

152 FERC ¶ 61,199  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

18 CFR Part 40

[Docket No. RM15-9-000, Order No. 813]

Protection System, Automatic Reclosing, and  
Sudden Pressure Relaying Maintenance Reliability Standard

(Issued September 17, 2015)

AGENCY: Federal Energy Regulatory Commission.

ACTION: Final rule.

SUMMARY: Pursuant to the Federal Power Act, the Commission approves a revised Reliability Standard, PRC-005-4 (Protection System, Automatic Reclosing and Sudden Pressure Relaying Maintenance), developed and submitted by the North American Electric Reliability Corporation (NERC). In addition, the Commission approves one new definition and four revised definitions referenced in the proposed Reliability Standard, as well as the assigned violation risk factors and violation severity levels, and the associated implementation plan. Consistent with Order No. 758, the proposed Reliability Standard requires applicable entities to test and maintain certain sudden pressure relays as part of a protection system maintenance program.

EFFECTIVE DATE: This rule will become effective [**INSERT DATE 60 days after publication in the FEDERAL REGISTER**].

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SUPPLEMENTARY INFORMATION:

152 FERC ¶ 61,199  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Norman C. Bay, Chairman;  
Philip D. Moeller, Cheryl A. LaFleur,  
Tony Clark, and Colette D. Honorable.

Protection System, Automatic Reclosing, and  
Sudden Pressure Relaying Maintenance  
Reliability Standard

Docket No. RM15-9-000

ORDER NO. 813

FINAL RULE

(Issued September 17, 2015)

1. Pursuant to section 215 of the Federal Power Act (FPA),<sup>1</sup> the Commission approves a revised Reliability Standard, PRC-005-4 (Protection System, Automatic Reclosing and Sudden Pressure Relaying Maintenance), developed and submitted by the North American Electric Reliability Corporation (NERC), the Commission-certified Electric Reliability Organization (ERO). In addition, the Commission approves one new definition and four revised definitions referenced in the Reliability Standard, as well as the assigned violation risk factors and violation severity levels, and the proposed implementation plan. Consistent with Order No. 758,<sup>2</sup> Reliability Standard PRC-005-4

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<sup>1</sup> 16 U.S.C. 824o (2012).

<sup>2</sup> *Interpretation of Protection System Reliability Standard*, Order No. 758, 138 FERC ¶ 61,094, *clarification denied*, 139 FERC ¶ 61,227 (2012).

requires applicable entities to test and maintain certain sudden pressure relays as part of a protection system maintenance program.

## **I. Background**

### **A. Regulatory Background**

2. Section 215 of the FPA requires a Commission-certified ERO to develop mandatory and enforceable Reliability Standards, 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> In 2006, the Commission certified NERC as the ERO pursuant to FPA section 215.<sup>5</sup>

3. In 2007, the Commission approved an initial set of Reliability Standards submitted by NERC, including initial versions of four protection system and load-shedding-related maintenance standards: PRC-005-1, PRC-008-0, PRC-011-0, and PRC-017-0.<sup>6</sup> In addition, the Commission directed NERC to develop a revision to PRC-005-1 incorporating a maximum time interval during which to conduct maintenance and testing of protection systems, and to consider combining into one standard the various maintenance and testing requirements for all of the maintenance and testing-related

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<sup>3</sup> 16 U.S.C. at 824o(c) and (d).

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

<sup>5</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>6</sup> *Mandatory Reliability Standards for the Bulk Power System*, Order No. 693, FERC Stats. & Regs. ¶ 31,242 at PP 1474, 1492, 1497, and 1514, *order on reh'g*, Order No. 693-A, 120 FERC ¶ 61,053 (2007).

standards for protection systems, underfrequency load shedding (UFLS) equipment and undervoltage load shedding (UVLS) equipment.

