

143 FERC ¶ 61,049  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

18 CFR Part 40

Docket No. RM12-16-000

Generator Requirements at the Transmission Interface

(Issued April 18, 2013)

AGENCY: Federal Energy Regulatory Commission.

ACTION: Notice of Proposed Rulemaking.

SUMMARY: Pursuant to section 215 of the Federal Power Act (FPA),<sup>1</sup> the Commission proposes to approve modifications to four existing Reliability Standards as submitted by the North American Electric Reliability Corporation (NERC), the Commission certified Electric Reliability Organization. Specifically, the Commission is proposing to approve Reliability Standards FAC-001-1 (Facility Connection Requirements), FAC-003-3 (Transmission Vegetation Management), PRC-004-2.1a (Analysis and Mitigation of Transmission and Generation Protection System Misoperations), and PRC-005-1.1b (Transmission and Generation Protection System Maintenance and Testing). The proposed modifications improve reliability either by extending their applicability to certain generator interconnection facilities, or by clarifying that the existing Reliability Standard is and remains applicable to generator interconnection facilities. The

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<sup>1</sup> 16 U.S.C. 824o (2006).

Commission also proposes to approve the related Violation Risk Factors and Violation Severity Levels, as well as the implementation plan and effective dates proposed by NERC.

**DATES:** Comments are due **[INSERT DATE 60 days after publication in the FEDERAL REGISTER]**

**ADDRESSES:** Comments, identified by docket number, may be filed in the following ways:

- Electronic Filing through <http://www.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: Those unable to file electronically may mail or hand-deliver comments to: Federal Energy Regulatory Commission, Secretary of the Commission, 888 First Street, NE, Washington, DC 20426.

*Instructions:* For detailed instructions on submitting comments and additional information on the rulemaking process, see the Comment Procedures Section of this document.

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SUPPLEMENTARY INFORMATION:

143 FERC ¶ 61,049  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Generator Requirements at the  
Transmission Interface

Docket No. RM12-16-000

NOTICE OF PROPOSED RULEMAKING

(Issued April 18, 2013)

1. Pursuant to section 215 of the Federal Power Act (FPA),<sup>2</sup> the Commission proposes to approve modifications to four existing Reliability Standards as submitted by the North American Electric Reliability Corporation (NERC), the Commission certified Electric Reliability Organization. Specifically, the Commission is proposing to approve Reliability Standards FAC-001-1 (Facility Connection Requirements), FAC-003-3 (Transmission Vegetation Management), PRC-004-2.1a (Analysis and Mitigation of Transmission and Generation Protection System Misoperations), and PRC-005-1.1b (Transmission and Generation Protection System Maintenance and Testing). The proposed modifications improve reliability either by extending their applicability to certain generator interconnection facilities, or by clarifying that the existing Reliability Standard is and remains applicable to generator interconnection facilities. The Commission also proposes to approve the related Violation Risk Factors and Violation

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<sup>2</sup> 16 U.S.C. 824o (2006).

Severity Levels, as well as the implementation plan and effective dates proposed by NERC.

**I. Background**

**A. Regulatory Background - Section 215 of the FPA**

2. Section 215 of the FPA requires a Commission-certified Electric Reliability Organization (ERO) to develop mandatory and enforceable Reliability Standards, which are subject to Commission review and approval.<sup>3</sup> Once approved, the Reliability Standards may be enforced by the ERO subject to Commission oversight, or by the Commission independently.<sup>4</sup>

3. In 2006, the Commission established a process to select and certify an ERO<sup>5</sup> and, subsequently, certified NERC as the ERO.<sup>6</sup> In 2007, as part of Order No. 693, the Commission approved 83 Reliability Standards submitted by NERC, including initial versions of Reliability Standards FAC-001, FAC-003, PRC-004, and PRC-005.<sup>7</sup> Further,

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<sup>3</sup> *Id.* 824o(c) and (d).

<sup>4</sup> *See id.* 824o(e).

<sup>5</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, *order on reh'g*, Order No. 672-A, FERC Stats. & Regs. ¶ 31,212 (2006).

<sup>6</sup> *North American Electric Reliability Corp.*, 116 FERC ¶ 61,062, *order on reh'g & compliance*, 117 FERC ¶ 61,126 (2006), *aff'd sub nom., Alcoa, Inc. v. FERC*, 564 F.3d 1342 (D.C. Cir. 2009).

