

151 FERC ¶ 61,039  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

18 CFR Part 40

[Docket No. RM14-13-000; Order No. 808]

Communications Reliability Standards

(Issued April 16, 2015)

AGENCY: Federal Energy Regulatory Commission.

ACTION: Final rule.

SUMMARY: Pursuant to the Federal Power Act, the Commission approves two revised Reliability Standards, COM-001-2 (Communications) and COM-002-4 (Operating Personnel Communications Protocols), developed by the North American Electric Reliability Corporation (NERC), which the Commission has certified as the Electric Reliability Organization responsible for developing and enforcing mandatory Reliability Standards. The two revised Reliability Standards will enhance reliability by, among other things, requiring adoption of predefined communication protocols, annual assessment of those protocols and operating personnel's adherence thereto, training on the protocols, and use of three-part communications. In addition, the Commission directs NERC to develop a modification to Reliability Standard COM-001-2 that addresses internal communications capabilities that could involve the issuance or receipt of Operating Instructions or other communications that could have an impact on reliability.

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

FOR FURTHER INFORMATION CONTACT:

Vincent Le (Technical Information)  
Office of Electric Reliability  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, DC 20426  
(202) 502-6204  
[Vincent.le@ferc.gov](mailto:Vincent.le@ferc.gov)

Michael Gandolfo (Technical Information)  
Office of Electric Reliability  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, DC 20426  
(202) 502-6817  
[Michael.gandolfo@ferc.gov](mailto:Michael.gandolfo@ferc.gov)

Julie Greenisen (Legal Information)  
Office of the General Counsel  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, DC 20426  
(202) 502-6362  
[julie.greenisen@ferc.gov](mailto:julie.greenisen@ferc.gov)

SUPPLEMENTARY INFORMATION:

151 FERC ¶ 61,039  
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.

Communications Reliability Standards

Docket No. RM14-13-000

ORDER NO. 808

FINAL RULE

(Issued April 16, 2015)

1. Pursuant to section 215 of the Federal Power Act (FPA),<sup>1</sup> the Commission approves two Reliability Standards, COM-001-2 (Communications) and COM-002-4 (Operating Personnel Communications Protocols), developed by the North American Electric Reliability Corporation (NERC), which the Commission has certified as the Electric Reliability Organization responsible for developing and enforcing mandatory Reliability Standards. The Commission also approves three new defined terms for addition to the NERC Glossary of Terms Used in Reliability Standards (NERC Glossary), violation risk factors, violation severity levels, and NERC's proposed implementation plan for both revised standards. Further, pursuant to section 215(d)(5) of the FPA, the Commission directs that NERC develop one modification to Reliability

---

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

Standard COM-001-2 that addresses internal communications capabilities to the extent that such communications could involve the issuance or receipt of Operating Instructions or other communications that could have an impact on reliability.

2. Reliability Standard COM-001-2 is intended to establish a clear set of requirements for the communications capabilities that applicable functional entities must have in place and maintain. Reliability Standard COM-002-4 requires applicable entities to develop communication protocols with certain minimum requirements, including use of three-part communication when issuing Operating Instructions.<sup>2</sup> Reliability Standard COM-002-4 also sets out certain communications training requirements for all issuers and recipients of Operating Instructions, and establishes a flexible enforcement approach for failure to use three-part communication during non-emergencies and a “zero-tolerance,” i.e., without exception, enforcement approach for failure to use three-part communication during an emergency.<sup>3</sup>

3. We find that Reliability Standards COM-001-2 and COM-002-4 will enhance reliability over the currently-effective versions of these Communications (COM)

---

<sup>2</sup> NERC proposes to define Operating Instruction as “[a] command by operating personnel responsible for the Real-time operation of the interconnected Bulk Electric System to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System. (A discussion of general information and of potential options or alternatives . . . is not considered an Operating Instruction.)”

<sup>3</sup> See NERC Petition at 3 (“during Emergencies, operating personnel must use the documented communication protocols for three-part communications without exception.”).

standards in several respects. For example, the Reliability Standards as modified expand applicability to include generator operators and distribution providers, eliminate certain ambiguities in the currently-effective standards, and clarify that the use of three-part communication is required for issuance and receipt of all Operating Instructions, with a zero-tolerance approach to enforcement of that requirement during an emergency. However, we are not persuaded that COM-001-2 adequately covers all situations in which Operating Instructions are issued or received and, therefore, direct NERC to develop a modification to that standard that addresses our concern, as further discussed below.

**I. Background**

**A. Regulatory Background**

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

---

<sup>4</sup> 16 U.S.C. at 824o(c) and (d).

independently.<sup>5</sup> In 2006, the Commission certified NERC as the ERO pursuant to FPA section 215.<sup>6</sup>

5. The Commission approved Reliability Standard COM-001-1 in Order No. 693.<sup>7</sup> In addition, the Commission directed NERC to develop modifications to COM-001-1 to: (1) expand the applicability of the standard to include generator operators and distribution providers, (2) identify specific requirements for telecommunications facilities for use in normal and emergency conditions that reflect the roles of the applicable entities, and (3) include adequate flexibility for compliance to allow for the adoption of new technologies and cost-effective solutions.<sup>8</sup> Similarly, the Commission approved Reliability Standard COM-002-2 in Order No. 693. In addition, the Commission directed NERC to develop modifications to (1) include distribution providers as applicable entities, and (2) establish tightened communications protocols, especially for communications during alerts and emergencies.<sup>9</sup>

---

<sup>5</sup> *See id.* at 824o(e).

<sup>6</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*, 564 F.3d 1342 (D.C. Cir. 2009).

<sup>7</sup> *See Mandatory Reliability Standards for the Bulk-Power System*, Order No. 693, FERC Stats. & Regs. ¶ 31,242 at P 508, *order on reh'g*, Order No. 693-A, 120 FERC ¶ 61,053 (2007); *see also North American Electric Reliability Corp.*, Docket No. RD09-2-000 (2009) (delegated letter order accepting Reliability Standard COM-001-1.1).

<sup>8</sup> Order No. 693, FERC Stats. & Regs. ¶ 31,242 at P 508.

<sup>9</sup> *Id.* PP 531-535, 540.

6. NERC initiated Project 2006-06 to address the Order No. 693 directives related to Reliability Standards COM-001 and COM-002, resulting in two proposed Reliability Standards, COM-001-2 and COM-002-3. NERC also initiated Project 2007-02 to develop a new Reliability Standard (COM-003) that would require real-time system operators to use standardized communication protocols during normal and emergency operations, in order to improve situational awareness and shorten response time. The two projects ultimately merged when drafts of Reliability Standard COM-002-3 and COM-003-1 were combined into a single proposed Reliability Standard, COM-002-4.

