

Comment Form for 1st Draft of Project 2010-17: Definition of BES (BES) Technical Principles for Demonstrating BES Exceptions

Please **DO NOT** use this form. Please use the [electronic comment form](#) to submit comments on the first draft of the Project 2010-17: Definition of the Bulk Electric System (BES) Technical Principles for Demonstrating BES Exceptions. **Only** submit comments on the first draft Technical Principles for Demonstrating BES Exceptions. The comments must be submitted by **June 10, 2011**.

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

Background Information Definition of the BES (Project 2010-17)

In parallel with the definition project, another stakeholder team outside the standards development process has been set up to develop a change to the NERC Rules of Procedure (ROP) to allow for entities to apply for excluding Elements from the BES that might otherwise be included according to the proposed definition and designations. This same process would be used by Registered Entities to justify including Elements in the BES that might otherwise be excluded according to the proposed definition and designations. This process would also be utilized for those situations where the core definition and designations do not clearly identify whether an Element is BES or not. The ROP team will develop the process for seeking an exception from the definition and designations, but the Definition of the BES Standards Drafting Team (DBESSDT), through the standards development process, has developed the criteria necessary for applying for an exception.

The exclusion exception process has been set up as a choice between two alternative forms of evidence. The first choice is seen as less onerous in nature as it does not require extensive technical analysis. An entity must choose which path it wants to pursue.

The inclusion exception process requires more detailed analysis and only one choice is provided.

The first draft of the criteria that has been posted contains the evidence that must be presented by an entity seeking an exception as well as specific criteria for how that evidence will be evaluated. The SDT is seeking industry feedback **not just on the approach** being presented but **also on the specific numeric thresholds** that will be used. Comments received from this posting will help to determine the final criteria that the industry will be required to adhere to. Therefore, industry feedback is vital to the development process.

It should be noted that the actual application process is described in the Rules of Procedure document that has been posted concurrent with the criteria document.

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You do not have to answer all questions. Enter All Comments in Simple Text Format.

The New England States Committee on Electricity (“NESCOE”) appreciates the work of NERC’s standard drafting team as well as the opportunity to provide comments on this matter. NESCOE is New England’s Regional State Committee and the comments provided herein reflect the collective views of the six New England states. NESCOE’s comments below reflect its general perspective that any new costs imposed as a result of the BES and its implementation, which costs ultimately fall on consumers, should provide meaningful reliability benefits.

Insert a “check” mark in the appropriate boxes by double-clicking the gray areas.

1. Exclusions - The SDT has set up one path for evidence that does not include extensive technical analysis. It consists of 4 items, all of which must be addressed in order to submit a completed request for exclusion. The **first item** involves **proximity to Load** and requests industry feedback on how to measure this variable. Do you agree with this requirement? If you do not support this requirement or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. In addition, in the comment field, please provide your thoughts on the appropriate impedance value to replace ‘TBD,’ including technical rationale for your argument.

Yes:

No: x

Comments: NESCOE questions the concept as presented and seeks further clarification. As a general matter, NESCOE believes the requirement that a proposed exception must meet all four criteria is overly restrictive and will result in only a narrow category of elements qualifying for exclusion from the BES. NESCOE suggests that a better approach would allow exclusions to be based on one or more criteria, depending on the nature of the element that is the subject of the application. With respect to the proposal, NESCOE does not believe it is possible to obtain agreement on the “proximity to load” criterion for additional exclusions from the BES when the underlying impedance value has not been determined and may be the subject of significant debate. While it is possible that NESCOE could support a single impedance value that would govern exclusion determinations, it notes that a uniform value may not adequately address varying system configurations throughout ISO-New England and neighboring control areas. NESCOE suggests that the standards setting process allow for further deliberation on possible proposed values. Other terms, such as “load center,” also need definition.

2. Exclusions - The SDT has set up one path for evidence that does not include extensive technical analysis. It consists of 4 items, all of which must be addressed in order to submit a completed request for exclusion. The **second item** involves **Element(s) treated as radial**. Do you agree with this requirement? If you do not support this requirement or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments.

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Yes:

No: X

Comments: As noted in Response 1, NESCOE believes exclusion determinations should not require a finding that all four proposed criteria are met. In addition, NESCOE believes that the criterion proposed here is overly complex and that developing the evidence may be overly burdensome to the applicant. Radial paths should have a simple definition related to how the path is connected from a topological perspective. NESCOE suggests that a radial path be defined simply as a path having only one connection point to the BES, thereby presenting no opportunity for power flows parallel to the BES network. Under fault situations, these excluded paths can be isolated from the BES with suitable NERC compliant protection systems. Note the radial path may be comprised of parallel lines that terminate at the BES connection point. In addition, NESCOE believes that a radial path should qualify for exclusion as long as the power flowing into the BES is less than a threshold MVA. NESCOE does not at this point have a recommendation as to this specific threshold but believes it should be developed through the standards-setting process. NESCOE suggests this approach to avoid burdening the development of generation including renewable generation. As New England is working on facilitating the development of renewable resources located in and around the region to serve customers most cost-effectively, this process should take specific care not to impose undue burdens on renewable resources.

3. Exclusions - The SDT has set up one path for evidence that does not include extensive technical analysis. It consists of 4 items, all of which must be addressed in order to submit a completed request for exclusion. The **third item** involves **power flow**. Do you agree with this requirement? If you do not support this requirement or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. In addition, in the comment field, please provide your thoughts on the appropriate MWh value to replace 'TBD,' including technical rationale for your argument.