4. In February 2012, the Commission issued Order No. 758 in response to NERC's request for approval of its interpretation of Requirement R1 of the then-current version of the protection system maintenance standard, Reliability Standard PRC-005-1. In that order, the Commission accepted NERC's proposed interpretation of Requirement R1, which provided guidance on the types of protection system equipment to which the Reliability Standard did or did not apply. In reviewing NERC's interpretation, however, the Commission raised several concerns about potential gaps in the coverage of PRC-005-1, including a concern that the standard as written may not include all components that serve in some protective capacity.<sup>7</sup>

**B. NERC Petition and Proposed Standard PRC-005-4**

5. On December 18, 2014, NERC submitted a petition seeking approval of proposed Reliability Standard PRC-005-4, which would add to the applicability of Reliability Standard PRC-005-3 those sudden pressure relays that NERC has identified as having a

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<sup>7</sup> See Order No. 758, 138 FERC ¶ 61,094 at P 12. NERC has been addressing the concerns stated in Order No. 758 through a series of projects modifying the PRC-005 standard. See *Protection System Maintenance Reliability Standard*, Order No. 793, 145 FERC ¶ 61,253 (2013) (approving Reliability Standard PRC-005-2, which incorporated specific minimum maintenance activities and maximum time intervals for maintenance of individual components of the protection systems and load shedding equipment affecting the bulk electric system); *Protection System Maintenance Reliability Standard*, Order No. 803,150 FERC ¶ 61,039 (2015) (approving PRC-005-3 and directing NERC to develop a modification to include maintenance and testing of supervisory relays associated with relevant autoreclosing relay schemes).

potential effect on the reliable operation of the Bulk-Power System.<sup>8</sup> NERC stated that these revisions were developed to satisfy NERC's commitment to develop modifications to PRC-005 that would address the Commission's concerns, as set out in Order No. 758, regarding the lack of maintenance requirements for non-electrical sensing relays (such as sudden pressure relays) that could affect the reliable operation of the Bulk-Power System.<sup>9</sup>

6. NERC stated that sudden pressure relays are "designed to quickly detect faults on the Bulk-Power System transformer equipment that may remain undetected by other Protection Systems, and can operate to limit any potential damage on the equipment."<sup>10</sup> NERC stated that the "misoperation of sudden pressure relays that initiate tripping in response to fault conditions can impact the reliability of the Bulk-Power System," and accordingly proposed revisions to PRC-005-3 that will require entities to document and implement programs for maintenance of applicable sudden pressure relays.<sup>11</sup>

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<sup>8</sup> Reliability Standard PRC-005-4 is not attached to the Final Rule; however, the complete text of the Reliability Standard is available on the Commission's eLibrary document retrieval system in Docket No. RM15-9-000 and is posted on NERC's web site, *available at*: <http://www.nerc.com>.

<sup>9</sup> *See* NERC Petition at 3, 9.

<sup>10</sup> *Id.* at 3. NERC described sudden pressure relays as relays which "respond to changes in pressure and are utilized as protective devices for power transformers," and which may "detect rapid changes in gas pressure, oil pressure, or oil flow that are indicative of faults within the transformer equipment." *Id.* at 13. NERC noted that in addition to detecting faults, certain sudden pressure relays can trip the associated transformer circuitry in response to the fault conditions.

<sup>11</sup> *Id.* at 3-4.

7. NERC explained that, consistent with Order No. 758, NERC's System Protection and Control Subcommittee (SPCS) performed a technical study "to determine which devices that respond to non-electrical quantities should be addressed within PRC-005 identified devices."<sup>12</sup> NERC stated that the SPCS considered a broad range of devices that respond to non-electrical quantities, starting with the list of ninety-four devices included in the IEEE Standard Electrical Power System Device Function Numbers, then applying "multiple layers of analysis to each device to select the ones that can affect the reliability of the Bulk-Power System."<sup>13</sup> The SPCS first determined that only those devices that initiate action to clear faults or mitigate abnormal system conditions present a risk to the Bulk-Power System. Next, the SPCS eliminated those devices that were "previously considered as a result of the revised definition of Protection System or those that are clearly not protective devices, such as primary equipment and control devices."<sup>14</sup> Finally, the SPCS conducted an in-depth analysis of the remaining devices, and concluded that only one category – sudden pressure relays that are utilized in a trip application – should be included in the revised PRC-005-4.

