

130 FERC ¶ 61,204  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

18 CFR Part 40

Docket No. RM09-18-000

Revision to Electric Reliability Organization Definition of Bulk Electric System

(March 18, 2010)

AGENCY: Federal Energy Regulatory Commission.

ACTION: Notice of Proposed Rulemaking.

SUMMARY: The Commission proposes to direct the Electric Reliability Organization (ERO) to revise its definition of the term “bulk electric system” to include all electric transmission facilities with a rating of 100 kV or above. The Commission proposes that a Regional Entity must seek ERO and Commission approval before exempting any facility rated at 100 kV or above from compliance with mandatory Reliability Standards. The Commission believes that a 100 kV threshold for identifying bulk electric system facilities will protect the reliability of the bulk electric system. The proposal would also provide consistency across the nation’s reliability regions regarding the identification of bulk electric system facilities.

DATES: Comments are due [insert date that is 45 days after publication in the **FEDERAL REGISTER**].

ADDRESSES: You may submit comments, identified by docket number by any of the following methods:

- Agency Web Site: <http://ferc.gov>. Documents created electronically using word processing software should be filed in native applications or print-to-PDF format and not in a scanned format.
- Mail/Hand Delivery: Commenters unable to file comments electronically must mail or hand deliver an original and 14 copies of their comments to: Federal Energy Regulatory Commission, Office of the Secretary, 888 First Street, NE, Washington, DC 20426.

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SUPPLEMENTARY INFORMATION:

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FEDERAL ENERGY REGULATORY COMMISSION

Revision to Electric Reliability Organization Definition of Bulk Electric System      Docket No. RM09-18-000

NOTICE OF PROPOSED RULEMAKING

(March 18, 2010)

1. The Commission proposes to direct the Electric Reliability Organization (ERO) to revise its definition of the term “bulk electric system” to include all electric transmission facilities with a rating of 100 kV or above. The Commission proposes that a Regional Entity must seek ERO and Commission approval before exempting any facility rated at 100 kV or above from compliance with mandatory Reliability Standards. The Commission believes that a 100 kV threshold for identifying bulk electric system facilities will protect the reliability of the bulk electric system. The proposal would also provide consistency across the nation’s reliability regions regarding the identification of bulk electric system facilities.<sup>1</sup>

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<sup>1</sup> The Commission is not proposing any new or modified text to its regulations.

## I. Background

### A. Section 215 of the Federal Power Act

2. On August 8, 2005, the Energy Policy Act of 2005 (EPAct) was enacted into law. Title XII of EPAct added a new section 215 to the Federal Power Act (FPA),<sup>2</sup> which requires a Commission-certified ERO to develop mandatory and enforceable Reliability Standards, subject to Commission review and approval. Once approved, the Reliability Standards may be enforced by the ERO, subject to Commission oversight, or by the Commission independently.<sup>3</sup>

3. In February 2006, the Commission issued Order No. 672,<sup>4</sup> implementing section 215 of the FPA. Pursuant to Order No. 672, the Commission certified one organization, the North American Electric Reliability Corporation (NERC), as the ERO.<sup>5</sup>

### B. Order No. 693

4. On March 16, 2007, in Order No. 693,<sup>6</sup> pursuant to section 215(d) of the FPA,<sup>7</sup> the Commission approved 83 Reliability Standards proposed by the NERC, the Commission-

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<sup>2</sup> Pub. L. No. 109-58, Title XII, Subtitle A, 119 Stat. 594, 941 (2005) (codified at 16 U.S.C. 824o).

<sup>3</sup> See 16 U.S.C. 824o(e)(3).

<sup>4</sup> Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards, Order No. 672, FERC Stats. & Regs. ¶ 31,204 (2006), order on reh'g, Order No. 672-A, FERC Stats. & Regs. ¶ 31,212 (2006).

<sup>5</sup> See North American Electric Reliability Corp., 116 FERC ¶ 61,062 (ERO Certification Order), order on reh'g and compliance, 117 FERC ¶ 61,126 (2006).

<sup>6</sup> See Mandatory Reliability Standards for the Bulk-Power System, Order No. 693, (continued...)

certified ERO.<sup>8</sup> In addition, Order No. 693 addressed the applicability of mandatory Reliability Standards to the Bulk-Power System.

5. In Order No. 693, the Commission explained that section 215(a) of the FPA defines Bulk-Power System as:

(A) facilities and control systems necessary for operating an interconnected electric energy transmission network (or any portion thereof) and  
 (B) electric energy from generating facilities needed to maintain transmission system reliability. The term does not include facilities used in the local distribution of electric energy.[<sup>9</sup>]

The Commission observed that NERC defines “bulk electric system” as follows:

As defined by the Regional Reliability Organization, the electrical generation resources, transmission lines, interconnections with neighboring systems, and associated equipment, generally operated at voltages of 100 kV or higher. Radial transmission facilities serving only load with one transmission source are generally not included in this definition.[<sup>10</sup>]

Additionally, the Commission recognized that this definition provides discretion to define “bulk electric system” without any stated limitation and without ERO oversight.

Nevertheless, it accepted the definition.

