

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

**REVISIONS TO ELECTRIC RELIABILITY) Docket Nos. RD14-2-000
ORGANIZATION DEFINITION OF BULK)
ELECTRIC SYSTEM**

**REPLY COMMENTS OF THE NORTH AMERICAN
ELECTRIC RELIABILITY CORPORATION**

Pursuant to Rule 213 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission (“Commission”), 18 C.F.R. § 385.213 (2013), the North American Electric Reliability Corporation (“NERC”) hereby provides reply comments in response to comments submitted by the Electricity Consumers Resource Council, American Forest & Paper Association, Council of Industrial Boiler Owners and American Fuel & Petrochemical Manufacturers (collectively, “ELCON”), First Wind Holdings, LLC (“First Wind”), and the American Wind Energy Association (“AWEA”).

NERC’s comments clarify the record and demonstrate that the proposed definition of the term “Bulk Electric System” (“BES Definition”) should be approved without modification.¹ In order to ensure a smooth transition between Phase 1 and Phase 2 of the BES Definition and to avoid potential regulatory uncertainty, NERC has requested expedited Commission action in this proceeding to the extent necessary for the Commission to issue an order on the proposed Phase 2 BES Definition by no later than March 31, 2014.²

¹ To the extent that the Commission’s Rules of Practice and Procedure do not expressly authorize this response, NERC respectfully submits that the Commission should consider this response, as it will aid in the decision-making process. *See Midwest Indep. Transmission Sys. Operator, Inc.*, 122 FERC ¶ 61,198 at P 17 (2008) (answer to a protest permitted where it provided information that assisted the Commission’s decision-making process.).

² *Petition of the N. Am. Elec. Reliability Corp. for Approval of Revisions to the Definition of “Bulk Electric System” and Request for Expedited Action*, Docket No. RD14-2-000 at 5 (December 13, 2013).

I. BACKGROUND

The Phase 2 BES Definition was developed in an open and transparent manner, consistent with NERC's Reliability Standard development process, and included three formal comment periods. The final ballot achieved a quorum of 81.68%, and an approval of 74.34%. On December 13, 2013, NERC submitted a petition for approval of the proposed revisions completed in Phase 2 of the BES Definition. Among other modifications, NERC proposes to add a Note (Note 2) to Exclusion E1 (Radial Systems) that provides that "[t]he presence of a contiguous loop, operated at a voltage level of 50 kV or less, between configurations being considered as radial systems, does not affect this exclusion." NERC's proposed BES Definition is an integral part of the NERC Reliability Standards and is included in the *NERC Glossary of Terms Used in Reliability Standards*.³

On January 17, 2013, ELCON, First Wind, and AWEA submitted comments on the proposed BES Definition.⁴ ELCON generally supports NERC's petition for approval of the BES Definition but urges the Commission to remand to NERC the issue of Note 2 to Exclusion E1 (Radial Systems) and to direct NERC to consider replacing its proposed 50 kV threshold with a 70 kV threshold for loops that are inside the fence of industrial or manufacturing facilities.⁵ ELCON states that such a remand "could be addressed expeditiously by NERC and would not delay the July 1, 2014 effective date of the revised BES definition."⁶

³ Available at: http://www.nerc.com/pa/Stand/Glossary%20of%20Terms/Glossary_of_Terms.pdf.

⁴ Comments in support of NERC's petition were submitted by Exelon Corporation, the Transmission Access Policy Study Group, and the American Public Power Association and Public Utility District No. 1 of Snohomish County, Washington.

⁵ Motion to Intervene, Protest and Initial Comments of the Electricity Consumers Resource Council, American Forest & Paper Association, Council of Industrial Boiler Owners and American Fuel & Petrochemical Manufacturers, Docket No. RD14-2-000 (January 17, 2014) ("ELCON Protest") at 2-3.

⁶ ELCON Protest at 12.

First Wind's protest is limited to Inclusion I4 (Dispersed Power Producing Resources) and requests the Commission to reconsider its decision to include individual wind turbine generators in the BES. In the alternative, First Wind requests that the Commission: (i) direct NERC to expedite consideration of the stakeholder proposal to change the applicability of certain Reliability Standards applicable to Generator Owners and Generator Operators to provide that such standards should not be applied at the individual generating resource as opposed to just the facilities operated at 100 kV or more, and (ii) require NERC to regularly report to the Commission on these efforts.⁷ Similarly, AWEA requests that the Commission clarify that Inclusion I4 does not include individual dispersed generators and suggests that this could be achieved by removing the words "the individual resources" from Inclusion I4, sub-bullet "a."⁸

On January 31, 2014, Exelon Corporation submitted reply comments to ELCON on the issue of timing. Exelon requests that the Commission deny the request to remand Note 2 of Exclusion E1 and approve Note 2 as filed.⁹

⁷ Motion to Intervene and Protest of First Wind Holdings, LLC, Docket No. RD14-2-000 (January 17, 2014)(internal citation omitted)("First Wind Protest") at 2-3.