<sup>7</sup> *Mandatory Reliability Standards for the Bulk Power System*, Order No. 693, 72 Fed. Reg. 16416 (April 4, 2007), FERC Stats. & Regs. ¶ 31,242 (2007), *order on reh'g*, Order No. 693-A, 120 FERC ¶ 61,053 (2007).

in Order No. 693, the Commission approved NERC's compliance registry process, including NERC's Statement of Compliance Registry Criteria (Registry Criteria), which describes how NERC and the Regional Entities<sup>8</sup> will identify the entities that should be registered for compliance with mandatory Reliability Standards.<sup>9</sup> While that process allows a Regional Entity to register an entity over its objection, NERC's Rules of Procedure provide a mechanism for such an entity to seek NERC review of the Regional Entity's registration decision and, ultimately, to appeal to the Commission if NERC upholds the Regional Entity's decision.<sup>10</sup>

**B. Related Commission Orders and Genesis of Project 2010-07**

4. In several fact-specific cases on appeal from a NERC registration determination, the Commission has addressed the need to apply Reliability Standard requirements, otherwise generally applicable to a registered transmission owner or transmission operator, to the owner or operator of a significant generator interconnection facility or tie-line. In *New Harquahala Generating Co., LLC*, 123 FERC ¶ 61,173 (2008) (*Harquahala*), the Commission upheld NERC's registration of New Harquahala Generating Company (Harquahala) as a transmission owner and transmission operator,

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<sup>8</sup> NERC is authorized to delegate certain authority to regional entities as prescribed by FPA section 215(e)(4). *See* 16 U.S.C. 824o(e)(4).

<sup>9</sup> Order No. 693, FERC Stats. & Regs. ¶ 31,242 at PP 92-95. The Commission has approved subsequent amendments to the Registry Criteria. *See, e.g., North American Electric Reliability Corp.*, 122 FERC ¶ 61,101 (2008).

<sup>10</sup> Rules of Procedure of the North American Electric Reliability Corporation, Rule 501.1.3.4.

agreeing that Harquahala's 26-mile, 500 kV generator tie-line was "material to the reliability of the bulk power system."<sup>11</sup> The Commission went into some detail concerning the impact on the transmission network of an event on Harquahala's facilities,<sup>12</sup> and noted that it was affirming the Western Electric Coordinating Council's (WECC's) and NERC's findings "based on the specific facts of this case."<sup>13</sup> Similarly, in *Cedar Creek Wind Energy, LLC*, 135 FERC ¶ 61,141 (2011) (*Cedar Creek*), the Commission upheld the registration of two wind farm owners, Milford Wind Corridor Phase I, LLC (Milford) and Cedar Creek Wind Energy, LLC (Cedar Creek), as transmission owners and transmission operators, again based on the specific tie-line facilities involved.<sup>14</sup>

5. In both *Harquahala* and *Cedar Creek*, the Commission found that there would be a reliability risk if certain Reliability Standards generally applicable to transmission owners and operators were not also applied to Harquahala, Cedar Creek and Milford, and cited to specific Reliability Standards and requirements that should apply to those generators. However, the Commission recognized that it may not be appropriate to require these entities to comply with all Reliability Standards otherwise applicable to

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<sup>11</sup> *Harquahala*, 123 FERC ¶ 61,173 at P 44.

<sup>12</sup> *See id.* PP 45-55.

<sup>13</sup> *Id.* P 44.

<sup>14</sup> *Cedar Creek Wind Energy, LLC*, 135 FERC ¶ 61,241 (*Cedar Creek*), *order on reh'g and clarification*, 137 FERC ¶ 61,141 (2011) (November 17 Order), *order on compliance filing*, 139 FERC ¶ 61,214 (2012) (*Cedar Creek Compliance Order*).

transmission owners and operators, and in each case ordered NERC to negotiate with the generating company to develop a list of transmission owner and transmission operator Reliability Standard requirements applicable to that individual entity.<sup>15</sup> On December 21, 2011, NERC submitted its compliance filing to the *Cedar Creek* order identifying which standards should apply to the generators subject to that order. In accepting NERC's filing, the Commission noted that the *Cedar Creek* order did not preclude NERC from pursuing a generic approach through the standards development process to determine which Reliability Standards should apply to generators.<sup>16</sup>

6. After the *Harquahala* decision, NERC announced the formation of an Ad Hoc Group for Generator Requirements at the Transmission Interface (Ad Hoc Group) to address concerns about perceived reliability gaps associated with generator interconnection facilities.<sup>17</sup> The Ad Hoc Group issued a report (Ad Hoc Group Report) suggesting a fairly broad approach to address these perceived gaps, including proposed changes to standard applicability and requirement language, as well as the introduction of two new NERC Glossary terms.<sup>18</sup> NERC initiated Project 2010-07 on January 15, 2010,

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<sup>15</sup> See *Harquahala*, 123 FERC ¶ 61,173 at PP 56-57; *Cedar Creek*, 135 FERC ¶ 61,241 at PP 88-89.

<sup>16</sup> *Cedar Creek Compliance Order*, 139 FERC ¶ 61,214 at P 19.

<sup>17</sup> See NERC Petition at 11.

