UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Mandatory Reliability Standards for Interconnection Reliability Operating Limits	**)** **)**	**Docket No. RM10- 15-000**

COMMENTS OF THE NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION IN RESPONSE TO NOTICE OF PROPOSED RULEMAKING

Gerald W. Cauley
President and Chief Executive Officer
David N. Cook
Senior Vice President and General Counsel
North American Electric Reliability Corporation
116-390 Village Boulevard
Princeton, NJ 08540-5721
(609) 452-8060
(609) 452-9550 – facsimile
david.cook@nerc.net

Holly A. Hawkins
Attorney
Willie L. Phillips
Attorney
North American Electric Reliability Corporation
1120 G Street, N.W.
Suite 990
Washington, D.C. 20005-3801
(202) 393-3998
(202) 393-3955 – facsimile
holly.hawkins@nerc.net
willie.phillips@nerc.net

January 24, 2010

TABLE OF CONTENTS

I. INTRODUCTION

The North American Electric Reliability Corporation ("NERC")[1] hereby provides these comments in response to the Federal Energy Regulatory Commission's ("FERC" or "Commission") Notice of Proposed Rulemaking ("NOPR")[2] regarding Mandatory Reliability Standards for Interconnection Reliability Operating Limits. In the NOPR, the Commission proposed to approve 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 ("IRO Standards"). The Commission also proposed to approve the addition of two new terms to the NERC Glossary of Terms. However, the Commission raised some concerns regarding certain aspects of NERC's proposals.

The proposed IRO Reliability Standards[3] are 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 Interconnection Reliability Operating Limits. The Commission's approval of these standards is necessary to support the reliable planning and operation of the bulk power system. By this filing, NERC submits its response to the NOPR.

[1] The Federal Energy Regulatory Commission ("FERC" or "Commission") certified NERC as the electric reliability organization ("ERO") in its order issued on July 20, 2006 in Docket No. RR06-1-000. *North American Electric Reliability Corporation*, "Order Certifying North American Electric Reliability Corporation as the Electric Reliability Organization and Ordering Compliance Filing," 116 FERC ¶ 61,062 (July 20, 2006).

[2] *Mandatory Reliability Standards for Interconnection Reliability Operating Limits, Notice of Proposed Rulemaking*, 133 FERC ¶ 61,151 (November 18, 2010) ("NOPR").

[3] NERC's December 31, 2009 Petition proposed that the following new standards be approved: IRO-008-1, IRO-009-1, and IRO-010-1a. NERC also proposed that the following Reliability Standards be revised: EOP-001-1, IRO-002-2, IRO-004-2, IRO-005-3, TOP-003-1, TOP-005-2, and TOP-006-2.

II. NOTICES AND COMMUNICATIONS

Notices and communications with respect to this filing may be addressed to:

Gerald W. Cauley
President and Chief Executive Officer
David N. Cook*
Senior Vice President and General Counsel
North American Electric Reliability Corporation
116-390 Village Boulevard
Princeton, NJ 08540-5721
(609) 452-8060
(609) 452-9550 – facsimile
david.cook@nerc.net

Holly A. Hawkins*
Attorney
Willie L. Phillips*
Attorney
North American Electric Reliability Corporation
1120 G Street, N.W., Suite 990
Washington, D.C. 20005-3801
(202) 393-3998
(202) 393-3955 – facsimile
holly.hawkins@nerc.net
willie.phillips@nerc.net

*Persons to be included on the Commission's service list are indicated with an asterisk. NERC requests waiver of the Commission's rules to permit the inclusion of more than two people on the service list.

III. DISCUSSION

A. Additional Criteria Regarding the Role of Reliability Coordinators with Respect to Monitoring System Operating Limits Does Not Need to be Formalized in the Proposed Reliability Standards.