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FERC Stats. & Regs. ¶ 31,242, order on reh’g, Order No. 693-A, 120 FERC ¶ 61,053 (2007) (directing improvements to 56 of the 83 approved Reliability Standards and leaving 24 Reliability Standards as pending until further information is provided).

<sup>7</sup> 16 U.S.C. 824o(d) (2006).

<sup>8</sup> North American Electric Reliability Corp., 116 FERC ¶ 61,062, order on reh’g and compliance, 117 FERC ¶ 61,126 (2006), aff’d sub nom. Alcoa Inc. v. FERC, No. 06-1426 (D.C. Cir.) (certifying NERC as the ERO responsible for the development and enforcement of mandatory Reliability Standards).

<sup>9</sup> 16 U.S.C. 824o(a).

<sup>10</sup> Order No. 693, FERC Stats. & Regs. ¶ 31,242 at P 51.

6. The Commission stated in Order No. 693 that, “at least for an initial period, the Commission will rely on the NERC definition of bulk electric system and NERC’s registration process to provide as much certainty as possible regarding the applicability to and the responsibility of specific entities to comply with the Reliability Standards . . . .”<sup>11</sup> Further, the Commission explained that some regional definitions of bulk electric system exclude facilities below 230 kV and transmission lines that serve Washington, DC and New York City:

Although we are accepting the NERC definition of bulk electric system and NERC’s registration process for now, the Commission remains concerned about the need to address the potential for gaps in coverage of facilities. For example, some current regional definitions of bulk electric system exclude facilities below 230 kV and transmission lines that serve major load centers such as Washington, DC and New York City. The Commission intends to address this matter in a future proceeding.<sup>[12]</sup>

The Commission directed NERC to submit an informational filing that includes regional definitions of bulk electric system and any regional documents that identify critical facilities to which the Reliability Standards apply (i.e., facilities below 100 kV).

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<sup>11</sup> Id. P 75; see also Order No. 693-A, 120 FERC ¶ 61,053 at P 19 (“the Commission will continue to rely on NERC’s definition of bulk electric system, with the appropriate regional differences, and the registration process until the Commission determines in future proceedings the extent of the Bulk-Power System”).

<sup>12</sup> Order No. 693, FERC Stats. & Regs. ¶ 31,242 at P 77 (footnotes omitted).

**C. NERC's June 14, 2007 Filing**

7. In a June 14, 2007 filing, NERC submitted the regional definitions of bulk electric system.<sup>13</sup> NERC represented that “[e]ach Regional Entity utilizes the definition of bulk electric system in the NERC Glossary of Terms Used in Reliability Standards (NERC Glossary); however, as permitted by that definition . . . several Regional Entities define specific characteristics or criteria that the Regional Entity uses to identify the bulk electric system facilities for its members. In addition, the Reliability Standards apply to load shedding and special protection relay facilities below 100 kV, which are monitored by Regional Entities, in compliance with NERC’s Reliability Standards.”<sup>14</sup>

8. In the June 2007 Filing, NERC indicated that four Regional Entities, Texas Regional Entity, Florida Reliability Coordinating Council (FRCC), Midwest Reliability Organization, and SERC Reliability Corporation, use the NERC definition of bulk electric system without modification. In a supplemental filing, NERC informed the Commission that Western Electricity Coordinating Council (WECC) uses the NERC definition alone in its implementation of Regional Entity activities.<sup>15</sup>

9. Three other Regional Entities, ReliabilityFirst Corporation (ReliabilityFirst), Southwest Power Pool (SPP Regional Entity) and Northeast Power Coordinating

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<sup>13</sup> NERC Informational Filing, Docket No. RM06-16-000 (June 14, 2007) (June 2007 Filing).

<sup>14</sup> Id. at 7.

<sup>15</sup> NERC Supplemental Informational Compliance Filing, Docket No. RM06-16-000 (March 6, 2009).

Council, Inc. (NPCC) stated that they use the NERC definition supplemented with additional criteria. For example, SPP Regional Entity indicated that it uses the criteria specified in the NERC Statement of Registry Criteria (with one exception).

ReliabilityFirst supplemented the NERC definition with specific voltage-based inclusions and exclusions. For example, ReliabilityFirst includes “lines operated at voltage of 100 kV or higher.”<sup>16</sup> ReliabilityFirst excludes certain radial facilities, balance of generating plant control and operation functions, and “all other facilities operated at voltages below 100 kV.”

10. NERC’s June 2007 Filing indicated that NPCC also asserts that it uses the NERC definition of bulk electric system supplemented by additional criteria. Unlike the supplemental criteria of other Regional Entities, however, NPCC utilizes a significantly different approach to identifying bulk electric system elements. According to NERC, NPCC identifies elements of the bulk electric system using an impact-based methodology, not a voltage-based methodology. Further, as part of its approach to defining the bulk electric system, NPCC includes its own definition of “bulk power system” as follows:

The interconnected electrical systems within northeastern North America comprised of system elements on which faults or disturbances can have a significant adverse impact outside of the local area.

According to NERC, NPCC analyzes all system elements within its footprint regardless of size (voltage) to determine impact based on this definition. NERC’s filing included

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<sup>16</sup> June 2007 Filing at 10.



