Mandatory Reliability Standards for Interconnection Reliability Operating Limits

(issued March 17, 2011)

AGENCY: Federal Energy Regulatory Commission.

ACTION: Final Rule.

SUMMARY: Under section 215 of the Federal Power Act, the Federal Energy Regulatory Commission (Commission) approves three new Interconnection Reliability Operations and Coordination Reliability Standards and seven revised Reliability Standards related to Emergency Preparedness and Operations, Interconnection Reliability Operations and Coordination, and Transmission Operations. These Reliability Standards were submitted to the Commission for approval 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 Reliability Standards were designed to prevent instability, uncontrolled separation, or cascading outages that adversely impact the reliability of the interconnection by ensuring that the reliability coordinator has the data necessary to assess its reliability coordinator area during the operations horizon and that it takes prompt action to prevent or mitigate instances of exceeding Interconnection Reliability
Operating Limits. The Commission also approves the addition of two new terms to the NERC Glossary of Terms.

In addition, the Commission approves NERC’s proposed revisions to Reliability Standards EOP-001-1, IRO-002-2, IRO-004-2, IRO-005-3, TOP-003-1, TOP-005-2, and TOP-006-2, which remove requirements for the reliability coordinator to monitor and analyze system operating limits other than interconnection reliability operating limits.

EFFECTIVE DATE: This Rule will become effective [60 days after publication in the FEDERAL REGISTER]

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SUPPLEMENTARY INFORMATION:
Mandatory Reliability Standards for Interconnection

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1. Under section 215 of the Federal Power Act (FPA), the Federal Energy Regulatory Commission (Commission) approves three new Interconnection Reliability Operations and Coordination (IRO) Reliability Standards and seven revised Reliability Standards related to Emergency Preparedness and Operations (EOP), IRO, and Transmission Operations (TOP). The proposed Reliability Standards were submitted to the Commission for approval by the North American Electric Reliability Corporation (NERC), which the Commission has certified as the Electric Reliability Organization (ERO) responsible for developing and enforcing mandatory Reliability Standards.

These Reliability Standards were designed to prevent instability, uncontrolled separation,
or cascading outages that adversely impact the reliability of the interconnection by ensuring that the reliability coordinator has the data necessary to assess its reliability coordinator area during the operations horizon and that it takes prompt action to prevent or mitigate instances of exceeding Interconnection Reliability Operating Limits (IROL).³

The Commission also approves the addition of two new terms to the NERC Glossary of Terms (NERC Glossary). In addition, the Commission approves NERC’s proposed revisions to Reliability Standards EOP-001-1, IRO-002-2, IRO-004-2, IRO-005-3, TOP-003-1, TOP-005-2, and TOP-006-2, which remove requirements for the reliability coordinator to monitor and analyze system operating limits (SOL)⁴ other than IROLs.

2. In addition, the Commission asks the ERO to evaluate certain issues through ongoing standards development and working group projects and to develop appropriate revisions as necessary. These issues regard the scope of the reliability coordinator’s responsibility under these and other IRO Reliability Standards. In particular, the Commission identifies, based on the comments received, certain issues regarding the

³ NERC defines IROLs as the value (such as MW, MVar, Amperes, Frequency or Volts) derived from, or a subset of the SOLs, which if exceeded, could expose a widespread area of the bulk electric system to instability, uncontrolled separation, or cascading outages. See NERC Glossary, available at http://www.nerc.com/docs/standards/rs/Glossary_of_Terms_2010April20.pdf.

⁴ NERC defines SOLs as the value (such as MW, MVar, Amperes, Frequency or Volts) that satisfies the most limiting of the prescribed operating criteria for a specific system configuration to ensure operation within acceptable reliability criteria. Id.
delineation of the responsibility of the reliability coordinator to analyze, monitor and communicate to other operating entities the class of SOLs identified as “grid-impactive” SOLs by NERC.

I. **Background**

   A. **Mandatory Reliability Standards**

   3. Section 215 of the FPA requires a Commission-certified ERO to develop mandatory and enforceable Reliability Standards, which are subject to Commission review and approval. Once approved, the Reliability Standards are enforced by the ERO, subject to Commission oversight, or by the Commission independently.

   B. **Order No. 693 Directives**

   4. On March 16, 2007, the Commission issued Order No. 693, approving 83 of the 107 initial Reliability Standards filed by NERC, including the currently-effective IRO Reliability Standards.\(^5\) Under section 215(d)(5) of the FPA, the Commission directed NERC to develop modifications to the IRO Reliability Standards to address certain issues identified by the Commission.

   5. With respect to IRO-001-1, the Commission directed the ERO to develop modifications to eliminate the regional reliability organization as an applicable entity.\(^6\)

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\(^6\) Order No. 693, FERC Stats. & Regs. ¶ 31,242 at P 896.
The Commission also directed the ERO to modify IRO-002-1 to require a minimum set of capabilities that must be made available to the reliability coordinator to ensure that a reliability coordinator has the capabilities it needs to perform its functions.\(^7\) With respect to IRO-003-2, the Commission directed the ERO to develop a modification to create criteria to define the term “critical facilities” in a reliability coordinator’s area and its adjacent systems.\(^8\) The Commission also directed the ERO to modify IRO-004-1 to require the next-day analysis to identify control actions that can be implemented and effective within 30 minutes after a contingency. In addition, the Commission directed the ERO to consider adding Measures and Levels of Non-Compliance to Reliability Standards IRO-004-1 and IRO-005-1 that are commensurate with the magnitude, duration, frequency and causes of the violations and whether these occur during normal or contingency conditions.\(^9\)

6. The Commission also directed the ERO to conduct a survey on IROL practices and actual operating experiences by requiring reliability coordinators to report any violations of IROLs, their causes, the date and time, the durations and magnitudes in

\(^7\) Id. P 908.

\(^8\) Id. P 914.

\(^9\) Id. P 935. NERC has subsequently replaced Levels of Non-Compliance with Violation Severity Levels. See Order on Violation Severity Levels Proposed by the Electric Reliability Organization, 123 FERC ¶ 61,284 (Violation Severity Level Order), order on reh’g, 125 FERC ¶ 61,212 (2008).
which actual operations exceed IROLs to the ERO on a monthly basis for one year beginning two months after the effective date of Order No. 693.\textsuperscript{10} On October 31, 2008, NERC filed the results of its year-long survey with the Commission.\textsuperscript{11} On February 8, 2009, NERC supplemented those results in a second filing.\textsuperscript{12}

C. **NERC Petition**

7. On December 31, 2009, NERC submitted a petition to the Commission (NERC Petition)\textsuperscript{13} seeking approval of proposed Reliability Standards IRO-008-1, IRO-009-1, and IRO-010-1a. Under these Reliability Standards, reliability coordinators must analyze and monitor IROLs within their Wide-Area\textsuperscript{14} to prevent instability, uncontrolled separation, or cascading outages that adversely impact the reliability of the interconnection. These Reliability Standards do not require the reliability coordinator to

\textsuperscript{10} Id. P 951.