In the NOPR, the Commission requested comments regarding the role of the Reliability Coordinator ("RC") with respect to System Operating Limits ("SOLs"), and whether the tasks associated with monitoring and controlling SOLs should be formalized through the requirements in Reliability Standards.[4] Specifically, the Commission requested comments regarding whether

[4] NOPR at P 16.

there is a need for RCs to continue to analyze, in addition to continuing to monitor and coordinate data on, SOLs other than IROLs.[5]

NERC Response:

The proposed IRO Reliability Standards appropriately distinguish who has responsibility for IROLs and SOLs. Specifically, RCs have primary responsibility for IROLs, and Transmission Operators ("TOPs") have primary responsibility for SOLs. While RCs monitor some SOLs, RCs should focus on preserving reliability of the interconnection and wide-area analysis rather than addressing SOLs that are local in nature. However, by mandating that 'local' TOPs have direct responsibility for SOLs, the interconnected system is assured that no SOL will be overlooked. The TOPs know their SOLs, they better understand the local system characteristics, and are most knowledgeable in predicting, controlling, and mitigating local system issues.

Similarly, RCs are intended to have wide-area responsibilities. Their responsibilities focus on "coordination" rather than "operation." By focusing the RCs' attention on wide-area operational issues affecting the bulk power system, interconnected system monitoring can be managed in an organized, hierarchical manner while still maintaining the benefits of local control. Importantly, wide-area analyses conducted by RCs are predicated on the use of most (if not all) of the asset data used by the TOPs. The difference is in the detail of that analysis and the responsibility RCs assume in resolving conflicts.

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. This means that TOPs maintain primary responsibility for SOLs, and RCs maintain primary responsibility for IROLs. However, RC's with wider-area capabilities

[5] *Id.*

and responsibilities, maintain some degree of flexibility over actions that could affect bulk power system reliability. While Balancing Authorities (BAs) are responsible for the scheduling of generation to meet projected load, decisions made by the BA regarding load and generation may be overridden by the TOP responsible for the integrity of local delivery infrastructure. Similarly, decisions made by the TOP regarding the integrity of local delivery infrastructure may be modified by the RC responsible for monitoring inter-TOP situations as well as wide-area and external system conditions.

Typically, while SOLs are associated with the prevention of facility damage or the accelerated degradation of equipment life, only a subset of SOLs are used to monitor local area reliability. For this reason, the proposed IRO standards are silent on the RC's responsibility with respect to SOLs. Rather, the proposed standards establish a clear delineation of responsibilities and authorities between the TOPs and the RCs with the goal of maintaining the reliability of the bulk power system (*i.e.*, those actions that focus on preventing instability, uncontrolled separation, or cascading outages).

In a voluntary survey sent by the standard drafting team to the RCs to solicit informal feedback on the questions posed in the NOPR ("RC Survey"), all nine of the RCs responding to the survey stated that, for SOLs that they monitor, the SOLs were developed in a coordinated fashion with the TOPs. There were no RC respondents replying that TOPs withheld important SOL information from their RCs, nor did any RC indicate that the TOPs were not willing to work with the RCs in monitoring SOLs for bulk power system reliability. Accordingly, current operating practices demonstrate that the RCs' abilities to obtain important information from the TOPs in order to monitor certain SOLs are effective.

Since the completion of the proposed IRO standards, the industry is continuing to work to improve the clarity of standard requirements regarding SOLs. For example, in the past year, the Real-time Operations SDT (Project 2007-03) has proposed the addition of the following requirement to TOP-001-2:

> **R8.** Each Transmission Operator shall 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.

By using tools that properly model high-level area conditions, the RCs are able to identify and help resolve lower-level issues that are not explicitly included in the RC modeling tools. This overlap of detailed local parameters and control by the TOPs with the detailed wide-area parameters and control by the RCs, maximizes the overall reliability of the bulk power system.

The proposed standards were developed based in part on the technical expertise and knowledge of NERC and industry RC and TOP experts that are 'on the front lines' every day addressing how to monitor and assess IROLs and SOLs to ensure bulk power system reliability. Additionally, the NERC Board of Trustees approved the proposed standards on the basis that the criteria included in the standards was developed based on industry expertise, and therefore sufficiently provides necessary guidance to the industry in monitoring IROLs and SOLs. Section 215(d)(2) of the Federal Power Act requires that the Commission "give due weight to the technical expertise of the Electric Reliability Organization with respect to the content of a proposed standard or modification to a reliability standard."[6] Additionally, in Order No. 693, the

[6] U.S.C. Section 824o (2010).