**B. NERC Petition**

7. On May 14, 2014, NERC filed a petition seeking approval of two revised communication standards, COM-001-2 (Communications) and COM-002-4 (Operating Personnel Communications Protocols).<sup>10</sup> Proposed Reliability Standard COM-001-2 establishes a set of requirements for the communications capabilities that various functional entities must maintain to enable communications with other identified functional entities. Proposed Reliability Standard COM-002-4 requires applicable entities to develop documented communications protocols. NERC stated in its petition that the proposed standards are intended to address all relevant Commission directives

---

<sup>10</sup> The COM Reliability Standards are not attached to the Final Rule. The complete text of the two Reliability Standards is available on the Commission's eLibrary document retrieval system in Docket No. RM14-13 and is posted on the ERO's web site, *available at:* <http://www.nerc.com>.

from Order No. 693. In addition, NERC stated that the revisions reflected in proposed COM-002-4 are intended to address Recommendation No. 26 from the final report on the August 2003 blackout issued by the U.S.-Canada Power System Outage Task Force (Blackout Report) concerning the need to “[t]ighten communications protocols, especially for communications during alerts and emergencies.”<sup>11</sup>

**Reliability Standard COM-001-2**

8. NERC stated in its petition that Reliability Standard COM-001-2 establishes requirements for Interpersonal Communication capabilities necessary to maintain reliability. NERC explained that proposed Reliability Standard COM-001-2 applies to reliability coordinators, balancing authorities, transmission operators, generator operators, and distribution providers. The proposed Reliability Standard includes eleven requirements and two new defined terms, “Interpersonal Communication” and “Alternative Interpersonal Communication,” that, according to NERC, collectively provide a comprehensive approach to establishing communications capabilities necessary to maintain reliability.<sup>12</sup> NERC stated that the definitions provide clarity that an entity’s

---

<sup>11</sup> NERC Petition at 3 (quoting *U.S.-Canada Power System Outage Task Force, Final Report on the August 14, 2003 Blackout in the United States and Canada: Causes and Recommendations* at 3 (April 2004) (Blackout Report), available at <http://energy.gov/sites/prod/files/oeprod/DocumentsandMedia/BlackoutFinal-Web.pdf>).

<sup>12</sup> *Id.* at 15. NERC defines Interpersonal Communication as “[a]ny medium that allows two or more individuals to interact, consult, or exchange information” and Alternative Interpersonal Communication as “[a]ny Interpersonal Communication that is able to serve as a substitute for, and does not utilize the same infrastructure (medium) as, Interpersonal Communication used for day-to-day operation.” *Id.*

communication capability must be redundant and that each of the capabilities must not utilize the same medium. According to NERC, the definitions improve the language used in the current Reliability Standard by eliminating the use of the more ambiguous phrases “adequate and reliable” and “redundant and diversely routed” that relate to “telecommunications facilities for the exchange of Interconnection and operating information.”<sup>13</sup>

9. The first six requirements of COM-001-2 address the Interpersonal Communication capability and Alternative Interpersonal Communication capability of the reliability coordinator, transmission operator, and balancing authority functions. Requirement R1 requires each reliability coordinator to have Interpersonal Communication capability with all transmission operators and balancing authorities within its reliability coordinator area, and with each adjacent reliability coordinator within the same interconnection. Requirement R2 requires each reliability coordinator to designate Alternative Interpersonal Communication capability with those same identified entities. Requirements R3 and R4 set out the communications capability requirements for a transmission operator. Under Requirement R3, Interpersonal Communication capability is required between the transmission operator’s reliability coordinator, each balancing authority within its transmission operator area, each distribution provider and generator operator within its transmission operator area, and each adjacent transmission

---

<sup>13</sup> *Id.* at 15-16.

operator whether synchronously or asynchronously connected. Under Requirement R4, Alternative Interpersonal Communication capability must be designated between the transmission operator's reliability coordinator, each balancing authority within its transmission operator area, and each adjacent transmission operator. Requirements R5 and R6 set out similar requirements for each balancing authority, again identifying the specific functional entities for which the balancing authority must maintain Interpersonal Communication capability and for which it must designate Alternative Interpersonal Communication capability.

10. Requirements R7 and R8 address the communications capability that distribution providers and generator operators must maintain, with each required to have Interpersonal Communications capability with its balancing authority and its transmission operator.

11. Requirement R9 requires each reliability coordinator, transmission operator, and balancing authority to test its Alternative Interpersonal Communication capability at least once each calendar month, and to initiate action to repair or designate a replacement if the test is unsuccessful. Requirement R10 requires the same entities to notify applicable entities (as identified in R1, R3 and R5) of the detection of an Interpersonal Communication capability failure that lasts 30 minutes or longer. Finally, Requirement R11 requires distribution providers and generator operators to consult with affected balancing authorities and transmission operators when a failure is detected in their Interpersonal Communication capability, and to determine a mutually agreeable action for the restoration of that capability.

12. NERC stated in its petition that proposed Reliability Standard COM-001-2 improves the currently-effective Reliability Standard by: (1) eliminating terms that do not adequately specify the desired actions that applicable entities are expected to take in relation to their telecommunication facilities; (2) clearly identifying the need for applicable entities to be capable of Interpersonal Communication and Alternative Interpersonal Communication; (3) not requiring specific technology or systems to be utilized; and (4) including the distribution provider and generator operator as applicable entities.<sup>14</sup> NERC added that COM-001-2 also addresses relevant directives from Order No. 693 by (1) adding generator operators and distribution providers as applicable entities; (2) identifying specific requirements for telecommunications capabilities for use in all operating conditions that reflect the roles of the applicable entities and their impact on reliability; and (3) including adequate flexibility to permit the adoption of new technologies.

13. NERC proposed to retire currently-effective COM-001-1.1 when proposed Reliability Standard COM-001-2 becomes effective, with the exception of Requirement R4, which addresses communications protocols. NERC requested that Requirement R4 be retired when proposed Reliability Standard COM-002-4 becomes effective.<sup>15</sup>

---

<sup>14</sup> NERC Petition at 18.

<sup>15</sup> *Id.* at 22.

**Reliability Standard COM-002-4**

14. NERC stated in its petition that Reliability Standard COM-002-4 improves communications surrounding the issuance of Operating Instructions by requiring the use of predefined communications protocols to reduce the possibility of miscommunication that could lead to action or inaction harmful to reliability.<sup>16</sup> NERC noted that the proposed standard requires use of the same protocols regardless of operating condition (i.e., Emergency or non-emergency), but requires operating personnel to use the documented communication protocols for three-part communications “without exception” during an Emergency.<sup>17</sup> As NERC explained:

[T]he proposed Reliability Standard employs the phrase “Operating Instruction during an Emergency” in certain requirements (R5, R6, R7) to provide a demarcation for what is subject to a zero-tolerance compliance approach and what is not.<sup>18</sup>

---

<sup>16</sup> *Id.* at 23. NERC stated that COM-002-3 (which was adopted by the NERC Board but not submitted to the Commission for approval) is proposed for retirement in the Implementation Plan because the proposed Reliability Standard has been combined with proposed COM-003-1 to create proposed Reliability Standard COM-002-4. NERC stated that Reliability Standard COM-002-3 has not been submitted to the Commission for approval, therefore, the currently effective version of COM-002 is COM-002-2. *Id.* at 23 n.43. Reliability Standard COM-002-4 combines proposed Reliability Standard COM-002-3 and the former draft COM-003-1 into a single standard that addresses communications protocols for operating personnel in Emergency and non-emergency conditions. *Id.* at 23-24.

