Unofficial Comment Form
Order 754 - Request for Data or Information

Second Posting
Please DO NOT use this form for submitting comments. Please use the electronic form¹ to submit comments on the data request. The electronic comment form must be completed by Monday, June 25, 2012, 8:00 p.m. ET.

If you have questions please contact Scott Barfield-McGinnis at scott.barfield@nerc.net or by telephone at 404-446-9689.

Click here for: Order 754 Project Page²

Background Information
This posting is soliciting informal comment in accordance with Section 1600 of the NERC Rules of Procedure.³ NERC may request data or information that is deemed necessary to meet its obligations under Section 215 of the Federal Power Act, as authorized by Section 39.2(d) of the Federal Energy Regulatory Commission’s (FERC) regulations. Section 1602 requires NERC to post the proposed request for data or information or a proposed modification to a previously authorized request for data or information for a forty-five (45) day public comment period.

Order 754 is the Final Rule approving the interpretation of Interpretation TPL-002-0a PacifiCorp (Project 2009-14⁴) regarding requirement R1.3.10. In addition to the approval, the Commission expressed a concern about single point of failure of protection systems and issued a directive for further investigation. From the Order, “…the Commission believes that there is an issue concerning the study of the non-operation of non-redundant primary protection systems; e.g., the study of a single point of failure on protection systems” (P19). In the first part of the directive (P20), the Commission directed FERC staff to meet with NERC and its appropriate subject matter experts to explore this reliability concern, including where it can best be addressed, and identify any additional actions necessary to address the matter. This portion of the directive was satisfied by the October 24-25, 2011 Technical Conference. The second part of the directive (P20) requires NERC to submit an informational

¹ https://www.nerc.net/nercsurvey/Survey.aspx?s=d86ae2907b884db9af1cac68b0af66ea
² http://www.nerc.com/filez/standards/order_754.html
⁴ http://www.nerc.com/filez/standards/Project2009-14_Interpretation_TPL-002-0_PacifiCorp.html
filing within six months of the Order (March 15, 2012) 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 that issue and what priority it should be accorded relative to other reliability initiatives planned by NERC. The data request will help NERC and the Commission to understand the extent of any reliability gap and guide any efforts to address any such reliability gap, if necessary.

Modifications from the Initial Posting
This second posting addresses many of the comments and concerns regarding the data request. Each applicable entity is encouraged to review the summary response to comments received posted on the Order 754 Project Page. Significant modifications include; (1) allowing flexibility for an entity to use an alternative method that yields data consistent (in form and substance) with the method in the data request, (2) updated tables to promote a better understanding of the criteria to be applied in responding to the data request, (3) the period to respond has been extended to twenty-four months with a staged approach for reporting data, and (4) many examples and illustrations have been added to provide additional clarity.
**Comment Questions**

Not all sections require a comment. Enter comments electronically in text only format when cutting and pasting from other documents. Avoid using any special characters other than commas and periods.

1. Please enter specific comments about the method of the data request in the provided text box.

   Comments: Revise the language in Section 3 under Survey—Method page 8 to read:

   - Simulations will be based on a case representing the expected 2015 system with case(s) used to perform the most recent annual transmission assessment representing stressed system conditions (e.g., load level and transfer levels) that will likely produce the most conservative results based on past studies or engineering judgment.

   - Trip the remote terminal(s) of all transmission lines connected to the faulted bus based on the maximum expected remote clearing time provided by the Generator Owner, Transmission Owner, or Distribution Provider. **As an alternative, the Transmission Planner may assume uncleared faults or assume fault clearing at 5 seconds after fault initiation.**

   The language changes in the first bullet are to provide a uniform year as the basis for all assessments. As presently written, the cases could be for the year 2022, where corrective action plans have been developed, but there is not enough detail known about their future installation yet to be able to complete the survey. Using the year 2015, or something akin to it, would allow for projects which are in process and are well known to be evaluated.

   The changes to the second item are to eliminate the need for contacting entities for estimated clearing times, since an uncleared or 5 second fault is sufficient since this is only a screening evaluation. Step 7 of the process will allow further refining based on actual anticipated clearing times. Revising the bulleted step eliminates a data request and it has no consequence on the usefulness of the final data to be provided.

   It would be beneficial if the final ‘Request for Data or Information’ provided additional guidance regarding which case(s) to use for testing, in order to achieve more consistent results without tying the hands of the entities performing the tests. Consider augmenting the text regarding case(s) to use in Step 3 with that the case(s) should represent system conditions for a study year within five (5) years, in
an effort to simplify how to consider projects in progress or planned. By restricting the time horizon to five years, we believe that there is more certainty and information available regarding in progress or planned (not-yet-in-service) projects to perform the evaluation in a consistent manner.

2. Please enter specific comments about the data reporting template of the data request in the provided text box. Note: The posted template is the structure of reporting data and actual reporting may use a different mechanism, such as, this electronic comment form.

Comments: There may be an error in the text associated with Note #2 in the Excel spreadsheets for ‘Attributes of Evaluated Transmission Line/ Transmission Transformer / Generator Step-Up Transformer / Step-Down Transformer / Shunt Device / Bus Protection Systems’. The present version of the text states: “The number of Shunt Devices to be entered in Row 2 is the subset of [Device Type] entered in Row 1 for which the protection system meets all of the specified protection system attributes in Table B, "Protection System Attributes to be Evaluated.”, while the text in row 2 of the Table states: “Number of [Device Type] for which protection systems does not meet all of the specified protection system attributes for redundancy in Table B:”. The text “meets all” in the notes should be replaced by “does not meet all” to be consistent with the text in the Tables.

3. Please enter specific comments about the reporting schedule of the data request in the provided text box.

Comments: No comments.

4. Please enter any other comments about the data request in the provided text box.

Comments: Bus needs to be defined in order to develop uniform assessments. Suggest a definition be developed similar to the following definition taken from NPCC’s Criteria A-10, Classification of Bulk Power System Elements:

“Bus
...the term bus refers to a junction with sensing or protection equipment within a substation or switching station at which the terminals of two or more elements are connected, regardless of whether circuit breakers are provided. In this context, bus may not have a direct correlation to the use of this term in substation design or a power flow data set.”

Specifics regarding bus configurations and other information can be found in the NPCC A-10 Classification of Bulk Power System Elements document.