<sup>18</sup> *Id.*



following the issuance of a Standard Authorization Request as developed by the Ad Hoc Group.<sup>19</sup>

**C. NERC Petition**

7. On July 30, 2012, NERC filed a petition (NERC Petition or Petition) seeking Commission approval of proposed Reliability Standards FAC-001-1, FAC-003-3, PRC-004-2.1a, and PRC-005-1.1b. The FAC-001 and FAC-003 standards currently in effect are applicable only to transmission owners and operators, and NERC is proposing to extend their applicability to certain generator interconnection facilities. By contrast, the current version of PRC-004 and PRC-005 do apply to generator owners as well as transmission owners. Accordingly, NERC asserts that the proposed modifications in Reliability Standards PRC-004-2.1a and PRC-005-1.1b are designed merely to clarify that their requirements extend not only to protection systems associated with the generating facility or station itself, but also to any protection systems associated with the generator interconnection facilities.

8. For FAC-001-1, and for FAC-003-3 Requirement R3, NERC requests an effective date of one year following the first quarter after regulatory approvals. For the remaining requirements of FAC-003-3, NERC requests an effective date of two years following the first calendar quarter after regulatory approvals. NERC requests that PRC-004-2.1a and PRC-005-1.1b become effective upon receiving required regulatory approvals.

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<sup>19</sup> *Id.* at 11, 28.

**1. FAC-001-1**

9. The currently effective Reliability Standard FAC-001-0 requires transmission owners to document, maintain, and publish facility connection requirements that comply with NERC, regional, and individual criteria for generation facilities, transmission facilities, and end-user facilities. In its Petition, NERC proposes to modify this standard so that it applies to any generator owner that has executed an “Agreement to evaluate the reliability impact of interconnecting a third party Facility to the Generator Owner’s existing Facility . . . used to interconnect to the interconnected Transmission systems (under FAC-002-1).”<sup>20</sup>

10. NERC notes that the proposed modification is designed to address the rare circumstance where a generator owner is required by a regulatory body to interconnect a third party generator to the generator owner’s interconnection facility. NERC states that such an arrangement could result in the generator owner being registered as a new functional entity (such as a transmission owner or operator).<sup>21</sup> NERC further explains that the modification provides “appropriate reliability coverage until any additional registration is required and ensures that the standard does not impact any Generator Owner that never executes an Agreement as described in the standard.”<sup>22</sup>

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<sup>20</sup> *Id.* at Ex. B (Proposed FAC-001-1, Requirement R1).

<sup>21</sup> *Id.* at 20.

<sup>22</sup> *Id.* at 20-21. In addition, NERC notes that minor changes were made to the standard to reflect that “Facilities” and “Transmission” are defined terms, to reference “Regional Entity” instead of “Regional Reliability Organization,” and to reference

(continued...)

## 2. FAC-003-3

11. Both Reliability Standards FAC-003-1 (the currently effective vegetation management standard) and FAC-003-2 (the recently approved version of that standard)<sup>23</sup> set out requirements for management of vegetation for transmission owners, but do not impose any obligations on generator owners. NERC's proposed modifications to Reliability Standard FAC-003-2 would extend its requirements to a subset of generator owners.

12. The proposed standard revises the "Applicability" section of FAC-003-2 to indicate that the standard applies to "Generator Owners" that own overhead lines that (1) extend more than one mile beyond the fenced area of the generating station switchyard, or (2) do not have a clear line of sight from the generating station switchyard to the point of interconnection with a transmission owner's facility (which NERC refers to as "applicable lines").<sup>24</sup> In addition, to qualify, the lines must meet the minimum standards for applicability associated with "Transmission Facilities," i.e., they must be operated at 200 kV or higher; or if operated below 200 kV, must be identified as an

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"ERO" instead of "NERC." Violation Risk Factors and Violation Severity Levels were created for each requirement.

<sup>23</sup> Subsequent to NERC's filing of the Petition, the Commission approved Reliability Standard FAC-003-2 although the revised standard has not yet become effective. *See Revisions to Reliability Standard for Transmission Vegetation Management*, Order No. 777, 78 FR 18,817 (Mar 28, 2013), 142 FERC ¶ 61,208 (2013).

<sup>24</sup> "Clear line of sight" is the distance that can be seen by the average person without special instrumentation on a clear day. NERC Petition, Ex. B (Proposed Reliability Standard FAC-003-3 § 4.3.1, n.3).

element of an Interconnection Reliability Operating Limit (IROL) under NERC Standard FAC-014 or as an element of a Major WECC Transfer Path. For generator owners with applicable lines, FAC-003-3 would impose the same requirements as are currently imposed on transmission owners under FAC-003-2, including an affirmative obligation to prevent encroachments into a minimum clearance distance, to prepare and update a formal transmission vegetation management program, to implement an annual work plan, and to report sustained outages for qualified lines.<sup>25</sup>

### 3. PRC-004-2.1a

13. Currently effective Reliability Standard PRC-004-2a requires transmission owners, applicable distribution providers, and generator owners to analyze their respective protection system misoperations, and to develop and implement a corrective action plan to address such misoperations. NERC states that, while there is no reliability gap in the existing version of this standard, the specific wording of the requirement could lead to confusion as to whether the activities required by this Reliability Standard apply to a generator owner's generator interconnection facilities.<sup>26</sup> Accordingly, NERC has proposed a modification that inserts the language "and generator interconnection Facility" into Requirement R2 (modification underlined):

The Generator Owner shall analyze its generator and generator interconnection Facility Protection System Misoperations, and shall develop and implement a Corrective

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<sup>25</sup> See NERC Petition at 21, 23.