⁸ Comments of the American Wind Energy Association, Docket No. RD14-2-000 (January 17, 2013)("AWEA Protest") at 1. NERC notes that the specific relief requested by AWEA cannot be granted by the Commission as requested, for as the Commission has noted, Section 215(d)(4) of the Federal Power Act requires that the Commission remand to the ERO for further consideration a Reliability Standard "that the Commission disapproves in whole *or in part*." *Monitoring System Conditions - Transmission Operations Reliability Standard Transmission Operations Reliability Standards Interconnection Reliability Operations and Coordination Reliability Standards*, 145 FERC ¶ 61,158 at P 4 (2013) (*citing* 16 U.S.C. 824o(d)(4) (2012)).

⁹ Exelon states: "[g]iven the importance of certainty to the NERC and registered entities, the costs to registered entities to prepare requests for exceptions and justifications for treatment under Exclusion 3, the need for the NERC to issue procedures to implement the Bulk Electric System definition, the need for registered entities to receive training on these procedures and the time it would take for the NERC to process a remand, Exelon is concerned that a remand at this late date would leave the NERC and registered entities in the same position that required the NERC to request the one year extension in the first place." Response of Exelon Corporation to Motion to Intervene, Protest and Initial Comments of the Electricity Consumers Resource Council, American Forest & Paper Associate, Council of Industrial Boiler Owners and American Fuel & Petrochemical Manufacturers. Docket No. RD14-4-000 (January 31, 2014)("Exelon Reply Comments") at 3.

II. COMMENTS

NERC submits comments: (1) in response to ELCON regarding the 50 kV threshold in Exclusion E1, and (2) in response to First Wind and AWEA regarding the inclusion of individual resources in Inclusion I4.

A. The 50 kV Threshold in Exclusion E1 is Technically Justified and Should be Approved Without Modification

As explained in the petition for approval of the BES Definition and in the Exhibit D, *White Paper on Bulk Electric System Radial Exclusion (E1) Low Voltage Loop Threshold* (“White Paper”), the 50 kV threshold in Note 2 of Exclusion E1 is technically supported and just and reasonable. The 50 kV threshold is a result of a two-step process to establish a technical justification for the establishment of a voltage threshold below which sub-100 kV loops do not affect the application of Exclusion E1.

1. The 50 kV Threshold in Exclusion E1 Establishes An Appropriate Level for Determining Whether a Portion of the System is Considered Radial

ELCON mischaracterizes the purpose of the 50 kV threshold, stating that “NERC has not properly demonstrated that 50 kV is the maximum threshold that would allow for reliability of the interconnected transmission network or that a 70 kV threshold would not allow for such reliability, particularly when the Exceptions Process to account for any outlier configurations is taken into account.”¹⁰

Exclusion E1 (Radial Systems) provides for the exclusion of radial systems that meet specific criteria. The 50 kV threshold was adopted as an associated component of this exclusion based on the scenarios and configurations utilized in the analysis for the White Paper, and represents the vast majority of configurations that will be encountered in the industry. This

¹⁰ ELCON Protest at 5.

approach is consistent with the fact that the BES Definition is a bright-line threshold designed to eliminate ambiguity.¹¹

Contrary to ELCON's assertion, systems connected by facilities operated above 50 kV are not swept into the Exception Process -- rather, the facilities that are included in the BES by application of the core definition are eligible for exclusion from the BES by application of Exclusion E3 (Local Networks). The White Paper demonstrates that 50 kV is an appropriate level for determining whether a portion of the system is considered radial and is therefore a candidate for exclusion from the BES by application of Exclusion E1 (Radial Systems), or is considered a networked system and therefore a candidate for exclusion from the BES Definition by application of Exclusion E3 (Local Networks). The White Paper resulted from extensive simulations which demonstrated that power flow reversal into the BES is unlikely when circuit loop operating voltages are below 50 kV. Using power flow reversal as the criterion to establish this threshold is consistent with Exclusion E3 (Local Networks), which precludes exclusion of facilities when power flows into the BES.¹²