8. NERC also explained that the SPCS developed a Supplemental Report in response to comments and questions from the Commission staff about its initial recommendations. These comments and questions focused on whether PRC-005 should include turbine

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<sup>12</sup> *Id.* at 4.

<sup>13</sup> *Id.* at 10.

<sup>14</sup> *Id.*

generator vibration monitors and circuit breaker arc extinguishing systems.<sup>15</sup> The SPCS Supplemental Report, issued on October 31, 2014, examined these two kinds of devices and provided information on events during which these devices operated or failed to operate. The Supplemental Report concluded that neither device affected the reliable operation of the Bulk-Power System.

9. NERC stated that the standard drafting team that was tasked with developing the modifications to PRC-005 in response to Order No. 758 adopted the SPCS Report's recommendations, both as to the scope of additional relays included and as to the required minimum maintenance activities and maximum maintenance intervals for these relays.

10. NERC maintained in its petition that Reliability Standard PRC-005-4 will enhance reliability by extending the coverage of an applicable entity's protection system maintenance program to include sudden pressure relaying components. NERC further maintained that the proposed standard satisfies the Commission's concerns as raised in Order No. 758 "by including . . . sudden pressure relays that detect [a] fault on Bulk-Power System transformer equipment and trip in response to fault conditions, as recommended by the SPCS Report."<sup>16</sup>

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<sup>15</sup> NERC Petition at 11, Ex. E (NERC SPCS, *Sudden Pressure Relays and Other Devices that Respond to Non-Electrical Quantities: Supplemental Information to Support Project 2007-17.3: Protection System Maintenance and Testing* (Oct. 31, 2014) (SPCS Supplemental Report)).

<sup>16</sup> NERC Petition at 12.



11. NERC explained that Reliability Standard PRC-005-4 has been modified to include “Sudden Pressure Relaying” devices (newly-defined) as part of an applicable entity’s protection system maintenance program.<sup>17</sup> NERC further explained that Reliability Standard PRC-005-4’s maintenance requirements would apply to a sudden pressure relay that trips an interrupting device to isolate the equipment it is monitoring, but that it “does not include other non-electric sensing devices, pressure relays that only initiate an alarm, or pressure relief devices.”<sup>18</sup> In addition, NERC explained that the revised standard replaces the term “Special Protection System” with the term “Remedial Action Scheme,” to align the standard with NERC’s employment of the latter term moving forward, and revises Applicability section 4.2.6.1 to address how the largest bulk electric system generating unit would be determined in circumstances involving a Reserve Sharing Group.

12. NERC’s proposed implementation plan for PRC-005-4 incorporates the phased-in implementation period approved for PRC-005-2, which has a twelve-year phase-in period, and adds compliance dates for the new requirements for applicable sudden pressure relays. NERC asked that PRC-005-4 become effective the first day of the first calendar quarter following Commission approval. Reliability Standard PRC-005-3 would be retired immediately prior to PRC-005-4 becoming effective.

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<sup>17</sup> NERC also proposed to modify the definitions of Protection System Maintenance Program, Component Type, Component, and Countable Event to reflect the addition of sudden pressure relays to the scope of a required maintenance program. NERC Petition at 15-16.

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

13. NERC explained that the evidence retention period for PRC-005-4 is shorter than that required in the preceding versions of the standard, as it requires entities to maintain records for one maintenance cycle, rather than two cycles, if the interval of the maintenance activity is longer than the audit cycle. For maintenance activities where the interval is shorter than the audit cycle, documentation is to be retained for all maintenance activities since the previous audit.

14. Finally, NERC stated that the violation risk factors proposed in PRC-005-4 track those in previous versions of the standard, and that the violation severity levels have been revised to include the additional component (sudden pressure relays) in a manner consistent with the approach taken for PRC-005-3.