<sup>26</sup> *Id.* at 24-25.

Action Plan to avoid future Misoperations of a similar nature according to the Regional Entity's procedures.

NERC asserts that the change to R2 "makes clear that generator interconnection Facilities are also part of the Generator Owners' responsibility in the context of this standard."<sup>27</sup>

#### **4. PRC-005-1.1b**

14. Like the changes to Reliability Standard PRC-004, NERC states that the changes for proposed Reliability Standard PRC-005-1.1b are merely clarifying changes.<sup>28</sup> As currently written, Reliability Standard PRC-005-1b requires transmission owners, applicable distribution providers, and applicable generator owners to have a protection system maintenance and testing program in place for any protection system that affects the reliability of the bulk electric system. NERC maintains that, as with PRC-004-2.1a described above, there is no reliability gap associated with the standard as currently written but proposes to modify the standard to make clear that any generator interconnection facilities are also part of the generator owners' responsibility.<sup>29</sup> To make this clarification, NERC is proposing the following changes to Requirement R1 (modification underlined):

Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation or generator interconnection Facility Protection System shall have a Protection System

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<sup>27</sup> *Id.* at 25.

<sup>28</sup> *Id.* at 26.

<sup>29</sup> *Id.* at 26-27.

maintenance and testing program for Protection Systems that affect the reliability of the BES. . . .

NERC has proposed similar changes as needed throughout the revised standard, including changes to Requirement R2 (related to documentation of Protection System testing and maintenance programs) and Measure M1.

## 5. Sufficiency

15. NERC maintains that the changes proposed for these four Reliability Standards will address the reliability gap for generator interconnection facilities “for the vast majority of Generator Owners and Generator Operators.”<sup>30</sup> NERC explains that the proposed modifications to these standards will result in the application of certain Reliability Standards to generator owners without the need to register them as transmission owners or transmission operators only as a result of the generator interconnection facilities.<sup>31</sup> NERC further states that these are the only standards that need to be applied to generator owners and generator operators to ensure appropriate coverage of generator interconnection facilities “[e]xcept as necessary on a fact-specific basis.”<sup>32</sup>

16. NERC notes that the standard drafting team reviewed and assessed the Reliability Standards as identified in the Ad Hoc Group’s Report, as well as the Reliability Standards identified in *Cedar Creek*. According to NERC, the Project 2010-07 standard

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<sup>30</sup> *Id.* at 5.

<sup>31</sup> *Id.* at 12.

<sup>32</sup> *Id.* at 5.

drafting team reviewed 34 Reliability Standards and 102 requirements to determine what requirements should be extended to generator owners and generator operators that own or operate generator interconnection facilities, many of which had also been addressed in the Ad Hoc Group's Report.<sup>33</sup> However, the Project 2010-07 standard drafting team ultimately chose a different approach than that proposed in the Ad Hoc Group Report. The standard drafting team elected not to include clarifying language about a Reliability Standard's applicability to generator interconnection facilities in most standards otherwise applicable to generator owners or generator operators, and to instead focus on modifying certain Reliability Standards not currently applicable to generating entities.<sup>34</sup>

17. NERC provides a "technical justification" as to why it is not proposing modifications to the remaining Reliability Standards identified in the Ad Hoc Group Report or by the Commission in *Cedar Creek*, to apply them to generator owners and generator operators with generator interconnection facilities.<sup>35</sup> NERC acknowledges, however, that some generator interconnection facilities may require a more expansive approach:

The drafting team acknowledges that some Facilities used solely to connect generators to the transmission system are more complex and may therefore require individual assessment. The reliability gaps associated with such Facilities should not be addressed simply through application of all standards applicable to Transmission Owners and

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<sup>33</sup> *Id.* at 11.

<sup>34</sup> *See id.* at 11-12.

<sup>35</sup> *See id.* at 12-18, Ex. C (Technical Resource Justification Document).

Transmission Operators, but instead through an assessment of the impact of such a Facility on neighboring transmission Facilities. Such assessment should then be used to determine exactly which Reliability Standards and requirements should apply to that Facility and whether additional entity registration is warranted. This assessment should, at a minimum, be based upon the output of transmission planning and operating studies used by the Reliability Coordinator, Transmission Operator and Transmission Planner in complying with applicable Reliability Standards (specifically, IRO, TOP and TPL).<sup>36</sup>

Finally, NERC notes that its Petition and the proposed modifications will not have the effect of de-registering any entity from the NERC Compliance Registry.<sup>37</sup>

## II. Discussion

18. Pursuant to section 215(d)(2) of the FPA, the Commission proposes to approve Reliability Standards FAC-001-1, FAC-003-3, PRC-004-2.1a, and PRC-005-1.1b as proposed by NERC.