¹¹ *Revision to Electric Reliability Organization Definition of Bulk Electric System*, 133 FERC ¶ 61,150 at P (2011) (“Order No. 743”) (“Eliminating broad regional discretion without ERO or Commission oversight and maintaining a 100kV bright-line definition, coupled with an exemption process, removes any ambiguity regarding who is required to comply and accomplishes the goal of reducing inconsistencies across regions.”), *order on rehearing*, 134 FERC ¶ 61,210 (2011) (“Order No. 743-A”).

¹² Proposed Exclusion E3 (Local Networks) provides: Local networks (LN): A group of contiguous transmission Elements operated at less than 300 kV that distribute power to Load rather than transfer bulk power across the interconnected system. LN's emanate from multiple points of connection at 100 kV or higher to improve the level of service to retail customers and not to accommodate bulk power transfer across the interconnected system. The LN is characterized by all of the following:

- a) Limits on connected generation: The LN and its underlying Elements do not include generation resources identified in Inclusions I2, I3, or I4 and do not have an aggregate capacity of non-retail generation greater than 75 MVA (gross nameplate rating);
- b) *Real Power flows only into the LN* and the LN does not transfer energy originating outside the LN for delivery through the LN; and
- c) Not part of a Flowgate or transfer path: The LN does not contain any part of a permanent Flowgate in the Eastern Interconnection, a major transfer path within the Western Interconnection, or a comparable monitored Facility in the ERCOT or Quebec Interconnections, and is not a monitored Facility included in an Interconnection Reliability Operating Limit (IROL). (emphasis added).

The 50 kV threshold is technically supported and establishes that a 50 kV threshold for sub-100 kV loops does not preclude the application of Exclusion E1. The 50 kV threshold satisfies the Commission's directives in Order Nos. 773 and 773-A in an equally efficient and effective manner, and should be approved by the Commission without modification.

2. The 50 kV Threshold is Consistent with the BES Exception Process

The BES Exception Process is included as an appendix to the NERC Rules of Procedure and it includes detailed technical and process requirements for handling exception requests. An entity that requests the inclusion (or exclusion) of a facility in the BES must provide technical and engineering support for its request. By following this process, a determination will be made by the Regional Entity, and approved by NERC, regarding whether a facility is included in the BES. ELCON incorrectly asserts that NERC has ignored the proper functioning of the BES Exception Process.¹³

The White Paper establishes a reasonable threshold below which power is unlikely to flow back to the BES. The White Paper notes there may be actual cases that deviate from these modeled scenarios, and that such deviations are expected to be rare and can be processed through the companion BES Exception Process.¹⁴ In setting the threshold at 50 kV, NERC recognizes that there may be cases in which: (1) power flows to the BES through facilities operated below 50 kV, or (2) power does not flow through facilities operated above 50 kV. In the former case, the Exception Process is available to include facilities if this power flow affects reliability of the Bulk-Power System. Similarly, in the latter case, if the facilities are included in the BES by

¹³ ELCON Protest at 10 (“in developing its proposal here NERC inexplicably ignored the proper functioning of the exception process as established by NERC and approved by the Commission.”).

¹⁴ White Paper at 16, *available at*:

http://www.nerc.com/pa/Stand/Project%20201017%20Proposed%20Definition%20of%20Bulk%20Electri/bes_white_paper_draft3_PUBLIC.pdf.

application of the core definition and do not qualify for application of Exclusion E3 (Local Networks), the BES Exception Process is available to exclude such facilities.

Contrary to ELCON's assertion, the threshold results in proper use of the BES Exception Process by achieving a balance to minimize the need for entities to utilize the BES Exception Process, while permitting its use to either include or exclude facilities. Setting the threshold at 50 kV establishes a bright-line for evaluation while providing certainty about those elements included in the BES and maintaining reliability of the Bulk-Power System. For these reasons, the proposed 50 kV threshold in Exclusion E1 is consistent with the structure and application of the BES Definition in its entirety, and the companion BES Exception Process. Furthermore, Commission approval of the proposed Phase 2 BES Definition will provide regulatory certainty, as noted by Exelon.¹⁵

B. Individual Resources are Appropriately Included in the Definition of “Bulk Electric System”

The purpose of Inclusion I4 (Dispersed Power Producing Resources) is to include variable generation¹⁶ and all forms of generation resources continue to be included in the proposed revisions to the BES Definition. Consistent with Order Nos. 773 and 773-A, the proposed BES Definition includes individual variable generation units within the scope of the bright-line BES Definition to ensure that, where necessary to support reliability, these units may

¹⁵ Exelon Reply Comments at 3.