Commission noted that it would defer to the "technical expertise" of the ERO with respect to the content of a Reliability Standard.[7] The Commission stated:

> Pursuant to Section 215(d)(2) of the FPA and § 39.5(c) of the Commission's regulations, the Commission will give due weight to the technical expertise of the ERO with respect to the content of a Reliability Standard or to a Regional Entity organized on an Interconnection-wide basis with respect to a proposed Reliability Standard or a proposed modification to a Reliability Standard to be applicable within that Interconnection.

Accordingly, for the reasons stated above, NERC respectfully requests that the Commission not direct that additional requirements be added to the proposed standard that would determine when RCs should monitor SOLs. Rather, the Commission should defer to the technical expertise of NERC and adopt the proposed standard as presented in NERC's December 31, 2009 petition, which appropriately leaves the primary responsibility for SOL analysis and resolution at the TOP level.

B. The Reliability Standards Should Not Require Reliability Coordinators to Have a Documented Methodology to Identify System Operating Limit Information it Needs to Fulfill its Responsibilities for Monitoring, Day Ahead, Real-Time Assessments, and Operational Control Within the Reliability Coordinator's Area.

In the NOPR, the Commission acknowledged that responsibility for monitoring the SOLs is shared between the RC and its TOPs.[8] However, the Commission proposed that it may also be beneficial for the RC to have a documented methodology for identifying the SOL information it needs to fulfill its responsibilities for monitoring, day ahead, real-time assessments, and operational control within the RC's area.[9]

---

[7] *Mandatory Reliability Standards for the Bulk-Power System*, 118 FERC ¶ 61,218, FERC Stats. & Regs. ¶ 31,242 (2007) ("Order No. 693") at P 9, *Order on Reh'g, Mandatory Reliability Standards for the Bulk-Power System*, 120 FERC ¶ 61,053 ("Order No. 693-A") (2007).
[8] NOPR at P 17.
[9] *Id.*

NERC Response:

Adding an additional requirement to the proposed standards requiring the RC to have a documented methodology for identifying the SOL information it needs to fulfill its responsibilities for monitoring, day ahead, real-time assessments, and operational control within the RC's area is unnecessary because the systems and controls in place already provide the information needed by the RCs.

The proposed standard IRO-008-1 (Requirements R1 and R2) requires RCs to assess conditions to ensure the security of the bulk power system (*i.e.,* by ensuring that IROLs are not exceeded). To perform that assessment, the RCs use tools that model generation and transmission assets based on the rating provided by the asset owners (in accordance with the FAC standards). When those ratings are exceeded, the system reaches a limit (*i.e.*, an SOL). The TOP is responsible for resolving that SOL by, for example, updating the rating from a long-term value to a higher, short-term value. For assets that have minimal impact on the bulk power system, there is no need for the RC to monitor the TOP's actions.

However, for assets that may have an impact on the reliability of the bulk power system, the RC can monitor the TOP's actions to resolve SOLs. For example, the RC can study real time operating trends to help determine whether an asset is trending toward a grid-impactive SOL. Additionally, small deviations from normal may require the RC to model the assets in more detail.

The risk that a non-modeled asset will result in an unknown adverse impact to the reliability of the bulk power system is unlikely. For example, for a non-modeled asset to significantly impact the reliability of the bulk power system, *both* the TOP's detailed modeling

tools to monitor the entity's impacts will have to fail *and* the RC's higher-level monitoring tools will have to fail to recognize grid anomalies.

Because the proposed IRO-008-1 standard already requires RCs to use tools to model transmission and generation assets based on ratings provided by asset owners, imposing an additional requirement that the RC have a documented methodology for identifying the SOL information it needs to fulfill its responsibilities for monitoring, day ahead, real-time assessments, and operational control within the RC's area is unnecessary because the systems and controls in place provide the information needed by the RCs.

C. Current Practices of Reliability Coordinators and Transmission Operators Give Reliability Coordinators the Ability to Provide an Accurate Assessment of the Bulk-Power System to its Transmission Operators on a Wide-Area Basis.