19. First, we find that revised Reliability Standards FAC-001-1 and FAC-003-3 will enhance reliability by extending current requirements to appropriate generator interconnection facilities. Currently, generator owners are not required under Reliability Standard FAC-001-1 to develop and make available facility connection requirements to ensure compliance with NERC Reliability Standards, even if a third party is requesting such an interconnection. Because this situation may not commonly arise, we agree that

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<sup>36</sup> *Id.* at 12-13.

<sup>37</sup> *Id.* at 5. The Commission reads this statement to mean that the Petition does not propose to overturn any order the Commission has issued addressing an entity's registration. *See, e.g., Cedar Creek and Harquahala.*



extending the requirements of Reliability Standard FAC-001 to generator owners only upon execution of an agreement stemming from an interconnection request, as proposed in Reliability Standard FAC-001-1, is a reasonable way to address the reliability gap that may arise from the changes in conditions resulting from the third party interconnection.

20. Similarly, we agree that extending the vegetation management requirements of Reliability Standard FAC-003-2 to certain generator interconnection facilities addresses a potential reliability gap in a reasonable manner. While the vegetation surrounding generator interconnection facilities is typically regularly maintained to ensure the delivery of generation, there are currently no Reliability Standards that require generator owners to perform vegetation management or to maintain minimum levels of clearance between vegetation and significant overhead generator interconnection lines. We further find that the limitations on applicability to “applicable lines” as NERC proposes are reasonable. It is common for generator interconnection facilities of a relatively short span (i.e., less than one mile) to cross only areas with limited or no vegetation, i.e., gravel or concrete surfaces typically found in switchyards and immediate surrounding areas. However, with respect to lines that are “exempt” based on the existence of a clear sight line to the point of interconnection, we emphasize that this exemption must be interpreted narrowly, i.e. there should be no obstructions (such as vegetation, geological formations,

buildings, fences, curvatures in the line, etc.) that prevent personnel from identifying potential reliability hazards for the full extent of the line.<sup>38</sup>

21. We further propose to approve the clarifying language NERC has proposed for Reliability Standards PRC-004-2.1a and PRC-005-1.1b. Given the potential that the existing standards could be interpreted to exclude generator interconnection facilities from the responsibilities otherwise assigned to the generator owner, we agree that it is appropriate to mitigate that possibility with the clarifying modifications.

22. However, further clarification of the term “generator interconnection facility” may be warranted. We understand the term to refer to generator interconnection tie-lines and their associated facilities extending from the secondary (high) side of a generator owner’s step-up transformer(s) to the point of interconnection with the host transmission owner.<sup>39</sup>

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<sup>38</sup> See generally, *Version One Regional Reliability Standards for Facilities Design, Connections, and Maintenance; Protection and Control; and Voltage and Reactive*, Notice of Proposed Rulemaking, 135 FERC ¶ 61,061, at P 79 (2010) (requesting comment on whether a Regional Entity should be directed to replace a blanket exemption for two percent of operating hours with a more specific exemption, and noting a concern that the exemption was “written more broadly than necessary”).

<sup>39</sup> In *Revisions to Electric Reliability Organization Definition of Bulk Electric System and Rules of Procedure*, Order No. 773, 141 FERC ¶ 61,236, at PP 164-65 (2012), we discussed the phrase “generator tie-line” in the context of deciding whether such lines should be excluded from the definition of bulk electric system as part of a broader exclusion for radial lines and radial systems. In that case, the Commission found that such lines should be included as part of the bulk electric system definition “[i]f the generator is necessary for the operation of the interconnected transmission network.” *Id.* P 164. We are not seeking any change to the approach taken or the definitions used in Order No. 773, but note that the inclusion of a generator tie-line in the bulk electric system definition does not necessarily mean its owner must be registered as a transmission owner or operator. In fact, NERC’s proposal here assumes such registration

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We further understand that a generator owner or generator operator's compliance obligations extend to the generator interconnection facilities up to the point of interconnection with the host transmission owner. We seek comment on this understanding.

23. We recognize that the standard drafting team reviewed 34 other Reliability Standards and 102 requirements to assess the need for applicability to generator owners and generator operators, and determined that some of those other Reliability Standards and requirements already apply to generators.<sup>40</sup> In its Petition, NERC makes clear that it is not seeking any changes to those other Reliability Standards and requirements, but identifies them in the Petition "to provide a more complete picture of the assessments made by the drafting team in the course of Project 2010-07."<sup>41</sup> The Commission appreciates NERC's work on this matter and its acknowledgement that the four Reliability Standards addressed in the Petition are not the only Reliability Standards that will apply to generators. However, the Commission concludes that the only Reliability Standards before the Commission for review in this proceeding are the four Reliability Standards described above. Therefore, this NOPR addresses the four Reliability Standards for which NERC seeks approval and makes no proposal about those other

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will usually be unnecessary so long as the entity, if registered as a generator owner or operator, is subject to the four Reliability Standards addressed here.

<sup>40</sup> See NERC Petition at 11-18.

<sup>41</sup> *Id.* at 13.

