Official Comment form for BES Definition Exception Process

Please use this form to submit your recommendations for consideration in developing criteria for deviating from the default criteria for classifying Elements and Facilities as part of the BES.

Please send recommendations relative to the BES Definition Exception Process and associated documentation to sarcomm@nerc.com with “BES Definition” in the subject line. The information should be submitted no later than January 21, 2011.

If you have questions please contact Ed Dobrowolski at Ed.Dobrowolski@nerc.net or by telephone at 609-947-3673.

Please provide your name, organization, telephone number and email address so that we may contact you if we need clarification:

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Background:

FERC issued Order 743 on November 18, 2010 with the directives identified below:

16. After consideration of the comments submitted, the Commission adopts the NOPR’s proposal with some modifications. The Commission directs the ERO to revise the definition of “bulk electric system” through the NERC Standards Development Process to address the Commission’s concerns discussed herein. The Commission believes the best way to address these concerns is to eliminate the Regional Entities’ discretion to define “bulk electric system” without ERO or Commission review, maintain a bright-line threshold that includes all facilities operated at or above 100 kV except defined radial facilities, and adopt an exemption process and criteria for excluding facilities that are not necessary to operate an interconnected electric transmission network. However, NERC may propose a different solution that is as effective as, or superior to, the Commission’s proposed approach in addressing the Commission’s technical and other concerns so as to ensure that all necessary facilities are included within the scope of the definition.

NERC is working to address these directives with two activities – the definition of Bulk Electric System (BES) is being revised through the standard development process and a BES Definition Exception Process is being developed as a proposed modification to the Rules of Procedure.

The information you provide in response to the following questions may be used by the standard drafting team working to revise the definition of BES or by the group working to develop a BES Definition Exception Process.
1. If you believe there are Transmission or Generation Elements or Facilities operated at voltages **100kV and above** which should be considered for **exclusion** from the Elements and Facilities classified as part of the BES:

   a. Identify the Element or Facility recommended for exclusion:

   All step-down transformers with their low-side terminals operated at below 100 kV.

   Radial taps from a BES feeder or bus connection to loads. All elements or facilities in series with excluded or exempt elements or facilities -- upstream to a designated point-of-demarcation with the BES and downstream to the customer meter or interconnection. (Refer to the response to Question 3, New York Indicator [NY-2] below, and the response to Question 13, proposed definition ‘Point-of-Demarcation’ in the BES Definition Comments provided separately). For example, upstream from an exempt or excluded feeder to the upstream-side of the disconnect switch connecting the excluded or exempted feeder to the BES, or if no disconnect switch is present, to the upstream BES supply-bus connection. This exclusion or exemption would extend to and also apply to related equipment, such as circuit switchers, circuit breakers, ground switches, disconnect switches, busses, etc. that are downstream of the point-of-demarcation and in the same circuit with the exempted or excepted feeders and transformers.

   Local generation and any facility associated with local generation serving as a load modifier to local load only. The power generated is demonstrated to be consumed locally and does not flow back into the BES. The operation (or loss) of the local generation and/or associated facilities does not materially impact any BES transmission facilities. If a local generator functions as a load modifier, and does not materially impact the BES, meaning that it is not necessary to maintain BES reliability, then it should be excluded from the definition of BES under the BES Exclusion process.

   The transmission lines dedicated to serve the native load in the Quebec Interconnection.

   b. Provide a generic one-line diagram depicting the Element or Facility in question (if available). Not Applicable

   c. Provide a technical justification for the exclusion (provide justification here or attach a supplemental document or URL link to publicly posted document if available).

   **Justification:** The FERC Seven Factor test has been shown to be a reliable, repeatable method for identifying facilities that are local distribution and separating them from those facilities which perform a transmission function. The indicators of local distribution in the Commission’s seven-factor test\(^1\) are:

   (1) Local distribution facilities are normally in close proximity to retail customers;

   (2) Local distribution facilities are primarily radial in character;

   (3) Power flows into local distribution systems, and rarely, if ever flows out;

   (4) When power enters a local distribution system, it is not reconsigned or transported on to some other market;

   (5) Power entering a local distribution system is consumed in a comparatively restricted geographic area;
(6) Meters are based at the transmission / local distribution interface to measure flow into the local distribution system; and

(7) Local distribution systems will be of reduced voltage.

1 Ref. FERC Order No. 888 at 31,771 and 31,981, e.g., Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities

d. Identify if this exclusion should apply on a continent-wide basis, interconnection-wide basis, region-wide basis, or less than a region-wide basis. If you don’t know how widely this exclusion should apply, please select, “unknown.”

☒ Continent-wide
☐ Interconnection-wide
☐ Region-wide
☒ Less than Region-wide
☒ Unknown

Comments relative to the proposed exclusion(s):

2. If you believe there are Transmission or Generation Elements or Facilities operated at voltages below 100kV which should be considered for inclusion in the Elements and Facilities classified as part of the BES:
   a. Identify the Element or Facility recommended for inclusion: Transmission facilities as determined to be necessary for reliability to the bulk electric system. Common interconnections between two or more areas.
   b. Attach a generic one-line diagram depicting the Element or Facility (if available).
   c. Provide a technical justification for the exclusion (provide justification here or attach a supplemental document or URL link to publicly posted document if available).