\textsuperscript{11} NERC, Compliance Filing, Docket No. RM06-16-006 (filed Oct. 31, 2008).

\textsuperscript{12} NERC, Compliance Filing, Docket No. RM06-16-006 (filed Feb. 8, 2009).

\textsuperscript{13} North American Electric Reliability Corp., Dec. 31, 2009 Petition for Approval of Proposed New and Revised Reliability Standards for Operating Within Interconnection Operating Limits.

\textsuperscript{14} The term “Wide-Area” is defined in the NERC Glossary, approved by the Commission. As defined, Wide-Area includes not only the reliability coordinators’ area, but also critical flow and status information from adjacent reliability coordinator areas as determined by detailed system studies to allow the calculation of IROLs. See NERC Glossary available at http://www.nerc.com/docs/standards/rs/Glossary_of_Terms_2010April20.pdf.
analyze and monitor SOLs other than IROLs or to take preventive action to avoid or mitigate SOL violations within their reliability coordinator area. In developing the proposed IRO Reliability Standards, NERC determined that it was necessary to retire or modify certain requirements from several existing Reliability Standards. Therefore, NERC proposed revisions to Reliability Standards EOP-001-1, IRO-002-2, IRO-004-2, IRO-005-3, TOP-003-1, TOP-005-2, and TOP-006-2, which remove requirements for the reliability coordinator to monitor and analyze SOLs other than IROLs. NERC also requests approval of new definitions “Operational Planning Analysis” and “Real-time Assessment.”

8. These IRO Reliability Standards together with the proposed revisions to existing Reliability Standards divide responsibility for SOLs and IROLs between reliability

\[\text{\footnotesize 15 Concurrent with its Petition in this Docket, NERC filed a petition in Docket No. RM10-16-000 seeking approval of certain Emergency Preparedness and Operations Reliability Standards. NERC, Petition for Approval of Three Emergency Preparedness and Operations Reliability Standards, Docket No. RM10-16-000 (filed Dec. 31, 2009). As part of its Petition in RM10-16-000, NERC proposed to retire Requirement R3.4 of EOP-001-0. Each petition proposes unique changes to EOP-001-0 reflecting the distinct issues addressed by the respective Reliability Standards drafting teams. In this Final Rule, the Commission is addressing Version 2 of EOP-001 contained in Exhibit B of the NERC Petition which reflects both the IRO and the EOP proposed changes.} \]
coordinators and transmission operators according to the Functional Model.\textsuperscript{16} In its Petition, NERC explains that having two entities with the same primary responsibility is not supported by the Functional Model.\textsuperscript{17} However, NERC notes that these IRO Reliability Standards should not imply that the reliability coordinator will not look at its future operations with respect to specific SOLs.\textsuperscript{18} NERC states that the reliability coordinator must look at its future operations with respect to specific SOLs to ensure that their transmission operators are taking actions at appropriate times, but the primary responsibility for SOLs rests with the transmission operators.

9. NERC explains that, under the new IRO Reliability Standards, the reliability coordinator retains overall visibility of all operations within its Wide-Area view, including some SOLs, although the transmission operator is primarily responsible for actions related to SOLs.\textsuperscript{19} NERC states that the IRO Reliability Standards were developed in support of the authority and assignment of tasks in the Functional Model.\textsuperscript{20}


\textsuperscript{17} In its comments, NERC cites specific tasks outlined in the Functional Model for the respective duties of the reliability coordinator and transmission operator with respect to SOLs and IROLs. NERC Comments at 14.

\textsuperscript{18} NERC Petition at 77.

\textsuperscript{19} Id. at 78.

\textsuperscript{20} Id. at 7-9.
NERC explains that under the Functional Model, while reliability coordinators will assign their transmission operators tasks associated with IROLs, the reliability coordinator has ultimate responsibility for these tasks, and the reliability coordinator is sanctioned if these tasks are not performed as required by the Reliability Standards.  

10. NERC further explains that, in a similar fashion, the Functional Model assigns responsibility for SOLs that are not IROLs to the transmission operator. But, NERC states, this too is a shared responsibility. NERC states that, where the Transmission Operator has primary responsibility for developing the SOLs within its transmission operator area, the transmission operator may request the assistance of its reliability coordinator in developing these SOLs. In addition, NERC points out that reliability coordinators are responsible for ensuring that transmission operators develop SOLs for its reliability coordinator area in accordance with a methodology developed by the reliability coordinator. NERC states that the transmission operator must share its SOLs with its reliability coordinator, and the reliability coordinator must share any SOLs it develops with its transmission operator. NERC also states that the reliability coordinator monitors the status of some, but not all, SOLs.

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21 Id. at 8.

22 Id. at 9.

1. **IRO-008-1**

11. Reliability Standard IRO-008-1 has the stated purpose of preventing instability, uncontrolled separation, or cascading outages that adversely impact the reliability of the interconnection by ensuring that the bulk electric system is assessed during the operations horizon. The proposed Reliability Standard applies to reliability coordinators. IRO-008-1 requires the reliability coordinator to use analyses and assessments as methods of achieving the stated goal. The Reliability Standard requires analysis of the reliability coordinator’s Wide-Area ahead of time and during real-time. It also requires communication with the entities that need to take specific operational actions based on the analyses and assessments.

12. Reliability Standard IRO-008-1 contains three requirements. Requirement R1 requires each reliability coordinator to perform an Operational Planning Analysis to assess whether the planned operations for the next day within its Wide-Area will exceed any of its IROLs during anticipated normal and contingency event conditions. Requirement R2 requires the reliability coordinator to perform a Real-Time Assessment at least once every 30 minutes to determine if its Wide Area is exceeding any IROLs or is expected to exceed any IROLs. Requirement R3 requires a reliability coordinator to share the results of an Operational Planning Analysis or Real-Time Assessment that indicates the need for specific operational actions to prevent or mitigate an instance of exceeding an IROL with those entities that are expected to take those actions.
13. NERC also requests approval of two new terms that appear in IRO-008-1: “Operational Planning Analysis” and “Real-time Assessment.” Operational Planning Analysis is defined as:

   An analysis of the expected system conditions for the next day’s operation. (That analysis may be performed either a day ahead or as much as 12 months ahead.) Expected system conditions include things such as load forecast(s), generation output levels, and known system constraints (transmission facility outages, generator outages, equipment limitations, etc.).

   NERC states that the definition was designed to provide greater specificity regarding the day-ahead study.

14. The proposed term “Real-time Assessment” is defined as “[a]n examination of existing and expected system conditions, conducted by collecting and reviewing immediately available data.” NERC states that the purpose of the new term is to assure that the reliability coordinator is required to conduct a real-time assessment, including situations in which the reliability coordinator is operating without its primary analysis facilities and has implemented the work-around requirements of IRO-002-2, Requirement R8.
2. **IRO-009-1**

15. As proposed, Reliability Standard, IRO-009-1 is designed to prevent instability, uncontrolled separation, or cascading outages that adversely impact the reliability of the interconnection by “ensuring prompt action to prevent or mitigate instances of exceeding [IROLs].” Proposed Reliability Standard IRO-009-1 applies only to reliability coordinators.