¹⁶ *Revisions to Electric Reliability Organization Definition of Bulk Electric System and Rules of Procedure*, Order No. 773, 141 FERC ¶ 61,236 at P 115 (2012) (“We agree with NERC’s statement that the purpose of this inclusion is to include such variable generation (e.g., wind and solar resources). NERC noted that, while such generation could be considered subsumed in inclusion I2 (because the gross aggregate nameplate rating of the power producing resources must be greater than 75 MVA), NERC considered it appropriate for clarity to add this separately-stated inclusion to expressly cover dispersed power producing resources using a system designed primarily for aggregating capacity.”), *order on reh’g*, Order No. 773-A, 143 FERC ¶ 61,053 (2013).

be subject to Reliability Standards.¹⁷ While individual resources are included in Phase 1 of the BES Definition, the proposed changes to Phase 2 clarify this issue in order to provide regulatory certainty.

1. Individual Wind Turbines Can Affect the Reliability of the “Bulk Electric System”

First Wind states that “an individual [wind turbine generator] does not impact BES reliability.”¹⁸ However, as noted in a 2009 NERC Special Report: *Accommodating High Levels of Variable Generation* (at p. 52), individual variable generators can have an impact on system operation:

Distributed variable generators, individually or in aggregate (e.g. small scale photovoltaic), can impact the bulk power system and need to be treated, where appropriate, in a similar manner to transmission connected variable generation. The issues of note are forecasting, restoration, voltage ride-through, safety, reactive power, observability and controllability.¹⁹

Given the increasing penetration of wind, solar, and other non-traditional forms of generation, the inclusion of individual variable generation units within the scope of the bright-line BES Definition is appropriate to ensure that, where necessary to support reliability, these units may be subject to mandatory and enforceable Reliability Standards. Further, as the Commission noted in

¹⁷ *Id.* (“We disagree with AWEA and other commenters that inclusion I4 should be interpreted to not include the dispersed power producing resources within a wind plant in the [BES]. We agree with NERC’s statement that the purpose of this inclusion is to include such variable generation (e.g., wind and solar resources). NERC noted that, while such generation could be considered subsumed in inclusion I2 (because the gross aggregate nameplate rating of the power producing resources must be greater than 75 MVA), NERC considered it appropriate for clarity to add this separately-stated inclusion to expressly cover dispersed power producing resources using a system designed primarily for aggregating capacity. In addition, although dispersed power producing resources (wind, solar, etc.) are typically variable suppliers of electrical generation to the interconnected transmission network, there are geographical areas that depend on these types of generation resources for the reliable operation of the interconnected transmission network. The Commission believes that owners and operators of these resources that meet the 75 MVA gross aggregate nameplate rating threshold are, in some cases, already registered and have compliance responsibilities as generator owners and generator operators.”).

¹⁸ First Wind Protest at 6.

¹⁹ Available at: http://www.nerc.com/files/ivgtf_report_041609.pdf.

Order No. 773, there are geographical areas that depend on these types of generation resources for the reliable operation of the interconnected transmission network.²⁰

2. NERC is Reviewing the Applicability of Reliability Standards to Dispersed Power Producing Resources

NERC is currently developing Project 2014-01, Standards Applicability for Dispersed Generation Resources, to review the applicability of Reliability Standards with requirements that apply to Generator Owners and Generator Operators.²¹ A Standard Authorization Request was posted for formal comment from November 20, 2013 through December 19, 2013. NERC will develop any necessary revisions to Reliability Standards through the Commission-approved standard development process.²² NERC's Reliability Standard development process is open and transparent.²³ Anyone, including First Wind and AWEA, can actively participate in the process by attending standard drafting team meetings and through the submission of written comments.

NERC has demonstrated that, consistent with its responsibilities as the Electric Reliability Organization, it will examine the applicability of Reliability Standards to responsible entities as needed. For example, Project 2010-07, which was approved by the Commission, improved reliability by addressing the applicability of Reliability Standards to generator interconnection facilities.²⁴

²⁰ Order No. 773 at P 115.