**C. Notice of Proposed Rulemaking**

15. On April 22, 2015, the Commission issued a Notice of Proposed Rulemaking (NOPR) proposing to approve Reliability Standard PRC-005-4, along with the new definition of Sudden Pressure Relaying, the four revised definitions referenced in the standard, and the assigned violation risk factors and violation severity levels.<sup>19</sup> The Commission agreed with NERC that the identified sudden pressure relays should be included in an adequate protection system maintenance program, and stated its belief that inclusion of these devices in such a maintenance program would enhance reliability.<sup>20</sup>

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<sup>19</sup> *Protection System, Automatic Reclosing, and Sudden Pressure Relaying Maintenance Reliability Standard*, Notice of Proposed Rulemaking, 80 Fed. Reg. 22,444 (Apr. 22, 2015), 151 FERC ¶ 61,026, (2015) (NOPR).

<sup>20</sup> *Id.* PP 15-16.

However, the Commission also noted its continuing concern that “misoperation of other types of non-electrical sensing relays or devices, such as pressure sensing devices associated with air blast or SF6 circuit breaker arc extinguishing systems, could affect the reliable operation of the Bulk-Power System.”<sup>21</sup> While the Commission did not propose any revisions to the standard based on these concerns, it noted its expectation that Commission staff would continue to explore the issue with NERC.<sup>22</sup>

16. Comments on the NOPR were filed by NERC, the Edison Electric Institute (EEI), the National Rural Electric Cooperative Association (NRECA), Tennessee Valley Authority (TVA), Southern Company Services, Inc. (Southern Companies), and Eric S. Morris. Dominion Resources Services, Inc. filed a motion to intervene in this rulemaking, but did not file substantive comments. Ameren submitted late-filed comments on August 31, 2015.

## **II. Discussion**

17. Pursuant to section 215(d)(2) of the FPA, the Commission approves Reliability Standard PRC-005-4, as well as the new definition of Sudden Pressure Relaying, the four revised definitions referenced in the proposed standard, the assigned violation risk factors and violation severity levels, and the proposed implementation plan (as discussed further below). We find that Reliability Standard PRC-005-4 will enhance reliability by requiring the inclusion of certain sudden pressure relays utilized in a trip application as

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<sup>21</sup> *Id.* P 17.

<sup>22</sup> *Id.*

part of the protection system maintenance program, and by requiring entities to undertake minimum required maintenance activities at maximum defined maintenance intervals.

Moreover, we note that all of the commenters that addressed the issue support approval of PRC-005-4, as well as the associated definitions and violation risk factors and violation severity levels.<sup>23</sup>

18. Below we discuss the following matters: (1) continued assessment of reliability gaps associated with non-electrical sensing devices; and (2) alignment of implementation plans with other versions of PRC-005.

**A. Continued Assessment of Non-Electrical Sensing Devices  
NOPR**

19. The Commission indicated in the NOPR that it continued to have some concern “that the misoperation of other types of non-electrical sensing relays or devices, such as pressure sensing devices associated with air blast or SF6 circuit breaker arc extinguishing systems, could affect the reliable operation of the Bulk-Power System.”<sup>24</sup> While the Commission recognized that the SPCS Report found no situations “in which misoperation of a density switch or sensor [i.e., pressure sensing device] in response to a

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<sup>23</sup> One commenter, Eric S. Morris, does not directly address the Commission’s proposed approval of PRC-005-4, but instead raises generic questions concerning the severity of fines imposed by NERC, and the lack of a cost-benefit analysis to determine whether reliability or security have improved following NERC’s certification as the ERO. Because Mr. Morris has not raised any issues relevant to this rulemaking, we will not address his comments further here, but note that the Commission recently addressed issues related to NERC’s overall performance and continued certification as the ERO in its Order on the Electric Reliability Organization’s Five-Year Performance Assessment. *See North American Electric Reliability Corp.*, 149 FERC ¶ 61,141 (2014).