<sup>17</sup> *Id.* at 3.

<sup>18</sup> *Id.* at 25.

NERC explained that, for Operating Instructions issued during non-emergency operations, “an entity will be assessed under a compliance approach that focuses on whether an entity meets the initial training Requirement (either R2 or R3) and whether an entity performed the assessment and took corrective actions according to Requirement R4.”<sup>19</sup>

15. Finally, NERC stated that the proposed Reliability Standard includes distribution providers and generator operators as applicable entities, in accordance with the Commission’s directive in Order No. 693, and in recognition of the fact that these types of entities can be recipients of Operating Instructions.

16. Proposed Reliability Standard COM-002-4 includes seven requirements. Requirement R1 requires entities that can both issue and receive Operating Instructions (balancing authorities, reliability coordinators and transmission operators) to have documented communications protocols that include a minimum set of elements, including use of the English language unless otherwise specified, and required use of three-part communications for issuance and receipt of Operating Instructions.<sup>20</sup>

Requirement R2 requires these same entities to conduct initial training on the communications protocols for each of their operating personnel responsible for the real-time operation of the bulk electric system. Requirement R3 requires distribution

---

<sup>19</sup> *Id.* at 26.

<sup>20</sup> *See id.* at 29.

providers and generator operators (who generally only receive but do not issue Operating Instructions) to conduct initial training on three-part communication for each of their operating personnel who can receive an oral two-party, person-to-person Operating Instruction, prior to that individual operator receiving an oral two-party, person-to-person Operating Instruction.

17. Requirement R4 requires each balancing authority, reliability coordinator and transmission operator to assess, at least once every twelve months, its operating personnel's adherence to the documented communication protocols required in Requirement R1, and to provide feedback to its operating personnel on their performance.

18. Requirement R5 requires balancing authorities, reliability coordinators and transmission operators that issue an oral two-party, person-to-person "Operating Instruction during an Emergency" to use three-part communication, and to take an alternative action if a confirmation is not received. Requirement R6 requires all applicable entities (balancing authorities, distribution providers, generator operators, and transmission operators) that receive an oral two-party, person-to-person "Operating Instruction during an Emergency" to use three-part communication, i.e., to repeat the Operating Instruction and receive confirmation from the issuer that the response was correct, or request that the issuer reissue the Operating Instruction. Both Requirement R5 and R6 include the clarification that the requirement does not apply to single-party to multiple-party "burst" Operating Instructions. As noted above, NERC explains that Requirements R5 and R6 require use of three-part communication during an Emergency without exception, because "use of three-part communication is critically important if an

Emergency condition already exists, as further action or inaction could increase the harmful effects to the Bulk Electric System.”<sup>21</sup> NERC further explains, however, that applicable entities are expected to use three-part communications at all times when issuing and receiving Operating Instructions.<sup>22</sup>

19. Finally, Requirement R7 requires that when a balancing authority, reliability coordinator, or transmission operator issues a written or oral single-party to multiple-party “burst” Operating Instruction during an Emergency, they must confirm or verify that at least one receiver received the Operating Instruction.

20. NERC requested that proposed Reliability Standard COM-002-4 become effective on the first day of the first calendar quarter that is twelve months after the date that the standard is approved.

### **C. Notice of Proposed Rulemaking**

21. On September 19, 2014, the Commission issued a Notice of Proposed Rulemaking (NOPR) proposing to approve Reliability Standards COM-001-2 and COM-002-4 pursuant to FPA section 215(d)(2), along with the three new definitions referenced in the proposed standards (Operating Instruction, Interpersonal Communication, and

---

<sup>21</sup> *Id.* at 39.

<sup>22</sup> *Id.* at 25-26.

Alternative Interpersonal Communication), the assigned violation risk factors and violation severity levels, and the proposed implementation plan for each standard.<sup>23</sup>

22. In the NOPR, the Commission explained that the two revised standards addressed outstanding directives from Order No. 693, in that COM-001-2 has been expanded to include distribution providers and generator operators, and COM-002-4 has been expanded to include distribution providers.<sup>24</sup> The Commission also stated that Reliability Standard COM-002-4 would enhance reliability by providing for improved communications through the required development of communication protocols.

23. In the NOPR, the Commission also discussed the following specific matters and asked for further comment: (1) responsibility for use of three-part communication by transmission owners and generator owners that receive Operator Instructions; (2) whether COM-001-2 should be modified to address internal communication capability requirements, or to address testing requirements for distribution providers and generator operators; and (3) clarifications regarding the proposed terms Interpersonal Communication and Alternative Interpersonal Communication.

24. Timely comments on the NOPR were filed by: NERC; the Edison Electric Institute and the Electric Power Supply Association (EEI/EPISA); ISO/RTO Council; the National Rural Electric Cooperative Association (NRECA); International Transmission

---

<sup>23</sup> *Communications Reliability Standards*, Notice of Proposed Rulemaking, 79 FR 58709 (Sept. 30, 2014), 148 FERC ¶ 61,210 (2014) (NOPR).

<sup>24</sup> *Id.* PP 22, 23.

Company (ITC); Idaho Power Company (Idaho Power); and Tri-State G&T. In addition, on March 6, 2015, NERC filed Supplemental Comments.

## II. Discussion

25. Pursuant to section 215(d)(2) of the FPA, we adopt our NOPR proposal and approve Reliability Standards COM-001-2 and COM-002-4, including the associated definitions, violation risk factors, violation severity levels, and implementation plans, as just, reasonable, not unduly discriminatory or preferential and in the public interest. We note that all of the commenters that addressed the overall value of the Reliability Standards supported, or did not oppose, approval of the two revised standards. We determine that COM-001-2 will enhance reliability by expanding the applicability of currently effective COM-001-1.1 to include generator operators and distribution providers as applicable entities under the COM-001 standard, and by expanding the applicability of COM-002-4 to include distribution providers. We further find that COM-002-4 will enhance reliability by requiring all issuers and recipients of Operating Instructions to develop communications protocols that require use of three-part communications, by requiring training on those protocols, and by adopting a zero-tolerance enforcement approach to the use of three-part communications during an Emergency. Moreover, we conclude that requiring issuers of Operating Instructions to perform an annual assessment of their personnel's adherence to the communications protocols will help ensure a high level of compliance with three-part communications at all times.

26. Pursuant to section 215(d)(5) of the FPA, the Commission directs that NERC develop one modification to COM-001-2 to address our concerns regarding applicability to certain internal communications, as discussed below.