3. **IRO-010-1a**

16. NERC proposes the addition of a new Reliability Standard, IRO-010-1a\(^{24}\) to the current suite of IRO Reliability Standards. IRO-010-1a is designed to prevent instability, uncontrolled separation, or cascading outages that adversely impact the reliability of the interconnection by mandating that the reliability coordinator have the data it needs to monitor and assess the operation of its reliability coordinator area.

17. The requirements in the Reliability Standard specify a formal request process for the reliability coordinator to explicitly identify the data and information it needs for reliability; and require the entities with the data to provide it as requested. The Reliability Standard applies to the reliability coordinator and to the other functional

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\(^{24}\) Because the interpretation for IRO-010-1 was completed before the filing of IRO-010-1, NERC requests Commission approval of IRO-010-1a, which includes the standard as interpreted.
entities that must supply data to the reliability coordinator.25 This includes entities that have been identified as owners, users, or operators of the Bulk-Power System.

D. Notice of Proposed Rulemaking

18. On November 18, 2010, the Commission issued a Notice of Proposed Rulemaking (NOPR) proposing to approve Reliability Standards IRO-008-1, IRO-009-1, and IRO-010-1a; revised Reliability Standards EOP-001-1, IRO-002-2, IRO-004-2, IRO-005-3, TOP-003-1, TOP-005-2, and TOP-006-2; and the two new NERC Glossary terms.

19. In the NOPR, the Commission agreed with NERC that it is appropriate to develop requirements for Reliability Standards that offer a clear division of responsibilities among reliability coordinators and transmission operators. In addition, the Commission sought ERO and public comment to ensure that the proposed Reliability Standards will not create a reliability gap by the inappropriate division of responsibilities for analyzing, monitoring and resolving SOLs and IROLs between transmission operators and reliability coordinators respectively.


25 The requirements in the standard are specifically applicable to the following functional entities: (1) reliability coordinator[s]; (2) balancing authority; (3) generator owner; (4) generator operator; (5) interchange authority; (6) load-serving entity; (7) transmission operator; and (8) transmission owner.
submitted joint comments (Joint Commenters). The Edison Electric Institute (EEI), Midwest Independent Transmission System Operator, Inc. (Midwest ISO), and Western Electricity Coordinating Council (WECC) also submitted timely comments. American Electric Power Service Corp. (AEP) filed comments one day out-of-time.

II. Discussion

21. The Commission hereby adopts its NOPR proposals and approves new Reliability Standards IRO-008-1, IRO-009-1, and IRO-010-1a; revised Reliability Standards EOP-001-1, IRO-002-2, IRO-004-2, IRO-005-3, TOP-003-1, TOP-005-2, and TOP-006-2; and the two new NERC Glossary terms: “Operational Planning Analysis” and “Real-time Assessment.” In approving these Reliability Standards, the Commission concludes that they are just, reasonable, not unduly discriminatory or preferential, and in the public interest. These Reliability Standards serve an important reliability purpose in seeking to prevent instability, uncontrolled separation, or cascading outages that adversely impact the reliability of the interconnection by ensuring that the reliability coordinator has the data necessary to assess its reliability coordinator area during the operations horizon and that it takes prompt action to prevent or mitigate instances of exceeding IROLs. Moreover, they clearly identify the entities to which they apply and contain clear and enforceable requirements. Commenters addressed many of the Commission concerns discussed in the NOPR and in some areas the ERO has indicated that it is continuing to study some issues related to the Commission concerns. The Commission encourages the
ERO, applying its technical expertise, to continue such reviews and make any necessary changes to applicable Reliability Standards.

A. **Division of Responsibilities for SOLs and IROLs**

22. In the NOPR, the Commission sought comment on a number of issues related to NERC’s division of responsibilities for SOLs and IROLs between reliability coordinators and transmission operators. NERC acknowledges in its Petition that the transmission operator must develop and share its SOLs with its reliability coordinator, and the reliability coordinator must share any SOLs it develops with its transmission operator.\(^\text{26}\)

NERC also states that it is currently working on a project to identify a subset of SOLs, other than IROLs, that the transmission operator and reliability coordinator must continuously analyze and monitor.\(^\text{27}\) Therefore, in the NOPR, the Commission sought comment on whether there is a need for reliability coordinators to continue to analyze, in addition to continuing to monitor and coordinate data on, SOLs other than IROLs.\(^\text{28}\) The Commission also sought comment on whether the reliability coordinator should have a documented methodology for identifying the SOL information it needs to fulfill its

\(^{26}\) NERC Petition at 77.


\(^{28}\) Under NERC FAC-011-2, reliability coordinators must have a documented methodology for use in developing SOLs within its reliability coordinator area.
responsibilities for day-ahead analysis, monitoring and real-time assessments, and operational control within the reliability coordinator’s area.

23. The Commission requested information from NERC, reliability coordinators, and other interested entities on the current practices of reliability coordinators and transmission operators with respect to coordinating operational responsibilities for monitoring, day ahead and real-time assessments. The Commission also asked for comments on Bulk-Power System operations related to SOLs and IROLs, on the practical division of responsibilities for preventing and mitigating SOL and IROL violations, and the monitoring capabilities of the reliability coordinator with respect to IROLs as well as other SOLs. Additionally, the Commission asked whether a reliability coordinator can provide an accurate assessment of the Bulk-Power System to its transmission operators on a Wide-Area basis, without evaluating: (1) the operating environment of SOLs that will impact the transmission operators within the reliability coordinator’s areas; (2) SOLs that have the potential to become IROLs; and, (3) the existing IROLs within the reliability coordinator area. The Commission further sought comment as to whether a transmission operator can provide reliable operating assessments or make reliable operating instructions on an SOL that is on the border between two different transmission operator’s areas. The Commission also requested comment on whether the reliability coordinator should have responsibility to monitor certain SOLs other than IROLs, and
whether such a responsibility would place an unreasonable burden on reliability coordinators.

24. The Commission noted that IRO-006-4.1 requires the reliability coordinator to model SOLs and IROLs in the Interchange Distribution Calculator (IDC) to perform the Transmission Loading Relief procedures. We sought comment on how reliability coordinators in the Eastern Interconnection select the SOLs for evaluation in the IDC and the extent of any burden this has caused the reliability coordinator.

25. Finally, the Commission also sought comments from NERC and the public as to how the current Functional Model represents the delineation of assessment and operating responsibilities between the reliability coordinator and transmission operator with respect to SOLs and IROLs.

Comments

1. Continued Analysis of SOLs by Reliability Coordinators

26. NERC states in its comments, that the proposed IRO Reliability Standards appropriately distinguish which entity has primary responsibility for SOLs. Further, Bulk-Power System reliability practices assign responsibilities for analyzing and resolving conditions to the entities closest to it, so that the entity with the closest eye to the condition can quickly assess and resolve it. NERC asserts that it is appropriate for transmission operators to maintain primary responsibility for SOLs, and for reliability coordinators to maintain primary responsibility for IROLs. NERC also explains that,
while SOLs are typically associated with the prevention of facility damage or the accelerated degradation of equipment life, only a subset of SOLs are used to analyze and monitor local area reliability and, therefore, the proposed IRO standards are silent on the reliability coordinator’s responsibility with respect to SOLs.