In the NOPR, the Commission requested comments regarding the current practices of RCs and TOPs with respect to coordinating operational responsibilities for monitoring, day ahead, and real-time assessments. FERC also requested comments on operating SOLs and IROLs, on the practical division of responsibilities for preventing and mitigating SOL and IROL violations, and on the monitoring capabilities of the RC with respect to IROLs as well as SOLs.[10]

Additionally, FERC requested comments regarding whether an RC can provide an accurate assessment of the bulk power system to its TOPs on a wide-area basis, without evaluating: (1) the operating environment on SOLs that will impact the TOPs within the RC's areas; (2) SOLs that have the potential to become IROLs; and (3) the existing IROLs within the RC area. The Commission also requested comments regarding whether a TOP can provide reliable operating assessments or make reliable operating instructions on an SOL that is on the border between two different TOPs' areas. FERC also requested comments on whether the RC

[10] NOPR at P 18.

should have responsibility to monitor certain SOLs other than IROLs, and whether such a responsibility would place an unreasonable burden on RCs.

NERC Response:

Current coordination practices between the RCs and the TOPs give the RCs the ability to provide assessments of the bulk power system to their TOPs on a wide-area basis. The NERC standards ensure that bulk power system reliability is achieved by requiring RCs to have wide-area monitoring capability. Additionally, while the RCs are responsible for wide-area analysis, TOPs are responsible for ensuring that all of their SOLs are monitored and analyzed so that all SOLs are accounted for.

Proposing that RCs should have responsibility for monitoring certain SOLs other than IROLs implies that only data that impacts IROLs will be monitored and analyzed. In fact, a much more robust amount of data is analyzed and monitored to ensure "numerical convergence" and results that can be "verified from actual events." This large amount of data virtually ensures that no single, unmonitored SOL will unexpectedly become an IROL. While it is not impossible for an SOL to become an IROL, mandating that RCs use detailed monitoring of SOLs is a burdensome and, more importantly, potentially distracting requirement that will result in very little reliability benefit.

While NERC believes it is unnecessary to require that RCs have additional responsibility to monitor SOLs other than IROLs, there are checks in place that give the RC the ability to monitor SOLs that could turn into IROLs. For example, the IRO standards require the RC to conduct Operational Planning Analyses and Real-time Assessments of its RC Area. 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. The requirements in IRO-010-1

specifically focus on conducting the Operational Planning Analyses and Real-Time Assessments with the goal of identifying any IROLs that may be exceeded.

Regarding inter-area SOLs, a TOP will be able to monitor and analyze an inter-area facility with respect to its own models (*i.e.*, models that produce acceptable results for the respective TOP), but may not be able to predict the change in flow (because of the lack of modeling of the external/wide-area facilities). However, wide-area facilities are modeled and analyzed by the RCs, and they will be addressed in the RC's wide-area modeling tools.

The electric power industry is predicated on interdependencies. For example, BAs rely on their resources to produce power while depending on TOPs to identify flow limitations. Similarly, TOPs coordinate the transmission implications of those flow limitations and depend on the BAs to coordinate resources as requested, while depending on the RCs to identify cascading implications and flow issues. RCs depend on the TOPs to identify local limit issues to sensitize the RC with regard to less detailed or unmonitored conditions and issues, which enables the RC to both control IROLs, flows, and still be aware of local "boots-on-the-ground" issues. This gives the RCs the ability to monitor SOLs (that may become IROLs) within the RCs' areas.

NERC is working in Project 2007-03 — Real-Time Operations on developing proposed revisions to the TOP standards that require a TOP to perform Operational Planning Analyses for its TOP area. This project is also considering revisions to the standards that would add requirements that SOL limits in adjoining areas be observed.

Given NERC's ongoing work in this area, NERC respectfully requests that FERC defer to NERC's technical expertise pursuant to Section 215(d)(2) of the FPA and approve the standard proposed in NERC's December 31, 2009 petition. This will ensure that standards necessary to support the reliable planning and operation of the bulk power system become

effective while providing NERC the necessary flexibility to continue working on these important issues in Project 2007-03 — Real-Time Operations.

D. Reliability Coordinators' Procedures for Selecting the SOLs for Evaluation by the IDC and the Extent of any Burden this has Caused the Reliability Coordinator.

In the NOPR, the Commission noted that Reliability Standard IRO-006 requires the RCs in the Eastern Interconnection to relieve overloads on the facilities modeled in the Interchange Distribution Calculator ("IDC") and to model the SOLs and IROLs in the IDC to perform the transmission loading relieve ("TLR") procedures.[11] Based on this, the Commission requested comments on how RCs in the Eastern Interconnection select SOLs for evaluation by the IDC and the extent of any burden this has caused the RCs.[12]

NERC Response:

RCs in the Eastern Interconnection select SOLs for evaluation by the IDC based on information received from the TOPs indicating that the TOP has a facility that is approaching/exceeding its SOL and/or IROL. As noted in the NOPR, the IDC is a congestion management tool that serves to aid the RCs in dealing with transmission constraints. However, the IDC is not and cannot be relied upon as the sole reliability tool available to the RC.