Reliability Standards and requirements that NERC identified in its Petition for informational purposes.

24. Further, in its Petition, NERC explains that some facilities are “complex,” and that it may require an “individual assessment” to determine whether a Reliability Standard applies to a facility used to connect a generator to the grid.<sup>42</sup> NERC goes on to state that such “assessments should then be used to determine exactly what Reliability Standards and requirements should apply to that Facility and whether additional entity registration is warranted.”<sup>43</sup> NERC adds that “[t]his assessment should, at a minimum, be based upon the output of transmission planning and operating studies used by the Reliability Coordinator, Transmission Operator and Transmission Planner in complying with applicable Reliability Standards (specifically, IRO, TOP and TPL).”<sup>44</sup> The Commission appreciates that, while certain facilities may be adequately addressed through a generic evaluation, other facilities may, as NERC indicates, require “individual assessment” to properly determine which Reliability Standards apply to a facility. Thus, our proposal to approve the revised Reliability Standards is based on the understanding that additional Reliability Standards or individual requirements may need to be applied to generator interconnection facilities as NERC acknowledges in its Petition, based on “individual

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<sup>42</sup> *Id.* at 12.

<sup>43</sup> *Id.*

<sup>44</sup> *Id.* The assessment of the other Reliability Standards and requirements included in the Petition for informational purposes is the outcome of an assessment made by the standard drafting team for the purposes of filing the Petition.

assessments.” However, the Petition is vague on the specific aspects of the individual assessments. For instance, will the determination of which Reliability Standards and requirements should apply to a facility occur during the Feasibility Study, the System Impact Study, the Facility Study, or some other time? Also, based on the individual assessments, how will the identification of the additional Reliability Standards and requirements be coordinated among the transmission owners, generator owners and others? Therefore, we seek comment as to what circumstances could trigger such an individual assessment. We also seek comment on how NERC envisions the individual assessments will be performed as part of the transmission planning and operating studies NERC mentions in the Petition, when the individual assessments will occur, what percentage of generator interconnection facilities are “complex” and thereby likely to trigger such an individual assessment (including the number of existing generator interconnection facilities that will be required to adhere to additional transmission owner or transmission operator Reliability Standards), and how the results of the individual assessments will be coordinated among the interested parties.

25. Finally, we propose to approve the Violation Risk Factors and Violation Severity Levels, as well as the implementation plan and effective dates for each modified Reliability Standard as proposed by NERC, including the proposed retirement dates for the existing standards.

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

26. The following collection of information contained in the Proposed Rule is subject to review by the Office of Management and Budget (OMB) under section 3507(d) of the

Paperwork Reduction Act of 1995 (PRA).<sup>45</sup> OMB's regulations require that OMB approve certain reporting and recordkeeping requirements (collections of information) imposed by an agency.<sup>46</sup> Upon approval of a collection of information, OMB will assign an OMB control number and expiration date. Respondents subject to the filing or recordkeeping 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.

27. The Commission will submit these reporting and recordkeeping requirements to OMB for its review and approval under section 3507(d) of the PRA. Comments are solicited on the Commission's need for this information, whether the information will have practical utility, the accuracy of the provided burden estimate, ways to enhance the quality, utility, and clarity of the information to be collected, and any suggested methods for minimizing the respondent's burden, including the use of automated information techniques.

28. This Notice of Proposed Rulemaking proposes to approve Reliability Standards FAC-001-1, FAC-003-3, PRC-004-2.1a, and PRC-005-1.1b, which would replace currently effective Reliability Standards FAC-001-0, FAC-003-1,<sup>47</sup> PRC-004-2a, and

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<sup>45</sup> 44 U.S.C. 3507(d) (2006).

<sup>46</sup> 5 CFR 1320.11 (2012).

<sup>47</sup> As of the date of issuance of this NOPR, the currently effective standard is FAC-003-1. As noted above (*see* n.23), we recently approved FAC-003-2, which has yet to go into effect.

PRC-005-1b. The modifications proposed for PRC-004-2.1a and PRC-005-1.1b are clarifications of existing requirements, do not extend those existing requirements to any new entity or to additional facilities, and do not affect the existing burden related to those standards.

29. The modifications proposed for FAC-001-1 would extend the obligation to document, maintain, and publish interconnection requirements to any generator owner that has an executed agreement with a third party to evaluate the reliability impact of a requested or required interconnection. NERC states, and we agree, that the number of affected generator owners is likely to be extremely small.<sup>48</sup> Moreover, it is likely that any increase in an entity's recordkeeping and reporting requirements would occur through a change in that entity's NERC registration status in any case, i.e., NERC would likely be considering registration of an entity as a transmission owner. Accordingly, the Commission views the potential increase in recordkeeping and reporting burden from revised standard FAC-001-1 as minimal, but has provided an estimate of that burden in the table set out below.