27. NERC notes in its Petition, that the proposed Reliability Standards “should not imply that the Reliability Coordinator will not look at its future operations with respect to specific SOLs.” NERC also states that “[t]he Reliability Coordinator retains the overall visibility of all operations within its Wide-Area view, including some SOLs, although the transmission operator is primarily responsible for actions related to SOLs.” NERC also notes that the reliability coordinator can monitor the transmission operator’s actions to resolve SOLs and provides, as an example, that the reliability coordinator can study real-time operating trends to help determine whether an asset is trending toward a “grid-impactive SOL.”

28. In its comments, NERC provides the results of a survey conducted in response to the NOPR in which each of the nine reliability coordinators in the Eastern

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29 NERC Petition at 9.

30 NERC Petition at 10.

31 NERC Comments at 7. NERC does not offer a definition of the term “grid-impactive SOL,” but we understand it to mean an SOL that the reliability coordinator monitor so that it does not develop into an IROL.
Interconnection responded that, for SOLs that it monitors, the SOLs were developed in a coordinated fashion with the transmission operators in its area. The survey responses did not suggest that any transmission operator withheld important SOL information from reliability coordinators, nor did any reliability coordinator indicate that transmission operators were not willing to work with the reliability coordinators in monitoring SOLs for Bulk-Power System reliability. NERC contends that this survey demonstrates that current operating practices are effective to ensure that reliability coordinators are able to obtain sufficient information from transmission operators in order to analyze and monitor certain SOLs other than IROLs.

29. NERC also notes that, since the completion of the proposed IRO standards, the industry has been working to improve the clarity of Reliability Standard requirements regarding the transmission operator’s primary responsibility for SOLs through the Real-time Operations Standard Drafting Team (Project 2007-03). For example, NERC explains that the Standard Drafting Team has proposed to add a requirement to TOP-001-2 that would require each transmission operator to inform its reliability coordinator of all SOLs which, while not IROLs, have been identified by the transmission operator as supporting its local area reliability based on its assessment of its Operational Planning Analysis. NERC states that, by using tools that properly model Wide-Area conditions, the reliability coordinators are able to identify and help resolve lower-level issues that may not explicitly be included in the reliability coordinator modeling capabilities. EEI
supports NERC’s comments to the NOPR and believes that the Commission should encourage the NERC reliability coordinators working group to engage these issues with NERC stakeholders, especially the NERC Planning and Operating Committees.

30. The Joint Commenters support the proposed primary division of responsibilities for SOLs and IROLs between reliability coordinators and transmission operators. They contend, though, that the proposed division should not be interpreted as implying that a reliability coordinator should not monitor any SOLs. The Joint Commenters further contend that it was not intended that the proposed Reliability Standards would remove all responsibility for SOLs from the reliability coordinator, but to establish a clear distinction of responsibilities and authority. The Joint Commenters state that they would not support a formal requirement that would assign primary responsibility for analyzing and resolving SOLs to a reliability coordinator since the primary responsibility is correctly assigned to the transmission operator that is most familiar with their respective operating limits and local Bulk-Power System characteristics.

31. Midwest ISO states that it is necessary for reliability coordinators to analyze, monitor, and coordinate some SOLs other than IROLs and that the Reliability Standards should reflect this best practice. Midwest ISO believes the Commission should encourage the efforts currently underway at NERC towards the development of Reliability Standards addressing the role of reliability coordinators with regard to
analyzing SOLs, other than IROLs, that are important to the reliable operation of the Bulk-Power System.

32. AEP states that it generally supports the proposed Reliability Standards but that it agrees with concerns raised by the Commission that if reliability coordinators are not monitoring other SOLs, there is a potential gap in monitoring for SOLs that have the potential to become IROLs. AEP argues that performing an annual IROL identification would be insufficient because it could miss some opportunities to identify these potentially new IROLs when they could be material. AEP asserts that, at a minimum, reliability coordinators should be required to be involved in SOLs that could border two different transmission operators’ areas to ensure the activities are appropriately coordinated. AEP states that reliability coordinators and transmission operators should develop this subset of SOLs through joint analysis, or agreement. AEP requests that the Commission direct NERC to develop a modification to proposed Reliability Standards EOP-001-1, IRO-002-2, IRO-004-2, IRO-005-3, TOP-003-1, TOP-005-2, and TOP-006-2, to require reliability coordinators to work together with transmission operators in developing and monitoring SOLs that border multiple transmission operators’ areas.

2. **Documented Methodology to Identify System Operating Limit Information**

33. NERC asserts that, because proposed Reliability Standard IRO-008-1 requires reliability coordinators to use tools to model transmission and generation assets based on
ratings provided by asset owners, it is unnecessary to impose an additional requirement that the reliability coordinator have a documented methodology for identifying the SOL information it needs because the systems and controls in place already provide the information needed by the reliability coordinators. The Joint Commenters also believe that such a methodology is unnecessary because, in its defined role, a reliability coordinator already will have access to, and be provided with, the appropriate set of SOLs from the transmission operator.

3. **Current Practices for the Prevention and Mitigation of SOLs and IROLs and the Monitoring Capability of the Reliability Coordinator**

34. NERC states that current practices give the reliability coordinators the ability to provide assessments of the Bulk-Power System to their transmission operators on a Wide-Area basis. NERC believes it is unnecessary to require reliability coordinators to have additional responsibility to monitor SOLs other than IROLs. NERC also notes that there are checks in place that allow the reliability coordinator to monitor SOLs that could turn into IROLs. As an example, NERC points out that IRO-010-1a requires reliability coordinators to conduct Operational Planning Analyses and Real-Time Assessments to identify any IROLs that may be exceeded.

35. NERC states that the electric power industry is predicated on interdependencies. NERC describes the interdependency of transmission operators and reliability coordinators as enabling the reliability coordinator both to control IROLs and flows, and
to be aware of local issues, giving the reliability coordinator the ability to monitor SOLs that may become IROLs within the reliability coordinators areas. NERC further explains that it is working on Project 2007-03 – Real-Time Operations to develop proposed revisions to the TOP standards that require a transmission operator to perform Operational Planning Analyses for its transmission operator area. NERC states that Project 2007-03 is considering revisions to the Reliability Standards that would require observation of SOL limits in adjoining areas.

36. The Joint Commenters state that the proposed IRO Reliability Standards hold reliability coordinators to the proper assessment of information required to provide accurate assessments on a Wide-Area basis. The Joint Commenters also caution that “accurate assessments” do not equate to precise results and the Commission should refrain from mandating that reliability coordinators provide accurate assessments.