27. Below, we discuss the following matters: (A) ensuring use of three-part communications by generator owners and transmission owners; (B) internal communication capability requirements; (C) testing requirements for distribution providers and generator operators; and (D) scope of the terms Interpersonal Communication and Alternative Interpersonal Communication.

**A. Applicability to Generator Owners and Transmission Owners**  
**NOPR**

28. In the NOPR, the Commission raised the concern that generator owners and transmission owners are not “applicable entities” under either COM-001-2 or COM-002-4, although these entities could, under some circumstances, receive and act on Operating Instructions.<sup>25</sup> The Commission sought comment on the obligations of an applicable entity when issuing an Operating Instruction to a transmission owner or generator owner, including information regarding which entity is responsible if the transmission owner or generator owner fails to perform three-part communication properly. In addition, the Commission asked NERC to explain its auditing practices when reviewing operating agreements between transmission operators and transmission owners, and between

---

<sup>25</sup> See *id.* PP 25-27.

generator operators and generation owners, including NERC's approach to reviewing the protocols of any transmission owner or generator owner that acts on an Operating Instruction in order to ensure that three-part communication is used appropriately.

### **Comments**

29. All commenters that address this issue maintain that the two revised COM Reliability Standards appropriately identify the entities that issue and/or receive Operating Instructions, and that the two standards should not be expanded to include transmission owners or generator owners.<sup>26</sup> NERC states that the two COM standards are appropriately tailored to apply to those functional entities that operate the Bulk-Power System as described in the NERC Functional Model and, therefore, apply to transmission operators and generator operators rather than transmission owners and generator owners. However, NERC acknowledges that “there are instances in which Transmission Owners or Generator Owners may receive and act on Operating Instructions within areas operated by RTOs or ISOs.”<sup>27</sup> NERC asserts that, in these instances, the generator owner or transmission owner is “acting on behalf of a registered Transmission Operator or Generator Operator under delegation as a member of the RTO or ISO.”<sup>28</sup> NERC asserts that, if performance of a reliability requirement is not achieved for a delegated task, “the

---

<sup>26</sup> See NERC Comments at 2, 8; EEI/EPISA Comments at 3-4; ISO/RTO Council Comments at 4; ITC Comments at 4-5; Tri-State G&T Comments at 1.

<sup>27</sup> NERC Comments at 8.

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

relevant Transmission Operator or Generator Operator responsible for compliance with the Reliability Standards is and has been held accountable.”<sup>29</sup>

30. NERC provides several examples of the various approaches to assigning compliance responsibility, including a Joint Registration Organization or Coordinated Functional Registration (as used in ERCOT), and assignment of compliance responsibility through operating agreements and manuals (as used in PJM). In both circumstances, NERC and Regional Entity auditors review the relevant documents assigning compliance responsibility “to determine whether there are gaps in performance under the Reliability Standards as a result of the delegation.”<sup>30</sup> In addition, NERC states that “the registered entity for a particular function retains responsibility for providing supporting documentation regarding how a task is delegated,” and “for providing proof of compliance under the Reliability Standards.”<sup>31</sup>

31. EEI/EPSCA maintains that generator owners do not receive and act on Operating Instructions, and therefore should not be included as applicable entities under the proposed standards. EEI/EPSCA further maintains that transmission owners do not typically receive and act on Operating Instructions, except in regions where the transmission owners have arrangements to do so under specific operating contracts, and,

---

<sup>29</sup> *Id.*

<sup>30</sup> *Id.* at 10.

<sup>31</sup> *Id.* at 11.

in those cases, act “sol[ely] at the direction of a responsible regional TOP, having broad area responsibilities.”<sup>32</sup>

32. Like NERC, ISO/RTO Council acknowledges that transmission owners and generator owners may act on Operating Instructions from an ISO/RTO, at least within some ISO/RTO regions, but states that in those cases the ISOs have market rules and operating procedures in place for communicating Operating Instructions to utilities and other market participants within their footprint. ISO/RTO Council also asserts that ISOs and RTOs do not control the registration of transmission owners and generator owners within their footprint, but that the entity and the relevant Regional Entity “make the final determination on their registration.”<sup>33</sup> Finally, ISO/RTO Council suggests that applying the requirements of the proposed COM standards to generator owners and transmission owners “seems to address an administrative concern as opposed to a reliability concern,” given that the “core reliability issue at hand is determining whether the RC, BA or TOP command was followed by the relevant recipient,” and given that ISOs and RTOs have market rules or tariff provisions in place that require strict adherence by utilities and market participants.<sup>34</sup> ISO/RTO Council also asserts that, if an ISO or RTO issues a command to an entity that is not registered as a transmission operator or generator operator, and there is a three-part communication failure resulting in an enforcement

---

<sup>32</sup> EEI/EPSC Comments at 3.

<sup>33</sup> ISO/RTO Council Comments at 3.

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

action, then the NERC Rules of Procedure should be used to hold that entity responsible.<sup>35</sup>

33. ITC asserts that Operating Instructions, as defined by NERC, cannot apply to a generator owner or transmission owner. ITC raises a related question, however, as to whether a transmission operator can issue an Operating Instruction to another transmission operator under the proposed Reliability Standards.<sup>36</sup> ITC seeks confirmation from the Commission that a transmission operator cannot issue such an instruction or directive to another transmission operator, or if no such confirmation is given, ITC asks that the Commission “explain the basis and process under which a Transmission Operator could issue such an Operating Instruction.”<sup>37</sup>

34. Idaho Power asserts that COM-002-4 does not apply to generator owners or transmission owners, without further discussion of whether such entities could ever receive and act on Operating Instructions as defined by NERC. Tri-State G&T agrees that generator owners and transmission owners should not be added as applicable entities, as they rarely, if ever receive an Operating Instruction.

---

<sup>35</sup> *Id.* at 4 (asserting that the NERC Rules of Procedure, Appendix 4C, Section 5.11 allows for an ISO or RTO to include in an enforcement proceeding an entity that causes or contributes to an alleged violation of a Reliability Standard).

<sup>36</sup> ITC Comments at 5.

<sup>37</sup> *Id.* at 6.

### **Commission Determination**

35. While several commenters have acknowledged that transmission owners and generator owners can receive and act on Operating Instructions in certain regions, we are persuaded that the proposed Reliability Standards need not be expanded to include those entities at this time. In doing so, we are persuaded by the explanation of NERC that “[w]hile the Transmission Operator or Generator Operator may delegate tasks under the proposed Reliability Standards to other member entities within [an RTO or ISO], the Transmission Operator and Generator Operator retain responsibility for compliance with the Requirements in the proposed Reliability Standards.”<sup>38</sup> Moreover, we rely on NERC’s explanation that NERC and Regional Entity auditors examine contractual arrangements “to ascertain how tasks are delegated and to determine whether there are gaps in performance . . . as a result of the delegation. Responsibility will always rest with the entity registered with NERC as the Transmission Operator.”<sup>39</sup> Thus, in the PJM example, if a transmission owner with delegated operating responsibilities fails to use three-part communication as required under COM-002-4, the registered entity that has delegated the operating responsibilities will remain responsible for the violation.