30. The modifications proposed in FAC-003-3 would extend NERC's vegetation management requirements to certain generator interconnection facilities, including requirements to create and maintain records related to the generator owner's vegetation management work plan and performance of inspections. Generator owners typically

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<sup>48</sup> See NERC Petition at 20.

already maintain the vegetation surrounding the right of way for the generator interconnection facility that connects the generating station switchyard to the point of interconnection with a transmission owner's facility. However, the proposed requirements outlined in FAC-003-3 may exceed a generator owner's current vegetation management program, particularly with respect to recordkeeping and reporting.

31. Public Reporting Burden: The burden and cost estimates below are based on the increase in the reporting and recordkeeping burden imposed by the proposed Reliability Standards. Our estimate of the number of respondents affected is based on the NERC Compliance Registry as of March 19, 2013. According to the Compliance Registry, NERC has registered 892 generator owners within the United States, and we estimate that approximately 10 percent (or 89) of these generator owners have interconnection facilities that meet the proposed requirements for applicability of the new standard (i.e., having overhead lines that are greater than 200 kV or are part of an IROL or WECC Transfer Path, and that are either longer than one mile or without a clear sightline to the point of interconnection with the host transmission system).

32. The burden estimates reflect the changes in the standards and the number of affected entities (e.g., the generator owner's one-time burden to develop, or review and modify, an existing vegetation management program, and the on-going, relatively minor burden of preparing quarterly reports of relevant outages). Estimates for the proposed additional burden imposed by the NOPR in RM12-16 follow.



<b>FERC-725A</b>	<b>Number of Respondents<sup>49</sup> (1)</b>	<b>Number of Responses per Respondent (2)</b>	<b>Average Burden Hours Per Response (3)</b>	<b>Total Annual Burden Hours (1)x(2)x(3)</b>	<b>Total Annual Cost<sup>50</sup></b>
<b>FAC-003-3 (Transmission Vegetation Management)</b>					
Strategies, documentation, processes, & procedures (M3)	89	1	32	2,848 (one-time)	\$148,096 one-time [@\$52/hr.]
Quarterly Reporting (Compliance 1.4)	97 <sup>51</sup>	4	0.25	97	\$6,790 [@\$70/hr.]

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<sup>49</sup> GO = Generator Owner; RE = Regional Entity. The respondents are generator owners, unless otherwise indicated.

<sup>50</sup> The estimates for cost per hour are derived as follows:

- \$52/hour, the average of the salary plus benefits for an engineer and a forester, from Bureau of Labor and Statistics at [http://bls.gov/oes/current/naics3\\_221000.htm](http://bls.gov/oes/current/naics3_221000.htm)
- \$70/hour, the average of the salary plus benefits for a manager and an engineer, from Bureau of Labor and Statistics at [http://bls.gov/oes/current/naics3\\_221000.htm](http://bls.gov/oes/current/naics3_221000.htm)
- \$28/hour, based on a Commission staff study of record retention burden cost.

<sup>51</sup> Number of respondents includes 89 generator owners, who may be subject to the recordkeeping and reporting burdens of FAC-003 for the first time, and 8 Regional Entities, who may have a slight increase in recordkeeping and reporting requirements due to the increase in entities covered by the vegetation management standard.

Annual Veg. Inspect. Doc. (M6); annual veg. work plan (M7); evidence of mgt. of veg. (M1 & M2), confirmed veg. condition (M4) & corrective action (M5)	89	1	2	178	12,460 [@\$70/hr.]
Record Retention (Compliance 1.2)	89	1	1	89	\$2,492 [@\$28/hr.]
FAC-001-1 (Facility Connection Requirements)					
Facility connection reqs. (R2, R3, M2, & M3)	5	1	16	80(one-time)	\$5,600 (one-time) [@\$70/hr.]
Record Retention <sup>52</sup>	5	1	1	5	\$140 [@\$28/hr.]
<b>Total</b>				<b>3,297</b>	<b>\$175,578</b>

Title: Mandatory Reliability Standards for the Bulk-Power System

Action: Proposed revisions to FERC-725A.

OMB Control No.: 1902-0244

Respondents: Businesses or other for-profit institutions; not-for-profit institutions.

Frequency of Responses: One-time, annual, and quarterly.

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<sup>52</sup> Regional Entities may have a de minimis increase in burden due to the increase in the number of entities potentially subject to the revised standard; that burden has been rolled into the estimated Average Burden Hours per Response.

Necessity of the Information: The proposed revisions to the four Reliability Standards noted above are part of the implementation of 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.

Internal Review: The Commission has reviewed the proposed revisions to the Reliability Standards and made a determination that its action is necessary to implement section 215 of the FPA. The Commission has assured itself, by means of its internal review, that there is specific, objective support for the burden estimate associated with the information requirements.

33. Interested persons may obtain information on the reporting requirements by contacting the following: Federal Energy Regulatory Commission, 888 First Street, NE, Washington, DC 20426 [Attention: Ellen Brown, Office of the Executive Director, e-mail: [DataClearance@ferc.gov](mailto:DataClearance@ferc.gov), phone: (202) 502-8663, fax: (202) 273-0873].