NPCC's "Classification of Bulk Power System Elements," which provides further information on the above definition and how it is applied.<sup>17</sup> Each balancing authority conducts studies in accordance with NPCC Document A-10 to develop a list of Bulk-Power System assets, which must be approved by NPCC's Task Force on System Studies.

**D. NPCC Identification of Bulk Electric System Facilities**

11. In a December 2008 order, the Commission directed NERC and NPCC to submit to the Commission a comprehensive list of bulk electric system facilities located within the United States portion of the NPCC region.<sup>18</sup> The Commission explained that there appeared to be conflicting lists of bulk electric system elements developed by one of the balancing authorities in the United States portion of the NPCC region. Further, it was not clear which, if any, of the lists developed using NPCC's document A-10 were submitted to NPCC or approved by NPCC's Task Force on System Studies. The December 2008 Order also stated that "[t]he Commission believes that to best achieve reliability, the applicable NPCC list should be consistent with both the NPCC impact-based methodology and with the interpretations of bulk electric system elements in other regional entities."<sup>19</sup>

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<sup>17</sup> NERC June 2007 Filing, Attachment 1 (NPCC Document A-10, Classification of Bulk Power System Elements (April 28, 2007)).

<sup>18</sup> North American Electric Reliability Corp., 125 FERC ¶ 61,295 (2008) (December 2008 Order).

<sup>19</sup> Id. P 13.

12. In response, NERC and NPCC submitted a compliance filing on February 20, 2009, as supplemented on April 21, 2009. The compliance filing indicated that the “NPCC Approved BES List” of June 2007 is the only listing of bulk electric system facilities approved by NPCC and is the current list of facilities within the U.S. portion of NPCC to which the NERC Reliability Standards apply.<sup>20</sup> The filing indicated that a majority of the 115 kV and 138 kV transmission facilities in the NYISO Balancing Authority Area of the NPCC region are excluded from the bulk electric system and, hence, compliance with mandatory Reliability Standards. In addition, NPCC excludes approximately seven higher voltage (e.g., 230 kV, 345 kV and 500 kV) transmission facilities, some connecting to nuclear power plants.

13. NERC and NPCC also provided information on generation facilities in the U.S. portion of NPCC that are subject to compliance with mandatory Reliability Standards. According to the filing, 92 percent of the total gross megavolt-ampere (MVA) in the NYISO Balancing Authority Area, and 97 percent of the total gross MVA in the NE-ISO Balancing Authority Area, are subject to compliance with mandatory Reliability Standards. That information also indicates that numerous transmission lines at 100 kV

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<sup>20</sup> NERC and NPCC Compliance Filing at 5 (February 20, 2009), Docket No. RC09-3-000. The February 20 Compliance Filing also indicated that the NPCC approved list of bulk electric system elements was not developed pursuant to NPCC’s Document A-10, Classification of Bulk Power System Elements, identified in NERC’s June 2007 Filing. Rather, the approved NPCC list was developed pursuant to an earlier version of the NPCC impact-based methodology.

and above that interconnect with the registered generation facilities are excluded from NPCC's list of bulk electric system facilities.

14. In September 2009, NERC and NPCC submitted a compliance filing in which NPCC evaluated the impact and usefulness of a 100 kV "bright-line" bulk electric system definition as well as another optional method which utilizes Transmission Distribution Factor calculations to determine reliability impacts. The NPCC definition would exclude radial portions of the transmission system.<sup>21</sup> However, NPCC states that it continues to believe that its current impact-based approach provides an adequate level of reliability and, therefore, intends to continue to apply the impact-based approach in classifying its bulk-electric system elements.<sup>22</sup>

## II. Discussion

15. As discussed in further detail below, based on our experience in implementing FPA section 215 over the past four years and events that have either caused or

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<sup>21</sup> NERC and NPCC Compliance Filing and Assessment of Bulk Electric System Report (September 21, 2009), Docket No. RC09-3-000. NPCC would define "radial portions of the transmission system to include (1) an area serving load that is connected to the rest of the network at a single transmission substation at a single transmission voltage by one or more transmission circuits; (2) tap lines and associated facilities which are required to serve local load only; (3) transmission lines that are operated open for normal operation; or (4) additionally as an option, those portions of the NPCC transmission system operated at 100 kV or higher not explicitly designated as a BES path for generation which have a one percent or less participation in area, regional or inter regional power transfers. *Id.* at 11.