In the RC Survey responses received, one RC noted that it does not distinguish IDC publication based on any SOLs or any limit set, but rather publishes most of its information to the IDC for use by any entity that may wish to use the information for its reliability assessments.

Another respondent stated that SOLs in its area do not go into the IDC, but flowgates are entered into the IDC that may have SOLs or IROLs associated with them. The respondent noted that because the IDC is a congestion management tool that accounts for the various priorities of

[11] NOPR at P. 19.
[12] *Id.*

transmission service, flowgates may be entered into the IDC to determine if there are external schedules impacting the flowgate. If there are external schedules impacting the flowgate beyond a certain threshold, curtailments will be issued in the IDC for that flowgate to manage the flow to prevent or mitigate an SOL exceedance.

Similarly, another RC responded that SOLs that are identified by the TOP whose mitigation plan could include a NERC interconnection-wide congestion management plan, and are modeled in the IDC base case, can be added into the IDC as a flowgate.

E. Reliability Coordinators Should Not Be Required to Develop or Implement Action Plans with Respect to Other SOLs Apart from IROLs.

In the NOPR, the Commission requested comments regarding the extent that RCs should have action plans developed and implemented with respect to other SOLs apart from IROLs, and if so, which SOLs.[13]

NERC Response:

As explained above, requiring the RCs to monitor SOLs is not necessary to maintain bulk power system reliability. Similarly, requiring RCs to develop or implement action plans regarding other SOLs (apart from IROLs) is not necessary to ensure bulk power system reliability. TOPs are already responsible for developing action plans for preventing and/or mitigating conditions that cause facility ratings to be exceeded (*i.e.*, SOLs). Therefore, requiring both the RC and TOP to develop action plans for every SOL would add confusion to the process.

It has been a long standing practice in the industry to avoid wherever possible scenarios where there are "two hands on the wheel"—each from a different operator. For this reason, NERC requests that, pursuant to Section 215(d)(2) of the FPA, FERC approve the proposed

[13] NOPR at P 32.

standards and not issue directives requiring RCs to develop action plans with respect to other SOLs apart from IROLs.

F. The Proposed Reliability Standards, such as Proposed IRO-008-1, Appropriately Resolve the Division of Responsibilities for SOLs and IROLs on Sharing Responsibility.

In the NOPR, the Commission requested comments regarding whether the proposed Reliability Standards, such as IRO-008-1, appropriately resolve the division of responsibilities for SOLs and IROLs or whether some level of sharing responsibility should exist.[14]

NERC Response:

The proposed IRO-008-1 standard appropriately resolves the division of responsibility for SOLs and IROLs on sharing responsibility. That is, the responsibility for analyzing and controlling adverse impacts on the wide-area system is assigned to the RC—the entity with a wide-area view of the bulk power system. Similarly, the responsibility for analyzing and controlling adverse impacts on local facilities is assigned to the TOPs—entities that understand local system characteristics and are therefore most knowledgeable in predicting local system issues.

For these reasons, and for the reasons stated above, the proposed standard appropriately resolves the division of responsibilities for SOLs and IROLs, and therefore no additional level of sharing responsibility should be added to the requirements of the proposed IRO-008 standard.

G. The NERC Functional Model Clearly Delineates Responsibility Between the Reliability Coordinator and the Transmission Operator with Respect to SOLs and IROLs.

[14] NOPR at P 27.

In the NOPR, the Commission summarized NERC's comments that, under the Functional Model, the RC is responsible for identifying the subset of SOLs known as IROLs and that the TOP is responsible for other SOLs. However, the Commission noted that the Functional Model assigns a much broader role to the RC to maintain the real-time operating reliability of the bulk electric system within its area. Accordingly, the Commission requested comments regarding how the current Functional Model represents the delineation of assessment and operating responsibilities between the RC and TOP with respect to SOLs and IROLs.