Yes:

No: x

Comments: As noted in Response 1, NESCOE believes exclusion determinations should not require a finding that all four proposed criteria are met. Generally, NESCOE is in agreement with an exception criteria for additional exclusions that takes into account power flows into the system that rarely flows out. However, additional clarity is necessary for criteria 1(c)(i),(ii) and (iv). Specifically, what is meant by "very limited set of conditions" under 1(c)(i) and (ii) and "limited quantity of energy" under 1(c)(i)? Further, is it appropriate to establish a fixed value of X megawatt hours for the maximum amount of energy flowing out of the system? While it is possible that NESCOE could agree upon a uniform value, NESCOE is not in a position to provide specific comment or support when the MWh value is unspecified. In addition, a fixed value may not adequately address varying system configurations throughout ISO-New England and neighboring control areas.

4. Exclusions - The SDT has set up one path for evidence that does not include extensive technical analysis. It consists of 4 items, all of which must be addressed in order to

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submit a completed request for exclusion. The **fourth item** involves **power transport**. Do you agree with this requirement? If you do not support this requirement or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments.

Yes:

No: x

Comments: As noted in Response 1, NESCOE believes exclusion determinations should not require a finding that all four proposed criteria are met. NESCOE further notes that New England's network has numerous parallel paths operated at voltages less than 200 kV which may parallel 230 kV and 345 kV BES network paths. If flows on a given <200 kV path only exceed 200 MVA under contingency conditions and if these paths are connected to the higher voltage BES elements with suitable NERC compliant protection systems, these paths may be EXCLUDED from the BES. NESCOE suggests the value of 200 MVA based on typical thermal ratings of 115 kV transmission lines but is open to other values that the drafting team may suggest. NESCOE also suggests that the phrase "to some other system" be broadened to include any other higher voltage BES element.

5. Exclusions - The SDT has set up **one path** for evidence that includes **technical analysis**. Do you agree with this requirement? If you do not support this requirement or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. In addition, in the comment field, please provide your thoughts on the proposed metrics for analysis and the appropriate values to replace 'TBD,' including technical rationale for your argument.

Yes: X

No:

5a. Comments on approach: NESCOE supports the concept of allowing an additional path to justifying an exclusion from the BES. NESCOE could support development of technical criteria such as those proposed, but does not have specific recommendations at this time. As stated earlier, any excluded elements must be connected to the BES using fully NERC compliant protection systems.

5b. Comments on **distribution factor** measurement:

5c. Comments on **allowable transient voltage dip** measurement:

5d. Comments on **allowable transient frequency response**:

5e. Comments on **voltage deviation measurement**:

6. Exclusions – Do you have other methods that may be appropriate for proving an exclusion claim? Or, other variables/measurements that may be added to the requirements already shown in the posted *Technical Principles for Demonstrating BES Exceptions*? If so, please provide your comments here with technical rationale for why they should be considered.

Yes: x

No:

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Comments: Please refer to comments under item 4., above. If the parallel power flow in a given < 200 kV path only exceed 200 MVA under contingency conditions and if the applicable BES points have fully NERC compliant protection systems, disturbances on this lower voltage path will not adversely affect the reliability of the BES.

The exclusion determination process should be flexible enough to recognize that any requirement that may impose substantial new costs on New England transmission owners, and ultimately on consumers, should also provide meaningful reliability benefits

7. Inclusions - The SDT has set up only one path for evidence that includes technical analysis. Do you agree with this requirement? If you do not support this requirement or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. In addition, in the comment field, please provide your thoughts on the proposed metrics for analysis and the appropriate values to replace 'TBD,' including technical rationale for your argument.

Yes:

No:

7a. Comments on approach:

7b. Comments on distribution factor measurement:

7c. Comments on allowable transient voltage dip measurement:

7d. Comments on allowable transient frequency response:

7e. Comments on voltage deviation measurement:

8. Do you have concerns about an entity's ability to obtain the data they would need to do the indicated technical analyses? If so, please be specific with your concerns so that the SDT can fully understand the problem and address it in future drafts.

Yes:

No:

Comments:

9. Are you aware of any conflicts between the proposed approach and any regulatory function, rule order, tariff, rate schedule, legislative requirement or agreement, or jurisdictional issue? If so, please identify them here and provide suggested language changes that may clarify the issue.

Yes:

No:

Comments:

10. Are there any other concerns with this approach that haven't been covered in previous questions and comments? Please be as specific as possible with your comments.

Yes:

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No:

Comments: NESCOE believes that exclusion determinations should be based on clear but flexible criteria that do not result in the unnecessary inclusion of elements into the BES that do not adversely impact the reliability of the BES. The process described here is too limiting in its requirement that an application meet all of those four listed criteria not requiring technical analysis. Applicants and reviewers should have a broader menu of decision criteria available to them. Regarding those criteria related to exclusions based on technical analysis, NESCOE suggests that ranges of values, in recognition of regional differences in network characteristics, be suggested by the drafting team for further consideration. Finally, as discussed above in response to questions 1 through 4, NESCOE believes that additional exclusion determinations should not require a finding that all four proposed criteria are met. Rather, the various criteria set forth under 1(a) through 1(d) should be treated as alternative criteria to qualify for an additional exclusion, and entities seeking additional exclusions to the BES should be allowed to demonstrate that one or more criteria is met, depending on the nature of the element that is the subject of the application.