4. **Reliability Coordinator’s Procedures for Selecting the SOLs for Evaluation by the Interchange Distribution Calculator**

37. NERC states that reliability coordinators in the Eastern Interconnection select which SOLs to evaluate in the interchange distribution calculator based on information received from the transmission operators indicating that the transmission operator has a facility that is approaching or exceeding its SOL and/or IROL. NERC states that the interchange distribution calculator is a congestion management tool that helps the reliability coordinators deal with transmission constraints. In the survey conducted by NERC of reliability coordinators, one reliability coordinator responded that it publishes
most of its information for use by any entity that may wish to use the information in its reliability assessments. Another reliability coordinator responded that it does not enter SOLs in its area into the interchange distribution calculator, but flowgates are entered into the interchange distribution calculator that may have SOLs or IROLs associated with them. Entering the flowgates allows an entity to determine if external schedules are impacting the flowgate.

5. **Current Functional Model**

38. NERC argues that Version 5 of the NERC Functional Model makes a clear distinction between the duties of the reliability coordinator and transmission operator with respect to SOLs and IROLs in certain task descriptions.\(^{32}\) Similarly, the Joint Commenters state that the latest NERC Functional Model divides reliability components and allocates them to “unique” baskets of tasks which include a fundamental reliability task to do Wide-Area analysis and another task for local analysis.

**Commission Determination**

39. As we stated in the NOPR, we believe that it is appropriate for Reliability Standards requirements to offer a clear division of responsibilities among reliability coordinators and transmission operators. The preponderance of comments to the NOPR supports Commission approval of the Reliability Standards as proposed by NERC,

\(^{32}\) See NERC Functional Model at 31, 37.
including the proposed division of responsibilities. For the reasons described below, we approve the division of responsibility for SOLs and IROLs among transmission operators and reliability coordinators as expressed in the proposed Reliability Standards.

40. NERC and others suggest that these Reliability Standards are not intended to remove all responsibility for the analysis and monitoring SOLs from the reliability coordinator. We agree. These Reliability Standards generally establish a clear distinction of primary responsibility for SOLs and IROLs between the transmission operator and reliability coordinator respectively. As NERC notes, however, the reliability coordinator will continue to have the ability and the responsibility to analyze and monitor SOLs that could turn into IROLs. For example, Requirements R5 and R6 of Reliability Standard IRO-002-2 require the reliability coordinator to monitor the important elements that could be critical to SOLs and IROLs within the reliability coordinator’s area and surrounding reliability coordinator areas. In addition, the proposed IRO Reliability Standards require the reliability coordinator to conduct Operational Planning Analyses and Real-time Assessments of its reliability coordinator area. As NERC explained, the Operational Planning Analyses look at the expected system conditions and potential reliability impacts, with a focus on any impacts that affect the Wide-Area. Although a transmission operator lacks the tools to predict the impact on the surrounding transmission operator areas due to any changes in flow
between inter-area facilities, a reliability coordinator addresses these facilities in its Wide-Area modeling capabilities.

41. As the Commission noted in its NOPR, Reliability Standard IRO-002-2 continues to require each reliability coordinator to monitor SOLs other than IROLs both within its reliability coordinator area and in surrounding reliability coordinator areas. Specifically, under Requirement R4 of IRO-002-2, each reliability coordinator must have detailed real-time monitoring capability of its reliability coordinator area and sufficient monitoring capability of its surrounding reliability coordinator areas to ensure that potential or actual SOL or IROL violations are identified and analyzed. In addition, under Requirement R5, each reliability coordinator must monitor bulk electric system elements such as generators, transmission lines, buses, transformers and breakers that could result in SOL or IROL violations within its reliability coordinator area. Further, as the Commission noted in the NOPR, the reliability coordinator must resolve potential or actual violations of SOL ratings by implementing a local or area-wide transmission loading relief procedure under Reliability Standard IRO-006-4.1.

42. Nevertheless, as noted by NERC and other commenters, there exists a subset of “grid-impactive” SOLs other than IROLs that the Commission believes may warrant closer analysis by the reliability coordinator, in addition to the analysis being conducted by the transmission operator, that focuses on whether these particular “grid-impactive” SOLs could become IROLs. The Commission believes that there can be considerable
benefit derived from some overlap in the responsibility for analyzing and monitoring these “grid-impactive” SOLs since, by definition, every IROL emanated from an SOL. While the proposed Reliability Standards continue to commit the reliability coordinator to the analysis and monitoring of SOLs that may become IROLs, a subset of SOLs, such as these “grid-impactive” SOLs, may deserve a more defined analysis and monitoring role on the part of the reliability coordinator.

43. We acknowledge NERC’s and industry’s continuing efforts to improve the clarity of standard requirements regarding SOLs through the Real-time Operations Standard Drafting Team (Project 2007-03). We believe that the issues concerning the analysis and monitoring of “grid-impactive” SOLs that we note here can be raised and considered in this or other ongoing projects. NERC comments that it is working on Project 2007-03 to develop revisions to the TOP Reliability Standards that require transmission operators to perform operational planning analyses for their local areas. NERC also comments that this project is also considering revisions that would require that SOL limits in adjoining areas be observed. In addition, there are other open projects, such as Project 2006-06 — Reliability Coordination, which is analyzing appropriate reliability coordinator functions and responsibilities. In consideration of these ongoing efforts, we will not direct specific modifications to these Reliability Standards and, rather, accept NERC’s commitment to exercise its technical expertise to study these issues and develop appropriate revisions to applicable Standards as may be necessary.
44. Because the study and monitoring of SOLs and IROLs is an issue at the very core of Bulk-Power System reliability, the Commission agrees with EEI that the NERC Reliability Coordinators Working Group should engage the issues raised in this proceeding with NERC stakeholders, including the NERC Planning and Operating committees, to determine whether a need exists to further refine the delineation of responsibilities between the reliability coordinator and transmission operator for analyzing a class of “grid-impactive” SOLs. Depending on the results of that review, we further encourage NERC, working through its standard development process, to develop appropriate modifications to these and any other related Reliability Standards as necessary.

B. **Operational Analyses and Real-time Assessments**

45. In the NOPR, the Commission sought comment on the prudence of using an Operational Planning Analysis up to twelve months old. The Commission asked whether this timeframe is reasonable or whether the timeframe should be shorter to ensure that the analysis is not outdated. In addition, the Commission sought comment on whether the definition should include measurable criteria to determine whether it is appropriate to use an existing analysis.

46. Further, the Commission requested comments on the meaning of “immediately available data” within the proposed definition of the NERC Glossary definition of Real-Time Assessment. The Commission proposed to direct NERC to modify the definition of
“Real-time Assessment” to specify that the type of data to be relied upon by a reliability coordinator in conducting a Real-time Assessment must be based on adequate analysis capabilities such as state estimation, pre- and post-contingency analysis capabilities (thermal, stability, and voltage), and wide-area overview displays referenced in Requirement R6 of IRO-002-2.