<sup>22</sup> *Id.* at 7-8. See also *id.* at 14 ("[i]f directed by the Commission to adopt the developed [bulk electric system] definition for U.S. registered entities within the NPCC footprint, NPCC would need additional time to carefully consider and develop a more extensive and detailed implementation plan").

contributed to significant bulk electric system disturbances and cascading outages, the Commission has reevaluated the definition of “bulk electric system” contained in Commission-approved NERC Glossary and has determined that the definition needs to be modified in order to protect the reliability of the Nation’s Bulk-Power System.<sup>23</sup>

Accordingly, the Commission proposes to direct the ERO to revise, within 90 days of the effective date of a final rule in this proceeding, the ERO’s definition of the term “bulk electric system” to include all electric transmission facilities with a rating of 100 kV or above.<sup>24</sup>

16. This proposal would eliminate the discretion provided in the current definition for a Regional Entity to define “bulk electric system” within a region. Importantly, however, we emphasize that we are not proposing to eliminate all regional variations and we do not anticipate that the proposed change would affect most entities. The goal of the proposal is to eliminate significant inconsistencies across regions and provide a backstop review to ensure that any regional variations do not compromise reliability and that facilities that could significantly impact reliability are subject to mandatory rules. Simply put, if the Commission does not take this step, we are concerned that we would not be fulfilling the

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<sup>23</sup> As with Reliability Standards, the Commission reviews and approves revisions to the NERC glossary pursuant to FPA section 215(d)(2). Further, the Commission may direct a modification to address a specific matter identified by the Commission pursuant to section 215(d)(5). See Order No. 693, FERC Stats. & Regs. ¶ 31,242 at P 1893-98.

<sup>24</sup> While the Commission indicated in Order No. 693, FERC Stats. & Regs. ¶ 31,242 at P 77, that the Commission may reconsider the scope of the statutory term Bulk Power System in a future proceeding, in this proceeding we are addressing only the ERO’s definition of the term bulk electric system.

intent of Congress in enacting section 215 to protect reliability of the Nation's Bulk-Power System, including reliability in major cities. The proposed change in definition and our rationale and technical support for a new definition, are discussed in more detail below.

17. The current ERO definition provides a "general" 100 kV threshold for identifying "bulk electric system" facilities:

As defined by the Regional Reliability Organization, the electrical generation resources, transmission lines, interconnections with neighboring systems, and associated equipment, generally operated at voltages of 100 kV or higher. Radial transmission facilities serving only load with one transmission source are generally not included in this definition.<sup>[25]</sup>

The definition, however, as noted above, also provides discretion for a Regional Entity<sup>26</sup> to define "bulk electric system" without any stated limitation or ERO oversight.

Although the Commission accepted this definition in our early implementation of FPA section 215, in Order No. 672,<sup>27</sup> we also expressed certain reservations about the definition and in particular a preference for uniformity of Reliability Standards. More recently, we have repeated our preference for a uniformity of definitions used by the

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<sup>25</sup> Order No. 693, FERC Stats. & Regs. ¶ 31,242 at P 51.

<sup>26</sup> In Order No. 693, the Commission recognized the Regional Entities as the appropriate statutory regional body, and directed the ERO to substitute "Regional Entity" for "Regional Reliability Organization" in mandatory Reliability Standards. *Id.* at P 157, 321.

<sup>27</sup> Order No. 672, FERC Stats. & Regs. ¶ 31,204 at P 290 ("[t]he Commission believes that uniformity of Reliability Standards should be the goal and practice, the rule rather than the exception").

ERO and the Regional Entities.<sup>28</sup> Similarly, the Commission believes that there should be uniformity in the definition of bulk electric system and the identification of facilities that are subject to mandatory Reliability Standards. Without such uniformity, and assurance of a strong justification for not complying with a uniform definition, the risk is that the reliability of the electric system could be compromised.

18. The Commission recognizes that there may be limited circumstances when a variation from the proposed uniform 100 kV threshold is appropriate. The Commission proposes that a Regional Entity must seek ERO approval before it exempts any transmission facility rated at 100 kV or above from compliance with mandatory Reliability Standards. Pursuant to this proposal, the ERO must submit to the Commission for review on a facility-by-facility basis any ERO-approved exception to the proposed threshold that all transmission facilities at 100 kV or above, except for radial transmission facilities serving only load, are subject to compliance with mandatory Reliability Standards. Any such submission must also include adequate supporting information explaining why it is appropriate to exempt a specific transmission facility that would otherwise satisfy the proposed 100 kV threshold. Only after Commission approval would the proposed exclusion take effect. Such review would allow flexibility where warranted while providing appropriate oversight to assure that there is a legitimate

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<sup>28</sup> Western Electricity Coordinating Council Regional Reliability Standard Regarding Automatic Time Error Correction, Order No. 723, 127 FERC ¶ 61,176, at P 39 (2009) (“the Commission believes NERC, as a rule, should develop definitions that apply uniformly across the different regions. As a general goal, NERC should work to minimize the use of regional definitions and terminology....”).

need for an exemption. The Commission seeks comment whether a corresponding revision to the ERO's Rules of Procedure to accommodate the proposed process is warranted.

19. Further, the Commission does not propose to change the ERO's statement that "[r]adial transmission facilities serving only load with one transmission source are generally not included in this definition." Likewise, as is currently the case, Regional Entities may identify "critical" facilities, rated at less than the 100 kV, that are subject to mandatory Reliability Standards, without seeking approval from the ERO and the Commission.<sup>29</sup>

20. The Commission believes that the proposed 100 kV threshold for identifying bulk electric system facilities is consistent with current reliability criteria. Most notably, NERC has applied a definition of bulk electric system that includes a 100 kV "general" threshold for decades.<sup>30</sup> As discussed above, seven of eight Regional Entities have adopted NERC's definition, including the 100 kV threshold, either verbatim or with limited additional criteria.<sup>31</sup> Significantly, ReliabilityFirst Regional Entity, which

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<sup>29</sup> See NERC June 2007 Filing at 14.