<sup>24</sup> NOPR, 151 FERC ¶ 61,026 at P 17.

system disturbance had contributed to a cascading event,” the Commission nevertheless noted its expectation that Commission staff would continue to explore the issue with NERC. The Commission pointed out that NERC’s 2013 and 2014 State of Reliability reports indicated “that AC substation equipment failures remain among the leading causes of Bulk Power System problems.”<sup>25</sup>

### **Comments**

20. NERC agrees with the Commission’s proposal to continue to work with Commission staff “to explore misoperations of particular types of non-electrical sensing relays or devices . . . to assess the impact of this equipment on the reliable operation of the Bulk-Power System.”<sup>26</sup> While EEI supports NERC’s commitment to continue to examine the misoperations issue, EEI maintains that the SPCS Report provided a “comprehensive and thorough response to the Commission’s concerns” as set out in Order No. 758, and asks that the Commission not issue any further directives or modifications related to PRC-005 at this time.<sup>27</sup>

21. With respect to the Commission’s expressed concern regarding density switches or sensors, EEI notes that the SPCS report found no operating experience in which misoperation of such a device contributed to a cascading event, and further found that “density switches typically respond to an abnormal equipment condition and take[] action to protect the equipment from excessive loss of life rather than for the purpose of

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

<sup>26</sup> NERC Comments at 2.

<sup>27</sup> EEI Comments at 4-5.

initiating fault clearing or mitigating an abnormal system condition to support reliable operation of the Bulk-Power System.”<sup>28</sup> EEI also states that NERC’s 2014 AC Substation Equipment Failure Report supports EEI’s position that no maintenance gap exists with respect to density switches, as the report found that although “failures of some of these devices may result in a breaker tripping, they are more properly considered as control failures, and typically are not associated with increased transmission outage severity.”<sup>29</sup> Finally, EEI states that NERC’s 2015 State of Reliability Report provides “no indication that these devices have been implicated or otherwise identified as having any contributing factor in affecting reliable of operation of the Bulk-Power System.”<sup>30</sup>

### **Commission Determination**

22. As proposed in the NOPR, we approve Reliability Standard PRC-005-4 without any directives or modifications. As we stated in the NOPR, we find the proposed addition to the standard of those sudden pressure relays identified by the SPCS Report as potentially having an impact on the reliability of the Bulk-Power System sufficient to address the concerns we raised in Order No. 758 at this time.

23. We decline to make any further findings, as EEI suggests, as to the comprehensiveness of the SPCS Report or otherwise take a position on whether a

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<sup>28</sup> *Id.* at 3 (quoting Consideration of Comments: Project 2007-17.3 Protection System Maintenance and Testing (PRC-005-X) (October 20, 2014) [http://www.nerc.com/pa/Stand/Prjct200717\\_3PrctnSstmMntnceANDTstnPhs3/Project\\_2007-17.3\\_PRC-005-4\\_Summary-of\\_Comments\\_20140930.pdf](http://www.nerc.com/pa/Stand/Prjct200717_3PrctnSstmMntnceANDTstnPhs3/Project_2007-17.3_PRC-005-4_Summary-of_Comments_20140930.pdf)).

<sup>29</sup> *Id.* at 4 (citing AC Substation Equipment Failure Report, NERC ACSEFT, December 2014, Circuit Breaker, Relay/Trip Coil, p. 10).

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

maintenance reliability gap currently exists with respect to non-electrical sensing devices. Instead, we acknowledge NERC's agreement to continue to work with Commission staff to explore and assess the misoperations of particular types of non-electrical sensing relays or devices in relation to the reliable operation of the Bulk-Power System. As with any aspect of NERC's and the Commission's reliability oversight obligations, we expect that when reliability gaps are identified, NERC would seek to address each gap through modification of a Reliability Standard or other appropriate means.

**B. Aligning PRC-005 Implementation Plans**

**NOPR**

24. In the NOPR, the Commission proposed to approve NERC's implementation plan for PRC-005-4, which incorporates the phased-in implementation period approved for PRC-005-2, with additional compliance dates for applicable sudden pressure relays. The Commission also proposed to approve NERC's proposed effective date for PRC-005-4, which would go into effect on the first day of the first calendar quarter following Commission approval.