Comments

47. In response to the Commission’s questions regarding the use of an existing Operational Planning Analysis, NERC states that it is unlikely that a reliability coordinator would deliberately rely on an Operational Planning Analysis that does not reflect its expected system conditions. NERC asserts that a reliability coordinator will rely on a twelve-month old operational planning analysis only if system conditions have not changed over that time period. NERC states that the proposed definition of Operational Planning Analysis was developed, based on stakeholder comments, to apply not only to studies conducted for the day ahead, but also for future use in possibly developing requirements for seasonal studies. Thus, NERC explains, the definition includes the option of performing an Operational Planning Analysis up to twelve months ahead. NERC further explains that the definition includes key elements that provide measurable criteria in assessing an entity’s Operational Planning Analysis.

48. In response to the Commission’s questions regarding the proposed definition of Real-time Assessment, NERC and the Joint Commenters state that the industry is
currently working towards consensus on the set of data and capabilities the reliability coordinators need to perform their tasks via the Real-time Reliability Monitoring and Analysis Capabilities Standards Development Team (Project 2009-02). Accordingly, NERC asks the Commission to refrain from directing modifications pending completion of the project.

**Commission Determination**

49. The Commission approves the definitions of “Operational Planning Analysis” and “Real-time Assessment” without modification.

50. The Commission agrees with NERC that the reliability coordinator should rely on a twelve-month old Operational Planning Analysis study only if system conditions have not changed from those originally studied. Consistent with the views of NERC, we expect that reliability coordinators will rely on Operational Planning Analysis that reflect expected system conditions. Accordingly, we accept the definition as proposed.

51. Similarly, we find it is unnecessary to direct NERC to modify the definition of “Real-time Assessment” to specify that the type of data to be relied upon by a reliability coordinator in conducting a Real-time Assessment as proposed in the NOPR. Instead, the Commission will allow industry to complete Project 2009-02, which is working towards consensus on the set of data and capabilities the reliability coordinators need to perform their tasks. We expect NERC to use its technical expertise to develop any modifications
to the definition of Real-time Assessment as may be necessary as a result of this ongoing project.

C. **Reliability Coordinator Actions to Operate Within IROLs**

52. In the NOPR, the Commission sought comment on whether reliability coordinators should have action plans developed and implemented with respect to other SOLs apart from IROLs and if so, which SOLs.

**Comments**

53. NERC states that transmission operators already are responsible for developing action plans for preventing and/or mitigating conditions that cause facility ratings to be exceeded. NERC therefore contends that it would add confusion to the process to require both the reliability coordinator and transmission operator to develop action plans for every SOL.

54. Similarly, WECC does not believe that reliability coordinators should be required to have action plans developed and implemented for SOLs apart from IROLs. WECC argues that requiring the reliability coordinator to second guess rather than defer to the more granular view and detailed view of the transmission operators or balancing authorities undermines and substantially changes the roles of each function without any foreseeable benefit to overall reliability.
55. The Commission agrees with NERC that requiring both the reliability coordinator and transmission operator to develop action plans for every SOL may add confusion to the process. As a result, the Commission approves IRO-009-1, without modification. However, the Reliability Coordinator Working Group should further study this issue and determine if there is a need for reliability coordinators to have action plans developed and implemented with respect to certain grid-impactive SOLs.

D. **IRO-010-1a**

56. In the NOPR, the Commission expressed concern that Reliability Standard IRO-010-1a does not require reliability coordinators to specify a list of minimum data needed for reliable operation of the Bulk-Power System. The Commission, therefore, sought comment on whether a minimum list of data is necessary for the effective sharing of data between neighboring reliability coordinators and, if so, what data should be included. The Commission also sought comment on how compatibility of data between neighboring reliability coordinators can be assured without a list of minimum data in this proposed Reliability Standard.

57. In its discussion of Reliability Standard TOP-003-1, the Commission noted that Requirement R3 of proposed Reliability Standard IRO-010-1a requires entities to provide data and information to the reliability coordinator in accordance with the reliability coordinator’s specifications. The Commission expressed concern that this requirement
does not specify outage coordination data and, therefore, the reliability coordinator may not receive adequate outage coordination data to support the Operational Planning Analysis. Accordingly, the Commission sought comment on whether IRO-010-1a should specify necessary outage coordination data.

**Comments**

58. NERC, the Joint Commenters and Midwest ISO contend that requiring a minimum list of data is not necessary for the effective sharing of data between neighboring reliability coordinators. NERC argues that requiring a list of minimum data not only could impair an entity’s ability to provide the data to the reliability coordinator quickly, but could prevent a reliability coordinator from obtaining needed data quickly. NERC also notes that, during the development of the proposed Reliability Standard, the reliability coordinators that were polled indicated they already were receiving the data they needed without any issues and that the data and information they received varied from one reliability coordinator to another. The Joint Commenters argue that it is unnecessary to develop such a requirement because two interconnected parties can agree upon the appropriate type and level of data it needs from the other, taking into consideration their respective tools and capabilities. Midwest ISO argues that many reliability coordinators already have developed coordination agreements with their neighbors that identify the information necessary for effective data sharing. Midwest ISO contends that a generic list of minimum data could be inadequate to meet regional
needs and could create conflicts with existing coordination agreements. Midwest ISO
further contends that a minimum list could curb creativity and innovation as capabilities
develop new uses for data.

59. NERC and the Joint Commenters also urge the Commission to refrain from
requiring NERC to modify IRO-010-1a to specify the necessary outage coordination data
for all reliability coordinators. They contend that such an approach would not account
for the significantly varying facilities located within the reliability coordinators’ area and
allow for the flexibility to specify the data needed for its respective area.

60. Reiterating comments it raised during the standard development process, WECC
opposes the requirement in R1.2 that the parties reach mutual agreement with respect to
the format of the data and information that the reliability coordinator receives. WECC
argues that, due to the large number of entities that must provide data to the reliability
coordinator, the requirement for mutually agreeable formats may cause the reliability
coordinator to receive data in a multitude of diverse formats. WECC also believes that
requiring mutually agreeable data formats could delay the submission of data by a
submitting entity until agreement can be reached via negotiation or dispute resolution.
WECC argues that more than one party is involved in the formulation of an agreeable
format yet only a reliability coordinator will be found non-compliant when the reliability
coordinator and transmission operators or balancing authorities within the reliability
coordinator area fail to reach an agreement over an acceptable format.
Commission Determination

61. The Commission agrees with commenters that it is unnecessary to direct NERC to develop a specific list of minimum data for the effective sharing of data between neighboring reliability coordinators under Reliability Standard IRO-010-1a. NERC and other entities confirm that reliability coordinators currently obtain necessary data without such a specific list. In addition, as commenters point out, a minimum list may conflict with coordination agreements currently in place which identify the information necessary for effective data sharing. With regard to the concern expressed in the NOPR regarding outage coordination data, we accept that reliability coordinators currently obtain necessary data. If, in the future, reliability coordinators are not able to obtain the necessary outage coordination data, we would ask NERC to consider whether a Reliability Standard should be developed for the reliability coordinators to obtain such data.