<sup>30</sup> See, e.g., NERC Board of Trustees, Minutes of the Meeting at 2-3 (April 3-4, 1995) (noting adoption of definitions, including a definition of bulk electric system: "[t]he bulk electric system is a term commonly applied to that portion of an electric utility system, which encompasses the electrical generation resources, transmission lines, interconnections with neighboring systems, and associated equipment, generally operated at voltages of 100 kV or higher").

<sup>31</sup> We note that WECC has established a "BES definition Task Force," which is currently re-evaluating WECC's 100 kV threshold. This Task Force has previously

(continued...)

resulted from a merger of three historical reliability regions, successfully replaced three “legacy” definitions with a 100 kV threshold for defining bulk electric system facilities.<sup>32</sup>

Moreover, the NERC Statement of Compliance Registry Criteria, which the ERO and Regional Entities use to determine which entities should be registered to comply with mandatory Reliability Standards, also utilizes a 100 kV threshold.<sup>33</sup> In fact, the Registry Criteria provide that a load serving entity should be subject to registration if its peak load exceeds 25 MW “and is directly connected to the bulk power (> 100 kV) system....”<sup>34</sup>

Likewise, the Registry Criteria provide that a transmission owner or transmission

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considered options that include retaining WECC’s current 100 kV threshold, adopting a 200 kV threshold, or adopting a “classification by voltage” definition. More recently, in December 2009, WECC’s Task Force posted a proposal to retain the 100 kV threshold, and also allow for the exclusion of facilities with a rating above 100 kV based on a “material impact” assessment. Information regarding the Task Force’s activities is available on the WECC website at:  
<http://www.wecc.biz/Standards/Development/BES/default.aspx>.

<sup>32</sup> See NERC June 2007 Filing at 11. One of the merged reliability councils in the ReliabilityFirst footprint had historically excluded transmission facilities with a rating below 230 kV from the definition of bulk electric system. *Id.* In an October 1, 2007 letter, ReliabilityFirst informed NERC of its transition plan to allow sufficient time for entities with facilities at voltages less than 230 kV to become compliant with mandatory Reliability Standards. Subsequently, ReliabilityFirst informed NERC that, as of December 2008, it completed the transition, and all entities within ReliabilityFirst “now subscribe to the stated bulk electric system definition and are required to comply with the NERC Reliability Standards in accordance with the new definition.” NERC Supplemental Compliance Filing at 3 (March 6, 2009), Docket No. RM06-16-000.

<sup>33</sup> NERC Statement of Registry Criteria, Revision 5.0 (October 16, 2008) (Registry Criteria).

<sup>34</sup> *Id.* at 7.



operator should be registered if it owns or operates “an integrated transmission element associated with the bulk power system 100 kV and above ....”<sup>35</sup>

21. In addition, the Commission believes that there is adequate technical justification for the proposed 100 kV threshold for identifying bulk electric system facilities for reliability-related purposes. Events on facilities rated at 115 kV and 138 kV have either caused or contributed to significant bulk electric system disturbances and cascading outages. For example, a February 26, 2008 event in the FRCC region, which resulted in widespread outages, originated from a fault at a facility connected to the 138 kV transmission system. This event resulted in the loss of 24 transmission lines and loss of 4,300 MW of generation, associated with thirteen generating units, and disruption of electric service to more than three million customers for several hours on average.

22. Other recent events also evidence the impact of 115 and 138 kV facilities on bulk electric system reliability. On June 13, 2008, the electrical failure of a 138 kV motor operated switch on a 138 kV-13 kV transformer located in the ReliabilityFirst region resulted in the tripping of two transformers, one due to the electrical failure and the second due to inappropriate operation of an adjacent protection system. This event resulted in the tripping of three 138 kV-13kV transformers, three 138 kV transmission lines, and an estimated loss of approximately 150 MW of firm load in a critical high population density area. A June 27, 2007 event on 138 kV transmission lines in the NPCC region resulted in sequential tripping of the four 138 kV cable-circuits. The event

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<sup>35</sup> Id. at 9.

resulted in the interruption of service to about 137,000 customers as well as the loss of five generators and six 138 kV transmission lines.

23. Transmission lines with a rating of 100-200 kV represent a significant portion of the total circuit miles of transmission within the bulk electric system.<sup>36</sup> As illustrated by the disturbances described above, the 100-200 kV facilities are important to reliable operations. Moreover, events that occur on the 100-200 kV facilities can result in consequences, sometimes severe, to the reliability of the higher kV system.

24. In addition, there are other compelling technical reasons for proposing a 100 kV threshold. Certain transmission lines in the U.S. portion of NPCC region are not identified as bulk electric system although these transmission lines extend into the footprint of another Regional Entity where they are considered bulk electric system facilities. For example, NPCC does not identify two 115 kV transmission lines - Falconer to Warren, and North Waverly to East Sayre - as part of the bulk electric system in its region even though the sections of these lines that connect to PJM's balancing authority area are considered bulk electric system within the Reliability First Corporation footprint.