---

<sup>38</sup> See also ISO/RTO Council Comments at 3-4; EEI/EPISA Comments at 3-4 (Commission approved Operating Agreements “contractually bind TOs to act in conformance with TOP obligations”).

<sup>39</sup> NERC Comments at 10-11.

36. ITC requests clarification whether or not a transmission operator can issue an Operating Instruction to another transmission operator, pursuant to COM-001-2 and COM-002-4. We find that the issue is beyond the scope of this rulemaking. The two standards at issue in this proceeding relate to requirements for communications capability and communications protocols, and do not address the relative authorities as between functional entities to require another entity to modify its operations in real-time, which is more properly addressed in the TOP and IRO Reliability Standards, including currently effective Reliability Standard TOP-1-1a.<sup>40</sup>

**B. Internal Communication Capability**

**NOPR**

37. In the NOPR, the Commission raised the concern that Reliability Standard COM-001-2 does not appear to carry forward an explicit requirement to maintain adequate internal communications capabilities, unlike the existing COM-001 standard, which states that each reliability coordinator, transmission operator, and balancing authority “shall provide adequate and reliable telecommunication facilities for the exchange of

---

<sup>40</sup> Requirement R1 of TOP-1-1a states that “Each Transmission Operator shall have the responsibility and clear decision-making authority to take whatever actions are needed to ensure the reliability of its area and shall exercise specific authority to alleviate operating emergencies.” The obligation of a functional entity to respond to an Operating Instruction is also expected to be more explicitly addressed in other TOP and IRO standards under development or awaiting Commission approval, including proposed Reliability Standard IRO-001-4, which requires transmission operators, balancing authorities, generator operators, and distribution providers to comply with their Reliability Coordinator’s Operating Instructions except under certain described circumstances.

Interconnection and operating information . . . internally.”<sup>41</sup> The Commission stated that maintaining adequate internal communications could be critical to reliability, pointing to specific recommendations in the 2003 Blackout Report. The Commission proposed to direct NERC to develop modifications to COM-001-2, or to develop a separate standard, “that ensures that entities maintain adequate internal communications capability, at least to the extent that such communications could involve the issuance or receipt of Operating Instructions or other communications that could have an impact on reliability.”<sup>42</sup> Alternatively, the Commission suggested that a requirement for internal communication capability could be considered to be implicit in the proposed requirements for communications capability between functional entities, even if those functional entities reside within the same utility, and sought comment on this suggested interpretation as well as the proposed directive.

### **Comments**

38. NERC and most other commenters assert that Reliability Standard COM-002-4 can and should be read to apply to internal communications between functional entities within the same organization, as the Commission suggested in the NOPR.<sup>43</sup> NERC and NRECA also assert that acceptance of this interpretation should eliminate the need for

---

<sup>41</sup> NOPR, 148 FERC ¶ 61,210 at P 28 (quoting COM-001-1.1, Requirement R1).

<sup>42</sup> *Id.* P 30.

<sup>43</sup> NERC Comments at 13; *see also, e.g.*, NRECA Comments at 1, Idaho Power Comments at 4, and Tri-State Comments at 1.

further modification to COM-002-4.<sup>44</sup> ITC comments that COM-001-2 should apply to internal communications between different functional entities within the same organization but only “when those communications are performed by means other than in direct, face-to-face situations.”<sup>45</sup> ITC continues, stating that “[f]or entities performing multiple functions that are located in close proximity such that direct, face-to-face communication is available, ITC does not see a reliability need for a requirement for Alternative Interpersonal Communication, and believes the Standards should be interpreted as not requiring AIC in these situations.”<sup>46</sup> ITC also advocates that, if the Commission does not find that COM-001-2 as submitted includes these kinds of internal communications, the standard ought to be modified to do so.

39. EEI/EPISA acknowledges that the approach taken in COM-001-2 is different than the currently-effective COM standard with respect to internal communications, but maintains that this change is consistent with results-based standards. EEI/EPISA maintains that “a result-based standard should not need to specifically cite facility requirements or the specific internal communication obligations,” and maintains that COM-001-2 properly specifies communications capability “at the Functional Entity level.”<sup>47</sup>

---

<sup>44</sup> NERC Comments at 13; NRECA Comments at 1-2.

<sup>45</sup> ITC Comments at 7.

<sup>46</sup> *Id.*

<sup>47</sup> *Id.* at 4-5.

### **Commission Determination**

40. We agree with NERC and other commenters that Reliability Standard COM-001-2 applies to communications between functional entities within a single organization. For example, COM-001-2, Requirement R3, provides that “each Transmission Operator shall have Interpersonal Communication capability” with the reliability coordinator, and each balancing authority, distribution provider, and generator operator “within its Transmission Operator Area.” We agree with NERC, ITC and other commenters that a reasonable understanding of Requirement R3 is that the transmission operator must have Interpersonal Communication capability with a balancing authority, distribution provider and/or generator operator within the same organization. Moreover, we agree with ITC that the COM-001-2 requirements concerning Alternative Interpersonal Communication only apply when those communications are performed by means other than direct, face-to-face situations.

41. However, the application of COM-001-2 to different functional entities within the same organization, as discussed above, does not fully address our concern set forth in the NOPR regarding internal communications.<sup>48</sup> In particular, the NOPR explained that Requirement R1.1 of currently-effective COM-001-1.1 provides that each reliability coordinator, transmission operator, and balancing authority “shall provide adequate and reliable telecommunication facilities for the exchange of Interconnection and operating

---

<sup>48</sup> See NOPR, 148 FERC ¶ 61,210 at PP 28-31.

information . . . internally.” This currently-effective Requirement applies more broadly to internal communications, including internal communications *within* the same functional entity. Thus, unlike the currently-effective Reliability Standard, COM-001-2 does not address the adequacy of internal telecommunications (or other internal communication systems) that may have an adverse effect on reliability, even within a single functional entity, including: (1) communications between geographically separate control centers within the same functional entity; and (2) communications between a control center and field personnel. These scenarios present a gap in reliability of the Bulk-Power System that NERC should address. Accordingly, pursuant to section 215(d)(5) of the FPA, we direct NERC to develop modifications to COM-001-2, or to develop a new standard, to address our concerns regarding ensuring the adequacy of internal communications capability whenever internal communications could directly affect the reliable operation of the Bulk-Power System.

