filez/standards/Project2009-14%20Interpretation%20TPL-002-0%20PacifiCorp.html)

- FERC Technical Conference (October 24-25, 2011)
 - Well attended by industry
 - Stakeholders, NERC and FERC staff
 - Discussions were open and helpful
 - 8 presentations
 - Outcomes
 - 4 Consensus Points
 - Problem Statement
 - 3 potential approaches for addressing the issue

- 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.”*

- Data Request – A small group should develop a proposal to the joint SPCS/TIS committees Dec 6-7, 2011
- Interpretation Request – A small group should develop a proposal to be presented to the joint SPCS/TIS committees Dec 6-7, 2011
- Project 2009-07 – To be considered later after the review of the first two bullets above

- RoP, Section 1600 – Request for Data or Information
 - Authority
 - FPA, Section 215
 - FERC, Section 39.2(d) regulations
 - Criteria
 - Describe why data is needed, its use and collection method
 - Identify the functional entity(ies)
 - Estimate of the burden on reporting entities
 - A schedule for reporting
 - Must not have a compliance use
 - Posting for Comment (45 days)
 - BOT Approval Required

- Data Request Goals
 - Meet the criteria of Order 754
 - Have clear expectations
 - Achieve the least burden on entities
 - Avoid “Compliance” space
 - Obtain quality data
 - Sufficient sample size
 - Data across all voltages > 100 kV
 - Define potential concern:
 - Potential impact on system performance
 - Risk based on attributes of “as-built” protection systems

- Responsibility
 - Transmission Planner
 - Requires assistance from GO(s) and TO(s)
- Method
 - Assessment for a cross-section of system elements operated at > 100 kV
 - 9-step process to assess concern
 - Transmission Planner assesses potential system performance associated with a protection system single-point-of-failure
 - GO(s) and TO(s) assess exposure to single-points-of-failure where a system performance concern is identified

- Rationale
 - Provides background on selection of:
 - Buses to be evaluated
 - Protection system components to be evaluated
 - System condition to be studied
 - System performance measure
- Schedule
 - Periodic reports
 - Completion due date

- Reporting template
 - Reporting template provided as a tool to assist entities
 - Further guidance to be provided on the reporting method
- Data to be reported
 - Statistics concerning the buses evaluated
 - Statistics concerning attributes of protection systems
 - Protective relays
 - Communication systems
 - AC current and voltage inputs
 - DC control circuitry
 - Statistics concerning the attributes of station dc supplies

- Informal Comment Period
 - 45 days, ending February 6, 2012
 - Use website for submitting comments
 - Summary consideration of comments
- Desired comment feedback
 - Method
 - Template
 - Schedule
 - Other items

- Please submit your questions via the chat feature in ReadyTalk
- The presenters will respond to as many questions as possible during remainder of the scheduled webinar
- Complete slide set will be posted tomorrow on the Order 754 project page in the “Standards Under Development” area