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<sup>36</sup> In the Eastern Interconnection, there is a total of 182,288 transmission line circuit miles rated above 100 kV, of which approximately 103,983 transmission line circuit miles are rated between 100 kV and 200 kV, or 57 percent of the total. In the Western Interconnection, approximately 27,318 (or 41 percent) of a total 66,815 transmission line circuit miles consist of facilities rated between 100 kV and 200 kV. (Based on information from publicly available sources, including FERC Form 1. The figures exclude transmission lines owned by Federal and local governmental entities.)

25. Moreover, reliability coordinators within NPCC have declared transmission load relief (TLR) events, pursuant to Reliability Standard IRO-006-4, on certain transmission lines to protect reliability of the bulk electric system.<sup>37</sup> Yet, NPCC does not classify the transmission lines subject to the TLR events as bulk electric system facilities. For example, the New York Independent System Operator has declared TLR events on a flowgate named “Central East ties,” multiple times, in some cases for more than twenty four hours, in a ninety-day period during 2009. The Central East ties consist of ten transmission elements, three of which operate at 115 kV, all of which were impacted during the TLR event.<sup>38</sup> Yet, the three 115 kV transmission elements are not bulk electric system facilities pursuant to NPCC’s current regional definition of that term. This suggests that entities within NPCC operate their systems as if certain facilities are important to protect the reliability of the bulk electric system, even though NPCC does not identify the same transmission facilities as bulk electric system elements.

26. Thus, the Commission believes that its proposal to direct the ERO to consistently maintain a 100 kV threshold for identifying bulk electric system facilities for reliability purposes, with exceptions allowed only with ERO and Commission oversight, is justified based on (1) the need to eliminate inappropriate inconsistencies among regions, (2) the

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<sup>37</sup> Pursuant to Reliability Standard IRO-006-4, the TLR procedure is used by reliability coordinators to prevent or manage potential or actual violations of “system operating limits” and “interconnection reliability operating limits” to maintain reliability of the bulk electric system.

<sup>38</sup> See North American Reliability Council, *Transmission Loading Relief Log* (June 2009), <https://www.crc.nerc.net/>.

historical and current application of a 100 kV threshold to identify the bulk electric system for reliability purposes, and (3) the technical justification for a 100 kV threshold provided above, including events on facilities rated at 115 kV and 138 kV that have caused or contributed to significant bulk electric system disturbances and cascading outages.

27. As discussed above, information provided by the ERO indicates that seven of eight Regional Entities currently have regional definitions of “bulk electric system” that are consistent with the ERO definition, either verbatim or with limited additional criteria. Thus, the Commission does not believe that the proposal would have an immediate effect on entities in any Regional Entity other than NPCC. Based on NERC’s and NPCC’s responses to the Commission’s December 2008 Order, it appears that a significant number of transmission lines in the U.S. portion of the NPCC region rated at 115 kV and 138 kV are currently excluded from NPCC’s definition of bulk electric system. The Commission recognizes that, similar to the transition that occurred in the ReliabilityFirst region, entities within the U.S. portion of NPCC would likely require a reasonable period of time to ensure that they can comply with mandatory Reliability Standards for previously-exempt facilities. Therefore, the Commission proposes to allow a Regional Entity impacted by the Commission’s final rule in this matter to submit a transition plan that allows a reasonable period of time for affected entities within that region to achieve

compliance with respect to facilities that are subject to mandatory Reliability Standards for the first time.<sup>39</sup>

28. In summary, the Commission proposes to direct the ERO to submit to the Commission, within 90 days of the effective date of a final rule, a revised ERO definition of bulk electric system that provides a 100 kV threshold for facilities that are included in the bulk electric system and eliminates the currently-allowed discretion of a Regional Entity to define bulk electric system within its system without ERO or Commission oversight.<sup>40</sup> The Commission proposes that a Regional Entity must seek ERO and Commission approval before it exempts a transmission facility rated at 100 kV or above from compliance with mandatory Reliability Standards. A Regional Entity may develop a transition plan that allows a reasonable period of time for affected entities within that

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<sup>39</sup> We note that for certain specific matters (such as operating reserves and protection), NPCC has more stringent criteria than NERC Reliability Standards, which NPCC refers to collectively as “NPCC Criteria.” NPCC designates each Criteria with a “Document A” prefix, such as “NPCC Document A-6.” These NPCC Criteria require the approval of two thirds of the NPCC membership, but are not submitted to the ERO or Commission for approval. The Commission’s proposal here would not affect the applicability of NPCC Criteria that are not submitted to the ERO and Commission for approval. NPCC would not be required to apply NPCC Criteria based on a 100 kV threshold and, rather, could continue to determine the applicability of such criteria to facilities in the region based on NPCC’s impact-based methodology.

<sup>40</sup> As discussed above, the Commission does not propose to change the provision of the ERO’s definition that “[r]adial transmission facilities serving only load with one transmission source are generally not included in this definition.” Likewise, Regional Entities may identify “critical” facilities, rated at less than the 100 kV, that are subject to mandatory Reliability Standards, without application to the ERO and the Commission.

region to achieve compliance with respect to facilities that are subject to mandatory Reliability Standards for the first time.