**C. Testing Requirements for Distribution Providers and Generator Operators**

**NOPR**

42. In the NOPR, the Commission expressed concern that Reliability Standard COM-001-2 did not include a requirement that distribution providers and generator operators test or actively monitor their telecommunications systems, but were merely required to consult with each affected entity to determine a mutually agreeable action for restoration

whenever a failure is detected.<sup>49</sup> The Commission asked for comment on “why generator operators and distribution providers should not have some form of requirement to test or actively monitor vital primary and emergency telecommunication facilities.”<sup>50</sup>

### Comments

43. NERC and the other commenters on this issue maintain that there is no need for a testing requirement for generator operators and distribution providers comparable to that required for reliability coordinators, balancing authorities and transmission operators, because generator operators and distribution providers are required to maintain only primary Interpersonal Communication capability, which is tested through routine use.<sup>51</sup> NERC further explains that its approach is consistent with the Commission’s statement in Order No. 693 that “[w]e expect the telecommunication requirements for all applicable entities will vary according to their roles and that these requirements will be developed under the Reliability Standards development process.”<sup>52</sup> NERC also explains that the standard drafting team found that the obligation to detect and address failures in a

---

<sup>49</sup> NOPR, 148 FERC ¶ 61,210 at P 31 (citing to COM-001-2, Requirement R11).

<sup>50</sup> *Id.*, (citing *System Restoration Reliability Standards*, Order No. 749, 134 FERC ¶ 61,215, at P 28 (2011)).

<sup>51</sup> *See, e.g.*, NERC Comments at 14 (“routine use is sufficient to demonstrate functionality of this . . . primary capability”); EEI/EPSC Comments at 5-6 (“a system in regular use would gain little through routine testing”); and ISO/RTO Council Comments at 6-7 (“capability will be ‘tested’ through regular use”).

<sup>52</sup> NERC Comments at 14-15 (quoting Order No. 693, FERC Stats. & Regs. ¶ 31,242 at P 487).

primary communication system, as set out in Requirement R11 of COM-001-2, is sufficient, given “the limited impact a failure might have on Distribution Providers and Generator Operators overall.”<sup>53</sup>

### **Commission Determination**

44. We are persuaded by the comments of NERC and others that additional testing requirements for distribution providers and generator operators are not necessary at this time. NERC and other commenters assert that the primary Interpersonal Communication systems used by a distribution provider or generator operator will effectively be tested through routine use, and that any potential failures in a given generator operator or distribution provider’s external communication system will not have a substantial impact on the Bulk-Power System. In light of this explanation, as well as our recognition in Order No. 693 that telecommunication requirements for applicable entities will vary according to their roles, we decline to require any additional testing requirements for distribution providers and generator operators at this time.

### **D. Definition of Interpersonal Communication and Alternative Interpersonal Communication**

#### **NOPR**

45. In the NOPR, the Commission sought clarification on the intended scope of the newly defined terms Interpersonal Communication and Alternative Interpersonal

---

<sup>53</sup> NERC Comments at 14.

Communication.<sup>54</sup> The Commission noted that NERC had explained the introduction of these terms as a means of eliminating the ambiguity in the terms “adequate and reliable” and “redundant and diversely routed” as currently used in Requirements R1 and R1.4 of COM-001-1.1.

46. The Commission raised two concerns about the new terms as used in proposed Reliability Standard COM-001-2. First, the Commission noted that the definitions do not state a minimum expectation of communication performance, such as speed and quality.<sup>55</sup> Second, the Commission asked for clarification as to whether Interpersonal Communication includes mediums used directly to exchange or transfer data, which communications appear to be covered under the currently-approved version of COM-001.<sup>56</sup> The Commission, thus, asked for further explanation “regarding acceptable (and

---

<sup>54</sup> NOPR, 148 FERC ¶ 61,210 at P 32. As previously noted, NERC is proposing to define the terms, respectively, as follows:

Interpersonal Communication – Any medium that allows two or more individuals to interact, consult, or exchange information.

Alternative Interpersonal Communication – Any Interpersonal Communication that is able to serve as a substitute for, and does not utilize the same infrastructure (medium) as, Interpersonal Communication used for day-to-day operation.

<sup>55</sup> NOPR, 148 FERC ¶ 61,210 at P 33.

<sup>56</sup> *Id.* As the Commission noted, COM-001-1.1, Requirement R1 addresses “telecommunications facilities for the exchange of Interconnection and operating information.”

unacceptable) performance of communication for both Interpersonal and Alternative Interpersonal Communications.”<sup>57</sup>

### **Comments**

47. With respect to minimum performance standards or specifications for the required communications mediums, none of the commenters believe such specifications are necessary or advisable. NERC maintains that additional specifications are not necessary because the standard as written requires applicable entities to have the working capability needed to maintain reliability.<sup>58</sup> EEI/EPISA agrees that performance specifications are not necessary, and questions whether it is even possible to set such standards given the diversity of systems used.<sup>59</sup> ISO/RTO Council asserts that it would be inadvisable to include technical specifications on the communication mediums required, as it could result in the use of the least expensive medium that could achieve compliance.<sup>60</sup> Idaho Power suggests that the kinds of measurable characteristics that might be appropriate for use to establish minimum performance levels for data exchanges are not available here, because the proposed COM standards do not include data exchange. Tri-State G&T states that the most common expected mediums for communication under the standard

---

<sup>57</sup> *Id.*

<sup>58</sup> NERC Comments at 4, 15-16.

<sup>59</sup> EEI/EPISA Comments at 6-7.

<sup>60</sup> ISO/RTO Council at 5. ISO/RTO Council also notes that its members already have requirements in place with their stakeholders on necessary technical requirements for voice and data exchange.

will likely be e-mail and telephone, and that there is no need to include minimum expectations of speed or performance because “all entities are focused on reliability and would always use the fastest and most reliable means of communication.”<sup>61</sup>

48. With respect to the transfer of data as opposed to communications between persons, all of the commenters to directly address the issue acknowledge that proposed Reliability Standard COM-001-2 is not intended to, and does not, cover data exchanges or transfers. NERC (through its initial and supplemental comments) and ISO/RTO Council maintain that COM-001-2 need not include requirements regarding data transfer capability because such capability is covered under other existing or proposed standards.

49. With respect to existing standards, NERC states that the standard drafting team determined that IRO-010-1a and IRO-014-1 “provided the necessary mandatory Requirements to ensure proper data exchange is occurring.”<sup>62</sup> ISO/RTO Council provides several additional examples of existing Reliability Standards that address data exchange and transfer capability, including BAL-004-2b, R14; IRO-002-2, R1; and TOP-006-2, R1.<sup>63</sup>

50. With respect to standards under development, NERC asserts that four proposed IRO and TOP standards, now approved by the Board, “include specific coverage related

---

<sup>61</sup> Tri-State G&T Comments at 2.

<sup>62</sup> NERC Comments at 16. *See also* ISO/RTO Council Comments at 5-6 (noting that the standard drafting team explained that data communication is covered under Requirement R3 of IRO-010-1).

<sup>63</sup> ISO/RTO Council Comments at 6, n.10.

to data exchange,” and “collectively require data exchange capability” for reliability coordinators, transmission operators, balancing authorities, generator operators, and distribution providers.<sup>64</sup> NERC describes the specific requirements in proposed Reliability Standards TOP-001-3, IRO-010-2, TOP-003-3, and IRO-002-4 that will address data exchange capabilities and/or data exchange specifications for applicable functional entities.