Justification: The exemption process should allow for a registered entity to submit the results of an objective, impact based assessment evaluation in support of its application for exemption of facilities that would otherwise be classified as part of the BES. This assessment process, when consistently applied in a non-arbitrary manner, would yield results that demonstrate that the facilities for which the exemption is being sought do not impact the BES whenever they are removed from service.

Any regional or registered entity can present technical studies to NERC for consideration of the expansion of the Bulk Electric System. The primary consideration by NERC Staff for inclusion must be that the addition of these recommended facilities bring a measurable (not subjective) incremental reliability benefit to real-time grid operations. Common rules should apply to elements common to the interconnections between two or more areas.

   d. Identify if this inclusion should apply on a continent-wide basis, interconnection-wide basis, region-wide basis, or less than a region-wide basis. If you don’t know how widely this inclusion should apply, please select, “unknown.”
Continental-wide
Interconnection-wide
Region-wide
Less than Region-wide
Unknown

Comments relative to the proposed inclusion(s): Registered Entities must retain the right to appeal any decisions with direct implications to their facilities. Broad applications of “included facilities” could result in the designation of facilities, the inclusion of which is not warranted. Registered Entities need the right to seek exemption when broad new inclusions are applied.

3. Please provide any other information that you feel would be helpful to the group working to develop a BES Definition Exception Process.

Comments: [1] Seven Factor Test – NPCC participating members believe that the BES Exclusion process should place substantial weight upon Factor 3 from the FERC Seven Factor test. Factor 3 states, “Power flows into local distribution systems, and rarely, if ever, flows out.” We also believe that Factor 7 has been broadly interpreted by FERC, State Commissions and the Courts to include facilities serving a distribution function and operated at 100 kV and above. 3,4,5,6,7,8

[2] NPCC A-10 Methodology for Determine BPS Elements – NPCC participating member believe the A-10 Criteria methodology that NPCC uses to determine its BPS elements can be further utilized to identify critical system components that may be operated below the 100 kV threshold. The Criteria may also be used be used in lieu of the use of “higher” thresholds that appear or are contemplated in some of the ERO standards such as FAC-003 cites 200kV and above, the TPL-001 currently under development may specify a 200 kV threshold for some “more stringent” planning criteria. These higher thresholds may lend themselves to the use of

2 We view the term “rarely” as used in Factor 3 to be bounded on the upside by a reverse power flow rate of no more than 10% of all hours and a peak reverse power flow (MW) amount of no more than 50% of peak inflows.
7 “With regard to the deference it would provide to recommendations by state regulatory authorities concerning where to draw the jurisdictional line between FERC jurisdictional transmission facilities and state-jurisdictional local distribution facilities, FERC provided the following guidelines:… (e) If the utility's classifications and/or cost allocations are supported by the state regulatory authorities and are consistent with the principles established in Order No. 888, FERC will defer to such classifications and/or cost allocations.” FERC comments filing by Central Illinois Light Company, Docket EL03-39-000, filed Dec. 20, 2002.
8 Mansfield Municipal Electric Department v. New England Power Co., 97 FERC ¶ 61,134 (2001). “…the Municipals' facilities have all of these [Seven Factor Test] indicators except the last one. The voltage of the lines is 115 kV, the same voltage as the transmission grid. As discussed supra, the voltage alone is not dispositive of the issue as to whether a line is distribution or transmission. We must also look at the function.”
an “impact based” methodology that could be used to determine where more stringent requirements may need to be applied.

[3] New York State Public Service Commission (NYSPSC) - In Opinion No. 97-12, Case 97-E-0251, the NYSPSC provided utilities under its jurisdiction explicit guidance for determining the point-of-demarcation between transmission facilities under FERC jurisdiction and distribution facilities under NYSPSC jurisdiction. Appendix C to this Order established three (3) measures that utilities were instructed to use in determining the classification of transmission and distribution assets.

[4] FERC non-jurisdictional entities such as the Canadian Provinces.

The exemption process should clearly address the process and requirements for FERC non-jurisdictional entities (such as the Canadian entities) with the exception of the interconnections between them and those entities under FERC jurisdiction, and/or those entities having a direct impact on those interconnections.

APPENDIX C

9 STATE OF NEW YORK PUBLIC SERVICE COMMISSION, OPINION NO. 97-12 in CASE 97-E-0251 - Proceeding on Motion of the Commission to Distinguish Bulk Electric Transmission System from Local Distribution Facilities.
NEW YORK INDICATORS (FINAL REVISED VERSION)

[NY-1] A transmission system delivers power from generation plants to local distribution systems. Where a generator directly supplies a local distribution system, the need for a transmission system to deliver its output to load depends on the size of the generator in relation to the minimum load of that system.

[NY-2] Transmission systems end at the high-voltage terminals or at the disconnect switch of a substation transformer; if no transformer is present, the transmission system ends at the bus tap of the local distribution feeder.

[NY-3] In a local distribution system, the power flows primarily to loads without re-entering the transmission system. The local distribution system cannot be used to facilitate power system transfers between local distribution systems. ...

For the Canadian entities, the inclusion or exclusion of equipment and facilities in the Bulk Electric System must also be approved by the Canadian Regulators (refer to the response to Question 2c).

It is difficult to propose first a definition for the Bulk Electric System, but only after an Exemption process. Both influence each other, and should be developed together.