34. For submitting comments concerning the collection of information and the associated burden estimates, please send your comments to the Commission, and to the Office of Management and Budget, Office of Information and Regulatory Affairs, Washington, DC 20503 [Attention: Desk Officer for the Federal Energy Regulatory Commission, phone: (202) 395-4638, fax: (202) 395-7285]. For security reasons, comments to OMB should be submitted by e-mail to: [oir\\_submission@omb.eop.gov](mailto:oir_submission@omb.eop.gov). Comments submitted to OMB should include Docket Number RM12-04 and OMB Control Number 1902-0244.

#### IV. Regulatory Flexibility Act Certification

35. The Regulatory Flexibility Act of 1980 (RFA)<sup>53</sup> generally requires a description and analysis of proposed rules that will have significant economic impact on a substantial number of small entities. The RFA mandates consideration of regulatory alternatives that accomplish the stated objectives of a proposed rule and that minimize any significant economic impact on a substantial number of small entities. The Small Business Administration's (SBA's) Office of Size Standards develops the numerical definition of a small business.<sup>54</sup> The SBA has established a size standard for electric utilities, stating that a firm is small if, including its affiliates, it is primarily engaged in the transmission, generation and/or distribution of electric energy for sale and its total electric output for the preceding twelve months did not exceed four million megawatt hours.<sup>55</sup>

36. Proposed Reliability Standards FAC-001-1, FAC-003-3, PRC-004-2.1a, and PRC-005-1.1b will help to ensure that generator interconnection facilities are properly maintained and operated. The number of small business entities affected is expected to be small, because FAC-001-1 will apply only to the small subset of generator owners that have executed an agreement to interconnect with a third party, and FAC-003-3 will only affect generator owners with overhead transmission lines that (1) are operated at 200 kV or higher, or, are elements of an IROL or of a Major WECC Transfer Path, and (2) are

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<sup>53</sup> 5 U.S.C. 601-612 (2006).

<sup>54</sup> 13 CFR 121.101 (2012).

<sup>55</sup> 13 CFR 121.201, Sector 22, Utilities & n.1.

longer than one mile or lacking in clear sightlines to the point of interconnection with the host transmission system.<sup>56</sup> Comparison of the NERC Compliance Registry with data submitted to the Energy Information Administration on Form EIA-861 indicates that, of the 892 generator owners in the United States registered by NERC, 48 qualify as small businesses. Of these, only about ten percent, or five entities, are expected to have qualifying interconnection facilities.

37. For the number of small generator owners that do have applicable facilities, the primary cost increase is expected to be in documentation, recordkeeping, and reporting burdens as discussed above. In addition, we estimate that for each of the estimated five small generator owners there will be an additional cost for the two hours to perform the annual inspection of the lines (at \$47.00 per hour,<sup>57</sup> or an additional \$94.00 per owner). Therefore, the estimated cost in the first year for the increased data collection and retention for these entities is approximately \$3,144.00 per entity (\$3,050.00 for the one-time and recurring reporting and record retention requirements from the table above plus \$94.00 for the annual inspection of the line). In subsequent years, after completion of the one-time recordkeeping or reporting requirements, the cost will be reduced. Based on the above, the Commission does not consider the costs associated with NERC's proposed revisions to the four Reliability Standards to constitute a significant economic

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<sup>56</sup> Some of the standards may also affect Regional Entities; however, they do not qualify as small entities.

<sup>57</sup> This wage figure is taken from the Bureau of Labor and Statistics at <http://bls.gov/oes/current/naics3.221000.htm>.

impact for small entities, because it should not represent a significant percentage of an affected small entity's operating budget. Accordingly, the Commission certifies that the revised requirements set forth in the four Reliability Standards will not have a significant economic impact on a substantial number of small entities, and no regulatory flexibility analysis is required.

#### **V. Environmental Analysis**

38. 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>58</sup> The Commission has categorically excluded certain actions from this requirement as not having a significant effect on the human environment. Included in the exclusion are rules that are clarifying, corrective, or procedural or that do not substantially change the effect of the regulations being amended.<sup>59</sup> The actions proposed here fall within this categorical exclusion in the Commission's regulations.

#### **VI. Comment Procedures**

39. 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 [**INSERT DATE 60 days after publication in the FEDERAL REGISTER**]. Comments must refer to

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<sup>58</sup> *Regulations Implementing the National Environmental Policy Act of 1969*, Order No. 486, FERC Stats. & Regs., Regulations Preambles 1986-1990 ¶ 30,783 (1987).

<sup>59</sup> 18 C.F.R. §380.4(a)(2)(ii).

Docket No. RM12-16-000, and must include the commenter's name, the organization they represent, if applicable, and address.

40. 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.

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

42. 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**

43. 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 the Commission's Home Page (<http://www.ferc.gov>) and in the Commission'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.

44. From the Commission'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.

45. User assistance is available for eLibrary and the Commission's website during normal business hours from the Commission's 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).

By direction of the Commission.

( S E A L )

Nathaniel J. Davis, Sr.,  
Deputy Secretary.