51. EEI/EPISA and Idaho Power also maintain that the term Interpersonal Communication does not cover data exchange, with EEI/EPISA asserting that the phrase requires a system “that enables effective communications between two or more individuals.”<sup>65</sup> Moreover, EEI/EPISA understands the term Alternative Interpersonal Communication to require certain entities to have backup communications that do not utilize the same infrastructure.

52. ITC asserts that the definitions of Interpersonal Communication and Alternative Interpersonal Communication “could ostensibly be interpreted to extend the Standard beyond verbal and written communications and Operating Instructions to include the transmission of electronic data between control systems that are monitored/used by

---

<sup>64</sup> NERC Supp. Comments at 3. NERC identified these same four standards in its Initial Comments, but provides a more detailed discussion of the proposed standards and their status in its Supplemental Comments.

<sup>65</sup> EEI/EPISA at 7. Similarly, Idaho Power states that the term was intended to include voice and electronic messaging between people, and exclude data exchanges, such as SCADA and metering data. Idaho Power Comments at 4-5.

system operators.”<sup>66</sup> ITC warns that “[i]f the Commission does indeed intend the scope of the Standards to extend to such electronic data transmission, the requirement for Alternative Interpersonal Communication may not be achievable” because “[i]t may simply not be possible to maintain a second pathway for the transmission of such data, whether by dint of data format, system compatibility, or the feasibility of installing a redundant system.”<sup>67</sup> ITC accordingly recommends that if an alternative pathway for data transmission is deemed necessary, then the Commission should retain the language from COM-001-1 which requires “redundant and diversely routed systems.”<sup>68</sup>

### **Commission Determination**

53. First, we are satisfied that technical specifications regarding minimum levels of performance for the mediums used to satisfy the requirements of COM-001-2 are not necessary at this time. In doing so, we note NERC’s explanation that the requirements in COM-001-2 are “absolute” and that entities must “have the capability in place to ‘establish Interpersonal Communication capabilities necessary to maintain reliability.’”<sup>69</sup> Moreover, we are persuaded by the commenters that setting performance criteria for the email and telephonic communications at issue here is both impractical and unnecessary.

---

<sup>66</sup> ITC Comments at 8.

<sup>67</sup> *Id.*

<sup>68</sup> *Id.* at 9.

<sup>69</sup> NERC Comments at 15-16.

54. Second, the NOPR raised concerns pertaining to whether COM-001-2 addresses “facilities that directly exchange or transfer data.”<sup>70</sup> In response, NERC states that data exchange capability is being addressed in proposed IRO and TOP standards.<sup>71</sup>

Accordingly, we do not make any determinations regarding data exchange capability in the immediate rulemaking. Rather, based on NERC’s explanation, we will address any issues regarding data exchange capability in the pending rulemaking pertaining to NERC’s proposed TOP and IRO Reliability Standards.

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

55. The 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 Paperwork Reduction Act of 1995.<sup>72</sup> OMB’s regulations require approval of certain information collection requirements imposed by agency rules.<sup>73</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

---

<sup>70</sup> See NOPR, 148 FERC ¶ 61,210 at P 33.

<sup>71</sup> See NERC Supplemental Filing at 2-3. On March 18, 2015, NERC submitted a petition for approval of proposed Transmission Operations and Interconnection Reliability Operations and Coordination Reliability Standards, Docket No. RM15-15-000, pending before the Commission.

<sup>72</sup> 44 U.S.C. 3507(d) (2012).

<sup>73</sup> 5 CFR 1320.11 (2013).

to respond to these collections of information unless the collections of information display a valid OMB control number.

56. The Commission solicited comments on the need for this information, 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. Specifically, the Commission asked that any revised burden or cost estimates submitted by commenters be supported by sufficient detail to understand how the estimates were generated.

57. The Final Rule approves Reliability Standards COM-001-2 and COM-002-4, as well as NERC's proposed retirement of currently-effective Reliability Standards COM-001-1.1 and COM-002-2. Reliability Standard COM-001-2 establishes Interpersonal Communication capability necessary to maintain reliability, while Reliability Standard COM-002-4 improves communications related to Operating Instructions, requiring issuers of Operating Instructions to adopt predefined communications protocols and requiring both issuers and recipients of Operating Instructions to use three-part communications.

Public Reporting Burden: Reliability Standards COM-001-2 and COM-002-4 do not require responsible entities to file information with the Commission. However, the Reliability Standards require applicable entities to develop and maintain certain information, subject to audit. In particular, COM-001-2 requires that transmission operators, balancing authorities, reliability coordinators, distribution providers, and

generator operators must maintain documentation of Interpersonal Communication capability and designation of Alternate Interpersonal Communication, as well as evidence of testing of the Alternate Interpersonal Communication facilities. COM-002-4 requires balancing authorities, distribution providers, reliability coordinators, transmission operators, and generator operators to develop and maintain documented communication protocols, and to be able to provide evidence of training on the protocols and of their annual assessment of the protocols. Additionally, all applicable entities (balancing authorities, reliability coordinators, transmission operators, generator operators, and distribution providers) must be able to provide evidence of three-part communication when issuing or receiving an Operating Instruction during an Emergency.

Many of the record retention or information collection requirements in COM-001-2 and COM-002-4 are translated in some form from the currently-effective Reliability Standards (COM-001-1 and COM-002-2). For these requirements, the Commission estimates a zero net change in burden. Accordingly, our estimate below shows the increase in record-retention or information collection burden, based on the new requirements to:

- (1) develop communications protocols (a one-time burden under COM-002-4, Requirement R1),
- (2) maintain evidence of required training, assessments, and use of three-part communications, as applicable (an on-going burden under COM-002-4 Requirements R2, R3, R4, R5 and R6); and
- (3) maintain evidence to demonstrate Interpersonal Communication capability (a new, on-going burden for distribution providers and generator operators under COM-001-2 Requirements R7 and R8).

The Commission's estimate of the number of respondents is based on the NERC compliance registry as of August 15, 2014. According to the NERC compliance registry, NERC has registered 179 transmission operators, 107 balancing authorities, 15 reliability coordinators, 475 distribution providers, and 853 generator operators within the United States. However, under NERC's compliance registration program, entities may be registered for multiple functions, so these numbers incorporate some double counting, which has been accounted for in the table below. The Commission estimates the annual reporting burden and cost as follows:

<b>Information Collection Requirement</b>	<b>Number and Type of Respondents (1)</b>	<b>Annual Number of Responses per Respondent (2)</b>	<b>Total Number of Responses (1)*(2)=(3)</b>	<b>Avg. Burden &amp; Cost Per Response<sup>74</sup> (4)</b>	<b>Total Annual Burden Hours &amp; Total Annual Cost<sup>75</sup> (3)*(4)=(5)</b>
-------------------------------------------	-----------------------------------------------	----------------------------------------------------------	--------------------------------------------------	-----------------------------------------------------------------	---------------------------------------------------------------------------------------

---

<sup>74</sup> The estimated hourly costs (salary plus benefits) are based on Bureau of Labor Statistics (BLS) information, as of March 19, 2015, for an electrical engineer (\$65.34/hour for review and documentation) and for an Information and Record Clerk (\$33.42/hour for record retention). These figures have been updated since issuance of the NOPR, and are *available at*: [http://bls.gov/oes/current/naics3\\_221000.htm#17-0000](http://bls.gov/oes/current/naics3_221000.htm#17-0000). The first row of the table (one-time burden) is done by an engineer, and the latter three rows (ongoing burden) are done by a file clerk.