NERC Response:

Version 5 of the NERC Functional Model makes a clear distinction between the duties of the RC and TOP with respect to SOLs and IROLs. For example, the Functional Model at pages 31 and 37 provides the following task descriptions pertinent to the Commission's concern:

- RC Task 6: Develops Interconnection Reliability Operating Limits, based on Transmission Owners' and Generator Owners' specified equipment ratings, and provides them to Transmission Operators.
- RC Task 7: Assists Transmission Operators in calculating and coordinating System Operating Limits.
- TOP Task 3: Develop system limitations such as System Operating Limits and Total Transfer Capabilities.
- TOP Task 6: Operate within established Interconnection Reliability Operating Limits.

Accordingly, the Functional Model clearly distinguishes between the duties of the RC and TOP while providing enough operating flexibility to maintain bulk power system reliability. More importantly, the Reliability Standards in this filing appropriately distinguish between the duties of the RC and TOP with respect to SOLs and IROLs.

H. Application of Definition of Operational Planning Analysis

In the NOPR, the Commission requested comments on the prudence of using an Operational Planning Analysis up to twelve months old and whether this timeframe is reasonable or whether the timeframe should be shorter to ensure that the analysis is not outdated.[15] FERC also requested comments regarding whether the definition should include measurable criteria needed to determine whether it is appropriate to use an existing analysis.[16]

NERC Response:

The purpose of conducting an Operational Planning Analysis is to prepare for real-time operations – a fundamental responsibility for an RC to meet its obligations. Therefore, it is unlikely that an RC would deliberately rely on an Operational Planning Analysis that does not reflect its expected system conditions. In fact, an RC will only rely on a 12-month old Operational Planning Analysis study if system conditions have not changed over that time period.

The 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. For this reason, "Operational Planning Analysis," as defined, includes the option of performing an Operational Planning Analysis up to 12 months ahead. Therefore, if there were no changes to the expected conditions from one day to the next, the RC would not be forced to conduct a new analysis of the expected system conditions solely to have documentation for compliance.

Additionally, the existing definition includes key elements that are expected to be included in the analysis. The definition is as follows:

[15] NOPR at P 28.
[16] *Id.*

> **Definition of Operational Planning Analysis:** 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.).

These key elements included in the definition (*i.e.*, load forecasts, generation output levels, and known system constraints) provide measurable criteria in assessing an entity's Operational Planning Analysis, consistent with the Commission's concerns expressed in the NOPR.

Accordingly, in certain circumstances, relying on an Operational Planning Analysis that is twelve months old can provide useful information of the last season and may be the best source of information if expected system conditions have not changed. Additionally, the key elements included in the existing definition of "Operational Planning Analysis" provide the criteria necessary to bring certainty to those elements that should be included in an entity's analysis.

I. Definition of Real-Time Assessment

In the NOPR, the Commission requested comments on the meaning of "immediately available data" within the proposed definition of Real-Time Assessment.[17] The Commission noted that Requirement R6 of the proposed Reliability Standard IRO-002-2 would require RCs to have adequate analysis capabilities such as state estimation, pre- and post-contingency analysis capabilities (thermal, stability, and voltage), and wide-area overview displays. The Commission concluded that it appears that any immediately available data used by the RC in the development of a Real-time Assessment should be data obtained from one of these analysis capabilities. The Commission therefore proposed in the NOPR to, in order to make this requirement more clear, direct NERC, under Section 215(d)(5) of the FPA, to modify the

[17] NOPR at P 29.

definition of "Real-time Assessment" to specify that the type of data to be relied upon by an RC in conducting a Real-time Assessment must be based on adequate analysis capabilities such as those referenced in Requirement R6 of IRO-002-2 when the tools are available.

NERC Response:

NERC has plans to identify the minimum set of capabilities each RC must have as part of Project 2009-02 — Real-Time Monitoring and Analysis Capabilities. The purpose of that project is to: "establish requirements for the functionality, performance, and maintenance of Real-time Monitoring and Analysis capabilities for Reliability Coordinators, Transmission Operators, Generator Operators, and Balancing Authorities for use by their System Operators in support of reliable System operations."

In addition, the definition of Real-time Assessment was deliberately written to clarify that the RC must perform this assessment under all conditions—even if its EMS is unavailable. FERC's proposal in the NOPR—to modify the definition of "Real-time Assessment" to specify that the type of data to be relied upon by an RC in conducting a Real-time Assessment must be based on adequate analysis capabilities—relies on an assumption that an RC's advanced applications will always be available. This may not be the case.