### **III. Information Collection Statement**

29. The Office of Management and Budget (OMB) regulations require approval of certain information collection requirements imposed by agency rules.<sup>41</sup> Upon approval of a collection(s) of information, OMB will assign an OMB control number and an expiration date. Respondents subject to the filing requirements of this rule will not be penalized for failing to respond to these collections of information unless the collections of information display a valid OMB control number. The Paperwork Reduction Act (PRA)<sup>42</sup> requires each federal agency to seek and obtain OMB approval before undertaking a collection of information directed to ten or more persons, or continuing a collection for which OMB approval and validity of the control number are about to expire.<sup>43</sup> The PRA defines the phrase “collection of information” to be the “obtaining, causing to be obtained, soliciting, or requiring the disclosure to third parties or the public, of facts or opinions by or for an agency, regardless of form or format, calling for either— (i) answers to identical questions posed to, or identical reporting or recordkeeping requirements imposed on ten or more persons, other than agencies, instrumentalities, or employees of the United States; or (ii) answers to questions posed to agencies,

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<sup>41</sup> 5 CFR 1320.11.

<sup>42</sup> 44 U.S.C. 3501-20.

<sup>43</sup> 44 U.S.C. 3502(3)(A)(i), 44 U.S.C. 3507(a)(3).

instrumentalities, or employees of the United States which are to be used for general statistical purposes.”<sup>44</sup>

30. This NOPR proposes to direct the ERO to revise its definition of the term bulk electric system to provide a 100 kV threshold for identifying bulk electric system facilities and requiring ERO and Commission approval of a Regional Entity definition of bulk electric system that varies from the ERO’s definition of the term. In Order No. 693, the Commission approved the ERO’s definition of the term bulk electric system. The Commission also approved 83 Reliability Standards submitted by the ERO. The Commission’s proposed action in this NOPR does not specify any information collection requirements. However, the proposal would likely result in certain responsible entities having to comply with mandatory Reliability Standards with respect to certain facilities in the 100 kV to 200 kV range for the first time. While the previously-approved Reliability Standards do not require reporting to the Commission, they do require responsible entities to develop and maintain certain information for a specified period of time, subject to inspection by the ERO or Regional Entities. Thus, the proposed revision to the ERO’s definition of bulk electric system in this proceeding would likely increase the public reporting burden estimate provided in Order No. 693.<sup>45</sup>

31. Public Reporting Burden: As discussed above, the Commission believes that only one Regional Entity, NPCC, would be immediately affected by the Commission’s

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<sup>44</sup> 44 U.S.C. 3502(3)(A).

<sup>45</sup> See Order No. 693, FERC Stats. and Regs. ¶ 31,242 at P 1904.

proposal. In particular, the Commission believes that transmission owners, transmission operators and transmission service providers in the U.S. portion of the NPCC region would be affected by the Commission's proposal. Based on registration information available on NPCC's website, it appears that approximately 33 transmission owners, transmission operators and transmission service providers in the U.S. portion of the NPCC region would potentially be affected by the Commission's proposal.<sup>46</sup> These entities are currently responsible for complying with applicable mandatory Reliability Standards approved by the Commission in Order No. 693 and subsequent orders. A final rule in this proceeding would result in the extension of compliance under these Reliability Standards to additional facilities within the U.S. portion of the NPCC region.

32. Based on currently available information, the Commission estimates that the increased Public Reporting Burden as follows:

Data Collection	No. of Respondents	No. of Responses	Hours Per Respondent	Total Annual Hours
FERC-725-A				
Transmission Owners,	33	1	Reporting: 0	Reporting: 0

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<sup>46</sup> "NPPC Registered Entities as of January 13, 2010," available on the NPCC website: <http://www.npcc.org/>.



Transmission Operators and Transmission Service Providers in the U.S. portion of the NPCC Region:			Recordkeeping: 500	Recordkeeping: 16,500
Total				16,500

- Total Annual hours for Collection: (Reporting + recordkeeping )= 16,500 hours.

Information Collection Costs: The Commission seeks comments on the costs to comply with these requirements. It has projected the average annualized cost to be the total annual hours

Recordkeeping = 16,500 @ \$40/hour = \$660,000

Labor (file/record clerk @ \$17 an hour + supervisory @ \$23 an hour)

- Total costs = \$ 660,000.
- Title: FERC-725-A Revision of Definition of Bulk Electric System
- Action: Proposed Collection of Information
- OMB Control No: 1902-0244
- Respondents: Business or other for profit, and/or not for profit institutions.
- Frequency of Responses: On Occasion
- Necessity of the Information: The proposed revision to the ERO's definition of the term bulk electric system, if adopted, would implement the Congressional mandate of the Energy Policy Act of 2005 to develop mandatory and enforceable Reliability Standards to better ensure the reliability of the nation's Bulk-Power System.

Specifically, the proposal would ensure that certain facilities needed for the reliable operation of the nation's bulk electric system are subject to mandatory and enforceable Reliability Standards.

- Internal review: The Commission has reviewed the proposed directive that the ERO revise its current definition of bulk electric system and determined that the proposal is necessary to meet the statutory provisions of the Energy Policy Act of 2005. The Commission has assured itself, by means of internal review, that there is specific, objective support for the burden estimates associated with the information requirements.