<sup>75</sup> This dollar burden figure in row 3 of this chart was incorrectly stated in the NOPR, which led to an incorrect estimate of the total dollar burden for the industry in row 5. Both estimates as stated in the NOPR were higher than the corrected and updated estimate reflected in this Final Rule.

(One-time) Development of Communication Protocols [COM-002-4 R1]	212 (BA, RC & TOP)	1	212	8 hrs. & \$522.72	1,696 hours & \$110,816.64
(On-going) Maintain evidence of Interpersonal Communication capability [COM-001-2 R7 and R8] <sup>76</sup>	1,217 (DP & GOP)	1	1,217	4 hrs. & \$133.68	4,868 hours & \$162,688.56
(On-going) Maintain evidence of training and assessments [COM-002-4 R2, R4, R5 and R6]	212 (BA, RC & TOP)	1	212	8 hrs. & \$267.36	1,696 hours & \$56,680.32
(On-going) Maintain evidence of training [COM-002-4 R3, and R6]	1,217 (DP & GOP)	1	1,217	8 hrs. & \$267.36	9,736 hours & \$ 325,377.12
TOTAL			2,858		17,996 hours & \$655,562.64

Title: Mandatory Reliability Standards for the Bulk-Power System: COM Reliability Standards.

<sup>76</sup> No change is expected in the record-keeping burden under COM-001-2 for reliability coordinators, balancing authorities, and transmission operators as compared to the currently-effective COM-001 standard.

Action: Proposed FERC-725V

OMB Control No: 1902-0277

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

Frequency of Responses: One-time and ongoing.

Necessity of the Information: The approval of Reliability Standards COM-001-2 and COM-002-4 implements 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 purpose of the Reliability Standards is to establish Interpersonal Communication capability necessary to maintain reliability, and to improve communications for the issuance of Operating Instructions with predefined communications protocols. The proposed Reliability Standards require entities to maintain records subject to review by the Commission and NERC to ensure compliance with the Reliability Standards.

Internal Review: The Commission has reviewed the requirements pertaining to the Reliability Standards for the Bulk-Power System and determined that the requirements are necessary to meet the statutory provisions of the Energy Policy Act of 2005. These requirements conform to the Commission's plan for efficient information collection, communication and management within the energy industry. 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.

58. 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, phone: (202) 502-8663, fax: (202) 273-0873].

59. Comments concerning the information collections approved in this Final Rule and the associated burden estimates should be sent to the Commission in these dockets 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 FERC-725V and the docket numbers of this Notice of Proposed Rulemaking (Docket No. RM14-13-000) in your submission.

#### **IV. Regulatory Flexibility Act Certification**

60. The Regulatory Flexibility Act of 1980 (RFA)<sup>77</sup> generally requires a description and analysis of proposed rules that will have significant economic impact on a substantial number of small entities. Reliability Standard COM-001-2 is expected to impose burdens for the first time on 1,217 entities (i.e., distribution providers and generator operators).<sup>78</sup>

---

<sup>77</sup> 5 U.S.C. 601-612.

<sup>78</sup> The number of small distribution providers required to comply with the COM standards 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).

Reliability Standard COM-002-4 may apply to as many as 1,279 entities.<sup>79</sup> Comparison of the applicable entities with FERC's small business data indicates that approximately 934 of the 1,279 entities are small entities.<sup>80</sup>

61. Reliability Standard COM-002-4 will serve to enhance reliability by, among other things, requiring adoption of predefined communication protocols, annual assessment of those protocols and operating personnel's adherence thereto, training on the protocols, and use of three-part communications. The Commission estimates that each small balancing authority, reliability coordinator, and transmission operator subject to Reliability Standard COM-002-4 will incur one-time compliance costs of about \$523 (i.e. development of communication protocols), plus on-going annual costs of about \$790 (i.e. performing training and maintaining evidence of training and assessments).<sup>81</sup> The Commission estimates that each of the small distribution provider and generator operator entities potentially subject to Reliability Standards COM-001-2 and COM-002-4 will incur on-going annual costs of about \$887 (i.e. performing training and maintaining

---

<sup>79</sup> The applicable entities are balancing authorities, reliability coordinators, transmission operators, generator operators, and distribution providers. After accounting for entities registered for more than one function, the total count is 1,279 entities.

<sup>80</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. The possible categories for the applicable entities have a size threshold ranging from 250 employees to 1,000 employees. We are using the 1000 employee threshold for this analysis.

<sup>81</sup> The ongoing annual costs for both paperwork and training are based on  $(8 \text{ hours} * \$33.42) + (8 * \$65.34) = \$790.16$  or approximately \$790.00.

evidence of interpersonal communication capability and of training).<sup>82</sup> The Commission does not consider the estimated costs per small entity to have a significant economic impact on a substantial number of small entities. Accordingly, the Commission certifies that this Final Rule will not have a significant economic impact on a substantial number of small entities.

## **V. Environmental Analysis**

62. 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>83</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>84</sup> The actions approved herein fall within this categorical exclusion in the Commission's regulations.

## **VI. Document Availability**

63. 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

---

<sup>82</sup> The ongoing annual cost is based on  $(12 * \$33.42) + (8 * \$60.70) = \$886.64$  or approximately \$887.00.

<sup>83</sup> *Regulations Implementing the National Environmental Policy Act of 1969*, Order No. 486, FERC Stats. & Regs. ¶ 30,783 (1987).

<sup>84</sup> 18 CFR 380.4(a)(2)(ii).

(<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.

64. 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.

65. 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).

## **VII. Effective Date and Congressional Notification**

66. This Final Rule is effective **[insert date 60 days from publication in the Federal Register]**.

67. The Commission has determined, with the concurrence of the Administrator of the Office of Information and Regulatory Affairs of OMB, that this rule is not a "major rule" as defined in section 351 of the Small Business Regulatory Enforcement Fairness Act of

1996.<sup>85</sup> The Commission will submit the Final Rule to both houses of Congress and to the General Accountability Office.

68. 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.

By direction of the Commission.

( S E A L )

Nathaniel J. Davis, Sr.,  
Deputy Secretary.

---

<sup>85</sup> See 5 U.S.C. 804(2).