²¹ More information is available at: <http://www.nerc.com/pa/Stand/Pages/Project-2014-01-Standards-Applicability-for-Dispersed-Generation-Resources.aspx>.

²² First Wind requests in the alternative that the Commission "direct NERC to expedite" this project. Such a directive is unnecessary as the project is already underway. Furthermore, as the Commission acknowledged in P 43 of Order No. 773-A, "elements that are newly-included in the bulk electric system due to the revised definition will only become subject to relevant Reliability Standards twenty-four months after the effective date of the revised definition."

²³ See NERC Standard Processes Manual at Section 1.4 ("Participation in NERC's Reliability Standards development balloting and approval processes shall be open to all entities materially affected by NERC's Reliability Standards."), available at: http://www.nerc.com/comm/SC/Documents/Appendix_3A_StandardsProcessesManual.pdf.

²⁴ *Generator Requirements at the Transmission Interface*, 144 FERC ¶ 61,221 (2013).

3. Commission Policy Precludes Relitigation of the Issue of Inclusion of Individual Resources in the BES Definition

As First Wind itself acknowledges, “the Commission addressed the question of whether individual resources should be included in the BES definition in Order Nos. 773 and 773-A, and concluded that individual wind turbine generators (‘WTG’) should be included as part of the BES.”²⁵ Therefore, First Wind’s request for the Commission to reconsider this determination is an impermissible collateral attack as this issue was fully litigated and decided on the merits.²⁶ Longstanding Commission policy precludes relitigation of issues previously decided.²⁷ Similarly, AWEA’s arguments, which were explicitly considered and rejected by the Commission in Order Nos. 773 and 773-A, should also be rejected.²⁸

The Commission’s policy against relitigation of issues, absent a showing of changed circumstances, clearly prohibits both First Wind and AWEA’s attempt to relitigate issues which have been previously determined.²⁹ It is contrary to sound administrative practice and a waste of resources to relitigate issues once those issues have been fully determined.³⁰ Absent a showing of significant change in circumstances, the relitigation of an issue is simply not justified and neither First Wind nor AWEA have demonstrated any such change in circumstances.

²⁵ First Wind Protest at 2-3.

²⁶ Neither First Wind nor AWEA have sought rehearing of Order No. 773-A pursuant to Section 313(b) of the Federal Power Act.

²⁷ See e.g., *San Diego Gas and Elec. Co. v. Pub. Serv. Co. of N.M.*, 86 FERC ¶ 61,253 (1999); see also *Pac. Gas & Elec. Co.*, 121 FERC ¶ 61,065, at P 38 (2007).

²⁸ See Order No. 773-A at PP 55-60.

²⁹ See Order No. 773-A at P 59 (“The Commission’s approval of the bulk electric system definition including inclusion I4 is adequately supported by the evidence in the record in this proceeding. In the Final Rule, the Commission agreed with NERC’s statement that the purpose of this inclusion is to include variable generation (e.g., wind and solar resources). The Commission also agreed with NERC that, while such generation could be considered subsumed in inclusion I2 (because the gross aggregate nameplate rating of the power producing resources must be greater than 75 MVA), it is appropriate for clarity to add this separately-stated inclusion to expressly cover dispersed power producing resources using a system designed primarily for aggregating capacity.”)(internal citations omitted).

³⁰ The basis for the collateral attack doctrine, as explained by the Commission, is “the fact that it is contrary to sound administrative practice and a waste of resources to relitigate issues in succeeding cases once those issues have been fully determined.” See *Alamito Co.*, 43 FERC ¶ 61,274, at 61,753 (1988).

Furthermore, sound public policy reasons support the Commission's policy against relitigation of issues. Regulatory proceedings before the Commission frequently involve numerous parties and issues. Finality could never be achieved if a single party could avoid litigation of an issue by not actively participating in the development of a record and thereby preserve its right to litigate the issue in subsequent proceedings.

As noted herein, NERC is addressing the applicability of Reliability Standards to dispersed power producing resources in Project 2014-01 and therefore, a Commission directive on this subject is unnecessary. The proposed BES Definition is a significant improvement that is technically supported and satisfies the Commission's directives in Order Nos. 773 and 773-A.

III. CONCLUSION

NERC respectfully requests that the Commission consider these comments and approve the proposed Phase 2 BES Definition without modification, prior to March 31, 2014.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that I have served a copy of the foregoing document upon all parties listed on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, D.C. this 3rd day of February, 2014.

/s/ Stacey Tyrewala

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