62. In response to WECC’s concerns about the submission of data in mutually agreeable formats under Requirement R1.2, we do not believe any modification is necessary. As NERC states in its Petition, by specifying that the format must be mutually agreeable, the standard supports efficiency by precluding the submission of data that is in a format that cannot be used. We agree. NERC states that current data exchange formats are acceptable. Therefore, entities can continue to utilize existing agreements regarding data exchange. While disputes may arise in the future, the Reliability Standard does not
dictate a specific dispute resolution process in the interpretation leaving reliability coordinators and other entities options for informal resolution of a dispute on the format of data and flexibility in choosing a dispute resolution process to reach an agreement.

63. Accordingly, the Commission approves IRO-010-1a as submitted.

E. Violation Severity Levels and Violation Risk Factors

64. In the event of a violation of a Reliability Standard, NERC establishes the initial value range for the corresponding base penalty amount. To do so, NERC assigns a violation risk factor for each requirement of a Reliability Standard that relates to the expected or potential impact of a violation of the requirement on the reliability of the Bulk-Power System. In addition, NERC defines up to four violation severity levels – Lower, Moderate, High, and Severe – as measurements for the degree to which the requirement was violated in a specific circumstance.

65. In Order No. 705, the Commission approved 63 of NERC’s 72 proposed violation risk factors for the version one FAC Reliability Standards and directed NERC to file violation severity level assignments before the version one FAC Reliability Standards become effective.\textsuperscript{33} Subsequently, NERC developed violation severity levels for each requirement of the Commission-approved FAC Reliability Standards, as measurements for the degree to which the requirement was violated in a specific circumstance.

\textsuperscript{33} Facilities Design, Connections and Maintenance Reliability Standards, Order No. 705, 121 FERC ¶ 61,296, at P 137 (2007).
66. On June 19, 2008, the Commission issued its Violation Severity Level Order approving the violation severity level assignments filed by NERC for the 83 Reliability Standards approved in Order No. 693. In that order, the Commission offered four guidelines for evaluating the validity of violation severity levels, and ordered a number of reports and further compliance filing to bring the remainder of NERC’s violation severity levels into conformance with the Commission’s guidelines. The four guidelines are: (1) violation severity level assignments should not have the unintended consequence of lowering the current level of compliance; (2) violation severity level assignments should ensure uniformity and consistency among all approved Reliability Standards in the determination of penalties; (3) violation severity level assignments should be consistent with the corresponding requirement; and (4) violation severity level assignments should be based on a single violation, not a cumulative number of violations. The Commission found that these guidelines will provide a consistent and objective means for assessing, inter alia, the consistency, fairness and potential consequences of violation severity level assignments. The Commission noted that these guidelines were not intended to replace

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34 Violation Severity Level Order, 123 FERC ¶ 61,284.

35 Guideline 2 contains two sub-parts: (a) the single violation severity level assignment category for binary requirements should be consistent and (b) violation severity levels assignments should not contain ambiguous language.

36 Violation Severity Level Order, 123 FERC ¶ 61,284 at P 17.
NERC’s own guidance classifications, but rather, to provide an additional level of analysis to determine the validity of violation severity level assignments.

67. On August 10, 2009, NERC submitted an informational filing setting forth a summary of revised guidelines that NERC intends to use in determining the assignment of violation risk factors and violation severity levels for Reliability Standards. NERC states that these revised guidelines were consistent with Commission’s guidelines. On May 5, 2010, NERC submitted the subject informational filing as a supplement to its pending March 5, 2010 Violation Severity Level Order compliance filing.\(^{37}\)

**NERC Proposal**

68. NERC proposes a complete set of violation severity levels and violation risk factors for proposed new Reliability Standards IRO-008-1, IRO-009-1, and IRO-010-1a. In addition, NERC proposes to apply the existing set of violation severity levels and violation risk factors assigned to the proposed modified requirements.

69. NERC states that it developed the violation severity levels for the new IRO Reliability Standards before the Commission issued its June 19, 2008 Order on violation severity levels.\(^{38}\) NERC also notes that the proposed violation severity levels were

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\(^{37}\) North American Reliability Corporation, Filing of the North American Electric Reliability Corporation regarding the Assignment of Violation Risk Factors and Violation Severity Levels, Docket No. RR08-4-005 (filed May 5, 2010).

\(^{38}\) *Id.*
developed before NERC proposed a new methodology for assigning violation severity levels and violation risk factors.\textsuperscript{39} As a result, NERC states that some of the proposed violation severity levels do not comport with the Commission’s guidelines on violation severity levels and some do not comport with the NERC’s revised guidelines. NERC identified differences and committed to propose revisions to the violation severity levels.

70. Separately from NERC’s Petition here, on March 5, 2010, NERC submitted the first of two VSL compliance filings (Filing 1) to the Commission’s VSL Orders,\textsuperscript{40} which contained the VSL assignments for the original set of 83 Reliability Standards approved by the Commission and NUC-001-2. In addition, NERC requested an extension for filing the remaining VSLs until the 3rd quarter of 2010. On July 6, 2010, the Commission issued a Notice of Extension of Time up to and including December 1, 2010, for Filing 2.\textsuperscript{41} On December 1, 2010, NERC submitted a compliance filing to the Commission in Docket No. RR08-04-006 (Filing 2). In Filing 2, NERC submitted VSLs both for Reliability Standards that are pending at the Commission and Reliability Standards

\textsuperscript{39} NERC, Informational Filing Regarding the Assignment of Violation Risk Factors and Violation Severity Levels, Docket Nos. RM08-11-000, RR07-9-000, and RR07-10-000 (filed Aug. 10, 2009).

\textsuperscript{40} North American Electric Reliability Corp., 123 FERC ¶ 61,284 (2008), order on reh’g, 125 FERC ¶ 61,212 (2008) (VSL Orders).

\textsuperscript{41} North American Electric Reliability Corporation, Docket No. RR08-4-005 (Jul. 6, 2010) (granting an extension of time for submitting this VSL compliance filing up to and including December 1, 2010).
previously approved by the Commission. Filing 2 includes VSLs to supersede those in NERC’s Petition in Docket No. RM10-15-000 for EOP-001-1, IRO-002-2, IRO-004-2, IRO-005-3, IRO-008-1, IRO-009-1, IRO-010-1, IRO-010-1a, TOP-003-1, TOP-005-2, and TOP-006-2.\(^\text{42}\)

**NOPR Proposal**

71. In the NOPR, the Commission proposed to accept the proposed violation risk factors and violation severity levels presented in NERC’s petition. In addition, the Commission proposed to accept NERC’s commitment to review the proposed violation risk factors and violation severity levels to ensure compliance with the Commission’s guidelines. Accordingly, we proposed to direct NERC to submit a compliance filing within six months of the effective date of the final rule in this proceeding that would provide the results of NERC’s review including any modifications necessary to comply with the Commission’s guidelines on violation risk factors and violation severity levels.

**Commission Determination**

72. Because a determination has not yet been made regarding NERC’s “roll-up” approach pending before the Commission in Docket Nos. RR08-4-005 and RR08-4-006, the Commission will defer discussion on the proposed violation risk factors and violation

\(^{42}\) See NERC, Compliance Filing, Docket No. RR08-4-006, at 2 n.6 (filed Dec. 1, 2010).
severity levels assigned to IRO-008-1, IRO-009-1, and IRO-010-1a, until after the Commission issues a final order acting on NERC’s petition in these proceedings.