33. Interested persons may obtain information on the reporting requirements by contacting: Federal Energy Regulatory Commission, 888 First Street, NE, Washington, DC 20426 [Attention: Michael Miller, Office of the Executive Director, Phone: (202) 502-8415, fax: (202) 273-0873, e-mail: michael.miller@ferc.gov]. Comments on the requirements of the proposed rule may also be sent to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503 [Attention: Desk Officer for the Federal Energy Regulatory Commission], e-mail: oira\_submission@omb.eop.gov.

#### IV. Environmental Analysis

34. The Commission is required to prepare an Environmental Assessment or an Environmental Impact Statement for any action that may have a significant adverse effect on the human environment.<sup>47</sup> The Commission has categorically excluded certain actions

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<sup>47</sup> Regulations Implementing the National Environmental Policy Act, Order No. (continued...)

from this requirement as not having a significant effect on the human environment. The actions proposed here fall within the categorical exclusion in the Commission's regulations for rules that are clarifying, corrective or procedural, for information gathering, analysis, and dissemination.<sup>48</sup> Accordingly, neither an environmental impact statement nor environmental assessment is required.

#### **V. Regulatory Flexibility Act Certification**

35. The Regulatory Flexibility Act of 1980 (RFA)<sup>49</sup> generally requires a description and analysis of final rules that will have significant economic impact on a substantial number of small entities. As discussed above, the Commission believes that the immediate effect of the proposed directive that the ERO revise its current definition of bulk electric system to establish a 100 kV threshold would likely be limited to certain transmission owners, transmission operators and transmission service providers in the U.S. portion of the NPCC region. Most transmission owners, transmission operators and transmission service providers do not fall within the definition of small entities.<sup>50</sup> The Commission estimates that approximately four of the 33 transmission owners,

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486, 52 FR 47897 (Dec. 17, 1987), FERC Stats. & Regs., Regs. Preambles 1986-1990 30,783 (1987).

<sup>48</sup> 18 CFR 380.4(a)(5).

<sup>49</sup> 5 U.S.C. 601-612.

<sup>50</sup> The RFA definition of "small entity" refers to the definition provided in the Small Business Act (SBA), which defines a "small business concern" as a business that is independently owned and operated and that is not dominant in its field of operation. See 15 U.S.C. 632 (2006). According to the SBA, a small electric utility is defined as one that has a total electric output of less than four million MWh in the preceding year.

transmission operators and transmission services providers may fall within the definition of small entities.

36. Based on this understanding, the Commission certifies that this rule will not have a significant economic impact on a substantial number of small entities. Accordingly, no regulatory flexibility analysis is required.

## **VI. Comment Procedures**

37. The Commission invites interested persons to submit comments on the matters and issues proposed in this notice to be adopted, including any related matters or alternative proposals that commenters may wish to discuss. Comments are due [**45 days from publication in the FEDERAL REGISTER**]. Comments must refer to Docket No. RM09-18-000, and must include the commenter's name, the organization they represent, if applicable, and their address in their comments.

38. The Commission encourages comments to be filed electronically via the eFiling link on the Commission's web site at <http://www.ferc.gov>. The Commission accepts most standard word processing formats. Documents created electronically using word processing software should be filed in native applications or print-to-PDF format and not in a scanned format. Commenters filing electronically do not need to make a paper filing.

39. Commenters that are not able to file comments electronically must send an original and 14 copies of their comments to: Federal Energy Regulatory Commission, Secretary of the Commission, 888 First Street, NE, Washington, DC 20426.

40. All comments will be placed in the Commission's public files and may be viewed, printed, or downloaded remotely as described in the Document Availability section below. Commenters on this proposal are not required to serve copies of their comments on other commenters.

## **VII. Document Availability**

41. In addition to publishing the full text of this document in the Federal Register, the Commission provides all interested persons an opportunity to view and/or print the contents of this document via the Internet through FERC's Home Page (<http://www.ferc.gov>) and in FERC's Public Reference Room during normal business hours (8:30 a.m. to 5:00 p.m. Eastern time) at 888 First Street, NE, Room 2A, Washington, DC 20426.

42. From FERC's Home Page on the Internet, this information is available on eLibrary. The full text of this document is available on eLibrary in PDF and Microsoft Word format for viewing, printing, and/or downloading. To access this document in eLibrary, type the docket number excluding the last three digits of this document in the docket number field.

43. User assistance is available for eLibrary and the FERC's web site during normal business hours from FERC Online Support at 202-502-6652 (toll free at 1-866-208-3676) or email at [ferconlinesupport@ferc.gov](mailto:ferconlinesupport@ferc.gov), or the Public Reference Room at (202) 502-8371, TTY (202) 502-8659. E-mail the Public Reference Room at [public.referenceroom@ferc.gov](mailto:public.referenceroom@ferc.gov).

Docket No. RM09-18-000

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List of subjects in 18 CFR Part 40

Electric power; Reporting and recordkeeping requirements

By direction of the Commission.

( S E A L )

Nathaniel J. Davis, Sr.,  
Deputy Secretary.

Document Content(s)

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