**Comments**

25. NRECA, Southern Companies, TVA, and Ameren, who otherwise support approval of PRC-005-4, ask the Commission to consider rejecting NERC's proposed implementation plan for the revised standard, and to instead consider postponing the start dates for this and earlier versions of the standard. These commenters explain that several versions of PRC-005 have recently been approved or are under development, and that, as a result, "implementation of the various versions of PRC-005 will burden the industry in

the continued need to modify associated maintenance and testing programs.”<sup>31</sup> Similarly, the Southern Companies “join in the concern that the implementation of these various PRC-005 versions risk burdening the industry with the need to continuously modify associated maintenance and testing programs to track the implementation of the associated various timelines, requiring additional costs and multiple revisions to their Protection System Maintenance Programs within a very short period of time, likely resulting in unnecessary expenditures for the sake of compliance and not for reliability improvements.”<sup>32</sup>

26. NRECA asks the Commission to consider two proposed approaches to allow for the alignment of implementation schedules for the revised version of PRC-005:

1. Postpone implementation of PRC-005-3, PRC-005-3(i), PRC-005-4 and PRC-005-5 to coincide with the beginning of implementation of PRC-005-6.
2. Defer action on PRC-005-3(i), PRC-005-3(ii), PRC-005-4 and PRC-005-5 to be considered concurrently with PRC-005-6.

Both TVA and Southern Companies support NRECA’s proposal to postpone implementation of all yet-to-be implemented versions of PRC-005 to align with the beginning of implementation of PRC-005-6 (i.e., the last PRC-005 revision under development).

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<sup>31</sup> NRECA Comments at 3.

<sup>32</sup> Southern Companies Comments at 6.



### **Commission Determination**

27. We decline, without prejudice, to postpone the proposed start date for implementation of PRC-005-4, or to alter the already-approved implementation plans and start dates for PRC-005-3. While we are sympathetic to commenters' concerns about the several versions of PRC-005 that have been or may be going into effect in a relatively short period, we are reluctant to consider postponing implementation of an approved standard (PRC-005-3) or deferring consideration of an otherwise beneficial standard (PRC-005-4) based on prospective versions of the standard that have yet to be filed. Thus, while we are aware that additional versions of the standard are being developed,<sup>33</sup> we cannot accurately predict when those versions will come before us and cannot properly evaluate the impact of postponing implementation of the two most recent versions of the standard. Accordingly, we decline without prejudice the requests pertaining to the implementation plans and start dates for PRC-005.

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

28. The following collection of information contained in this Final Rule is subject to review by the Office of Management and Budget (OMB) under Section 3507(d) of the

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<sup>33</sup> We note that NERC recently posted a draft version of PRC-005-6 for balloting, which includes a proposed implementation plan that would make all versions of PRC-005, from version 3 onward, effective on the same day PRC-005-6 becomes effective. *See* Implementation Plan: Project 2007-17.4 PRC-005 FERC Order No. 803 Directive PRC-005-6, available at [http://www.nerc.com/pa/Stand/Project%20201505%20PRC005%20Order%20No%20803%20Directives%20DL/PRC-005-6\\_Implementation\\_Plan\\_clean\\_2015Jul24.pdf](http://www.nerc.com/pa/Stand/Project%20201505%20PRC005%20Order%20No%20803%20Directives%20DL/PRC-005-6_Implementation_Plan_clean_2015Jul24.pdf).

Paperwork Reduction Act of 1995 (PRA).<sup>34</sup> OMB's regulations require approval of certain information collection requirements imposed by agency rules.<sup>35</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 a 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.

29. The Commission solicited comments on the need for and purpose of the information contained in Reliability Standard PRC-005-4, including whether the information will have practical utility, the accuracy of the burden estimates, ways to enhance the quality, utility, and clarity of the information to be collected or retained, and any suggested methods for minimizing respondents' burden, including the use of automated information techniques. The Commission received no comments regarding the need for the information collection or the burden estimates associated with PRC-005-4 as described in the Notice of Proposed Rulemaking.