III. Information Collection Statement

73. The information collection requirements in this Final Rule are identified under the Commission data collection FERC-725A, “Mandatory Reliability Standards for the Bulk-Power System.” The information collection requirements are being submitted to the Office of Management and Budget (OMB) for review under section 3507(d) of the Paperwork Reduction Act of 1995.\(^\text{43}\) OMB’s regulations require OMB to approve certain information collection requirements imposed by agency rule.\(^\text{44}\)

74. The Commission approves new Reliability Standards IRO-008-1, IRO-009-1, and IRO-010-1a; revised Reliability Standards EOP-001-1, IRO-002-2, IRO-004-2, IRO-005-3, TOP-003-1, TOP-005-2, and TOP-006-2; and the two new NERC Glossary terms: “Operational Planning Analysis” and “Real-time Assessment.” The three new Reliability Standards (IRO-008-1, IRO-009-1 and IRO-010-1a, governing reliability coordinator analyses, operational actions and data collection) replace parts of the currently-effective Reliability Standards EOP-001-0, IRO-002-1, IRO-004-1, IRO-005-2, TOP-003-0, TOP-005-1 and TOP-006-1 approved by the Commission in Order No. 693.

\(^{43}\) 44 U.S.C. 3507(d).

\(^{44}\) 5 CFR 1320.11.
75. Thus, this final rule does not impose entirely new burdens on the affected entities. With the exception of the addition of Interchange Authority as an applicable entity in IRO-010-1a, the currently-effective standards EOP-001-0, IRO-002-1, IRO-004-1, IRO-005-2, TOP-003-0, TOP-005-1 and TOP-006-1 require actions by the same applicable group of entities. IRO-010-1a clarifies that balancing authorities, generator owners, generator operators, interchange authorities, load-serving entities, reliability coordinators, transmission operators, and transmission owners shall provide data and information, as specified, to the reliability coordinator(s) with which it has a reliability relationship.  

The requirements of IRO-008-1 and IRO-009-1 provide clarification from existing requirements, dictating the analysis and operational roles of the reliability coordinator.

76. **Public Reporting Burden:** Our estimate below regarding the number of respondents is based on the NERC compliance registry as of September 28, 2010. According to the NERC compliance registry, there are 134 balancing authorities, 824 generator owners, 773 generator operators, 61 interchange authorities, 541 load-serving entities, 26 reliability coordinators, 178 transmission operators, and 332 transmission owners that would be involved in providing information. However, under NERC’s compliance registration program, entities may be registered for multiple functions, and as such there is some duplication of functions regarding the number of registered entities.

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45 Proposed Reliability Standard IRO-010-1a, Requirement R3
that would be required to provide information. Given these parameters, the Commission estimates that the Public Reporting burden for the requirements contained in the final rule is as follows:

<table>
<thead>
<tr>
<th>FERC-725A Data Collection</th>
<th>No. of Respondents (A)</th>
<th>No. of Annual Responses (B)</th>
<th>Hours Per Respondent (C)</th>
<th>Total Annual Hours (A X B X C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability Coordinators distribution of data specification to entities</td>
<td>26</td>
<td>1*</td>
<td>8</td>
<td>208</td>
</tr>
<tr>
<td>Balancing Authorities, Generator Owners, Generator Operators, Interchange Authorities, Load-serving Entities, Reliability Coordinators, Transmission Operators, and Transmission Owners reporting data to their Reliability Coordinator</td>
<td>1501</td>
<td>1*</td>
<td>8</td>
<td>12,008</td>
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<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>12,216</td>
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*As needed
Total Information Collection Costs: The Commission estimated that it would require 12,216 total annual hours for the information collection (reporting and recordkeeping) and that the average annualized costs would be $1,465,920 (12,216 hours @ $120/hour)

Title: FERC-725A, Mandatory Reliability Standards for the Bulk-Power System.

Action: Proposed Revision to FERC-725A.

OMB Control No.: 1902-0244

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

Frequency of Responses: On Occasion.

Necessity of the Information: This Final Rule approves three Reliability Standards that pertain to interconnection reliability operating limits and seven modified Reliability Standards that pertain to emergency preparedness and operations, interconnection reliability operations and coordination, and transmission operations. This Final Rule also approves the addition of two new terms to the NERC Glossary of Terms. The Reliability Standards that pertain to interconnection reliability operating limits will require reliability coordinators and transmission operators to coordinate data on system operating limits and interconnection reliability operating limits. This Final Rule finds the Reliability Standards and related definitions just, reasonable, not unduly discriminatory or preferential, and in the public interest.

Interested persons may obtain information on the reporting requirements by contacting: Federal Energy Regulatory Commission, Attn: Ellen Brown, Office of the Executive Director, 888 First Street, NE Washington, DC 20426, Email:
IV. Environmental Analysis

78. 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. The Commission has categorically excluded certain actions from this requirement as not having a significant effect on the human environment. The actions directed here fall within the categorical exclusion in the Commission’s regulations for rules that are clarifying, corrective or procedural, for information gathering, analysis, and dissemination. Accordingly, neither an environmental impact statement nor environmental assessment is required.


V. Regulatory Flexibility Act

79. The Regulatory Flexibility Act of 1980 (RFA)\(^{48}\) generally requires a description and analysis of final rules that will have significant economic impact on a substantial number of small entities. The requirements of this rule would apply primarily to reliability coordinators, which do not fall within the definition of small entities.\(^{49}\) Moreover, the proposed Reliability Standards reflect a continuation of existing requirements for reliability coordinators and other entities to monitor, analyze, prevent, and mitigate the occurrence of operating limit violations on the Bulk-Power System. The one exception is the proposed new requirements in Reliability Standard IRO-010-1a for interchange authorities, which also do not fall within the definition of small entities. Based on the foregoing, the Commission certifies that this proposed rule will not have a significant impact on a substantial number of small entities. Accordingly, no regulatory flexibility analysis is required.

VI. Document Availability

80. 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


\(^{49}\) The RFA definition of “small entity” refers to the definition provided in the Small Business Act (SBA), which defines a “small business concern” as a business that is independently owned and operated and that is not dominant in its field of operation. See 15 U.S.C. 632. According to the SBA, a small electric utility is defined as one that has a total electric output of less than four million MWh in the preceding year.
contents of this document via the Internet through FERC’s Home Page
(http://www.ferc.gov) and in FERC’s Public Reference Room during normal business
hours (8:30 a.m. to 5:00 p.m. Eastern time) at 888 First Street, NE, Room 2A,
Washington DC 20426.

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

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

VII. Effective Date and Congressional Notification

83. These regulations are effective [insert date 60 days from publication in
FEDERAL REGISTER]. 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.
List of subjects in 18 CFR Part 40

Electric power, Electric utilities, Reporting and recordkeeping requirements.

By the Commission.

( S E A L )

Nathaniel J. Davis, Sr.,
Deputy Secretary.