30. The Final Rule approves Reliability Standard PRC-005-4, which will replace PRC-005-3 (Protection System and Automatic Reclosing Maintenance). The Reliability Standard expands the existing standard to cover sudden pressure relays that meet certain criteria, thereby imposing mandatory minimum maintenance activities and maximum maintenance intervals for the applicable relays. Because the specific requirements were

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<sup>34</sup> 44 U.S.C. 3507(d) (2006).

<sup>35</sup> 5 CFR 1320.11 (2012).

designed to reflect common industry practice, entities are not expected to experience a meaningful change in actual maintenance and documentation practices. However, each applicable entity will have to perform a one-time review of sudden pressure relays that detect rapid changes in gas pressure, oil pressure, or oil flow that are indicative of faults within transformer equipment, and, if it has applicable sudden pressure relay devices, review current maintenance programs to ensure that they meet the requirements of proposed standard PRC-005-4. Accordingly, all additional information collection costs are expected to be limited to the first year of implementation of the revised standard.

31. Reliability Standard PRC-005-4 reduces the evidence retention requirements approved in previously-approved versions of the standard, and now requires entities to maintain documentation of maintenance activities for only one maintenance cycle (a maximum of twelve years) if the maintenance interval is longer than the audit cycle. For maintenance activities where the interval is shorter than the audit cycle, documentation is to be retained for all maintenance activities since the previous audit. While the potential data retention requirement exceeds the three-year period that is routinely allowed for regulations requiring record retention under the OMB regulations implementing the PRA,<sup>36</sup> the maximum evidence retention period has been reduced from 24 years to a maximum of 12 years as a result of the Commission's prior request for comment on the reasonableness of the evidence retention period in earlier versions of the standard, and

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<sup>36</sup> See 5 CFR 1320.5(d)(2)(iv).

appears to reflect the minimum time needed to ensure compliance with maintenance requirements.<sup>37</sup>

32. Public Reporting Burden: Affected entities must perform a one-time review of their existing sudden pressure relay schemes and associated maintenance programs to ensure that the programs contain at a minimum the activities required by Reliability Standard PRC-005-4. If the existing maintenance program does not meet the criteria in Reliability Standard PRC-005-4, the entity will have to make certain adjustments to the program.

33. Our estimate below assumes that the number of unique applicable entities (distribution providers, generator owners and transmission owners, or a combination of those) in the United States is approximately 1,287<sup>38</sup> and the time required to do the one-time review will be approximately eight hours. The estimate further assumes that the one-time review would be performed by an engineer at a rate of \$65.34 per hour.<sup>39</sup>

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<sup>37</sup> See Order No. 803, 150 FERC ¶ 61,039 at PP 37-38.

<sup>38</sup> This figure reflects the generator owners, transmission owners, and distribution providers identified in the NERC Compliance Registry as of February 27, 2015.

<sup>39</sup> The figure is taken from the Bureau of Labor Statistics at [http://www.bls.gov/oes/current/naics2\\_22.htm](http://www.bls.gov/oes/current/naics2_22.htm); Occupation Code: 17-2071.

RM15-9-000 (Mandatory Reliability Standards: Reliability Standard PRC-005-4)						
	Number of Respondents (1)	Annual Number of Responses per Respondent (2)	Total Number of Responses (1)*(2)=(3)	Average Burden (Hours) & Cost Per Response (4)	Total Annual Burden Hours & Total Annual Cost (3)*(4)=(5)	Cost per Respondent (\$) (5)÷(1)
One-time review of sudden pressure relay maintenance program and adjustment	1,287	1	1,287	8 \$523	10,296 \$673,101	\$523

Title: FERC-725P1,<sup>40</sup> Mandatory Reliability Standards: Reliability Standard PRC-005-4.

Action: Proposed Collection of Information.

OMB Control No: To be determined.

Respondents: Business or other for-profit and not-for-profit institutions.

Frequency of Responses: One time.

Necessity of the Information: Reliability Standard PRC-005-4 is 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. Specifically, Reliability Standard PRC-005-4 helps to ensure that transmission and generation protection systems affecting the reliability of the Bulk-Power System are maintained and tested.

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<sup>40</sup> The FERC-725P1 is a temporary collection established so the Commission can submit this proposed rulemaking to OMB on time. However, the burden contained in this rulemaking should be contained in FERC-725G (OMB Control No. 1902-0252). Commission staff plans eventually to move this burden to FERC-725G.

34. Internal review: The Commission has reviewed Reliability Standard PRC-005-4 and made a determination that approval of this standard 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 estimates associated with the information requirements.

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

36. Comments concerning the information collections approved in this Final Rule and the associated burden estimates should be sent to the Commission in this docket and may also be sent to the Office of Management and Budget, Office of Information and Regulatory Affairs [Attention: Desk Officer for the Federal Energy Regulatory Commission]. For security reasons, comments should be sent by e-mail to OMB at the following e-mail address: oira\_submission@omb.eop.gov. Please reference the docket number of this Final Rule (Docket No. RM15-9-000) or the collection number (FERC-725P1) in your submission.

#### IV. Regulatory Flexibility Act Analysis

37. The Regulatory Flexibility Act of 1980 (RFA)<sup>41</sup> generally requires a description and analysis of final rules that will have significant economic impact on a substantial number of small entities. Reliability Standard PRC-005-4 is expected to impose an additional, one-time burden on 1,287 entities (distribution providers, generator owners, and transmission owners, or a combination thereof). Comparison of the applicable entities with FERC's small business data indicates that approximately 789 of the 1,287 entities are small entities, or 61.31 percent of the respondents affected by this Reliability Standard.<sup>42</sup>

38. On average, each small entity affected may have a one-time cost of \$523, representing a one-time review of the program for each entity, consisting of 8 man-hours at \$65.34/hour, as explained above in the information collection statement. We do not consider this cost to be a significant economic impact for small entities. Accordingly, the Commission certifies that Reliability Standard PRC-005-4 will not have a significant

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<sup>41</sup> 5 U.S.C. 601-12. The number of small distribution providers required to comply with PRC-005-4 may decrease significantly. In March 2015, the Commission approved revisions to the NERC Rules of Procedure to implement NERC's "risk based registration" program, which raised the registry threshold for distribution providers from a 25 MW to 75 MW peak load. *North American Electric Reliability Corp.*, 150 FERC ¶ 61,213 (2015).

<sup>42</sup> The Small Business Administration sets the threshold for what constitutes a small business. Public utilities may fall under one of several different categories, each with a size threshold based on the company's number of employees, including affiliates, the parent company, and subsidiaries. For the analysis in this Final Rule, we are using a 500 employee threshold for each affected entity. Each entity is classified as Electric Bulk Power Transmission and Control (NAICS code 221121).

economic impact on a substantial number of small entities. Accordingly, no regulatory flexibility analysis is required.

## **V. Environmental Analysis**

39. 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>43</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>44</sup> The actions taken herein fall within this categorical exclusion in the Commission's regulations.

## **VI. Document Availability**

40. 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.

41. 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

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<sup>43</sup> *Regulations Implementing the National Environmental Policy Act of 1969*, Order No. 486, FERC Stats. & Regs. ¶ 30,783 (1987).

<sup>44</sup> 18 CFR 380.4(a)(2)(ii).



Word format for viewing, printing, and/or downloading. To access this document in eLibrary, type the docket number of this document excluding the last three digits in the docket number field.

42. 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 e-mail at [ferconlinesupport@ferc.gov](mailto:ferconlinesupport@ferc.gov), or the public reference room at (202) 502-8371, TTY (202) 502-8659. E-mail the Commission's public reference room at [public.referenceroom@ferc.gov](mailto:public.referenceroom@ferc.gov).

By the Commission.

( S E A L )

Nathaniel J. Davis, Sr.,  
Deputy Secretary.