Accordingly, given that NERC is already considering how to address these issues as part of Project 2009-02, NERC respectfully requests the Commission defer to the technical expertise of NERC and the industry by permitting the continuation of those standards development efforts. For these reasons, a Commission directive requiring that the definition of "Real-time Assessment" specify the type of data to be relied upon by an RC in conducting a Real-time Assessment is not necessary at this time.

J. A Minimum List of Data is Not Required to Continue the Effective Sharing of Data Between Neighboring RCs.

In the NOPR, the Commission requested comments regarding whether a minimum list of data is necessary for the effective sharing of data between neighboring RCs and, if so, what data should be included. Additionally, the Commission requested comments regarding whether a list of minimum "Electric System Reliability Data," such as that shown on Attachment 1 of the currently-effective Reliability Standard TOP-005-1, is beneficial for RCs to meet the requirements of IRO-008-1 and IRO-009-1.[18]

NERC Response:

NERC does not believe that the concept of a minimum list of data is necessary for the effective sharing of data between neighboring RCs. RCs were polled informally during the development of the IRO standards and did not identify any impediments to collecting data and information needed to support the real-time monitoring and assessment of the wide-area. The proposed IRO-010-1 standard gives the RC the ability to request needed data from any entity that possesses data it needs to properly perform its reliability tasks. Not only does this approach give the RC the flexibility to request the data it needs from specific entities in the format it believes the data should be provided, this approach also gives the RC the ability to specify the *exact* data that it needs. Requiring a list of minimum electric system data not only could impair an entity's ability to provide the data to the RC quickly, it could also prevent an RC from obtaining needed data quickly enough to address potential system events.

During the development of the proposed standard, the RCs that were polled indicated they were already receiving the data they needed without any issues – and the data and information they received varied from one RC to another. Accordingly, the standard drafting

[18] NOPR at P 65.

team identified no reliability-related benefit to mandating that a specific minimum list of data be developed for the purpose of sharing data between neighboring RCs. On the contrary, the proposed standards are structured in such a way that give the RC flexibility to share data with neighboring RCs as needed.

The approach proposed in the IRO standards provides needed flexibility for the RCs to share data and, based on the study conducted in developing the standard, reflects practices that are already being used today by RCs *that are working*. Additionally, the proposed approach provides flexibility to the RCs to share data as needed without requiring the RCs to comply with a generic list of data that may or may not be necessary to maintain bulk power system reliability.

Accordingly, for the reasons stated above, and because current operating practices indicate that RCs can obtain information from other RCs as needed on a voluntary basis, NERC respectfully requests that FERC not adopt its NOPR proposal requiring that a minimum list of data be developed for the sharing of data with neighboring RCs.

K. An Additional Requirement is Not Required in the IRO-010-1 Reliability Standard to Specify Necessary Outage Coordination Data.

In the NOPR, the Commission requested comments regarding whether IRO-010-1 should specify the necessary outage coordination data.[19]

NERC Response:

NERC disagrees that a requirement should be added to IRO-010-1 specifying necessary outage coordination data, because each RC must have the necessary flexibility to specify the data needed for its respective area.

[19] NOPR at P 60.

The facilities within each RC's area vary significantly, thereby resulting in the need for different outage data in each area. Additionally, the RCs were polled informally during the development of the proposed IRO-010-1 standard and did not identify any issues associated with their ability to coordinate necessary outage data or with their ability to obtain data needed to support the coordination and approval of outages.

Therefore, because the data currently shared among RCs adequately provides the necessary outage information for each RC's area, NERC does not believe adding an additional requirement to the proposed IRO-010-1 Reliability Standard specifying necessary outage coordination data would have a benefit necessary to ensure bulk power system reliability.

IV. CONCLUSION

For the foregoing reasons, NERC respectfully requests that the Commission take action consistent with these comments when it issues its Final Rule regarding the proposed IRO Reliability Standards.

Respectfully submitted,

/s/ Holly. A Hawkins

Gerald W. Cauley
President and Chief Executive Officer
David N. Cook
Senior Vice President and General Counsel
North American Electric Reliability Corporation
116-390 Village Boulevard
Princeton, NJ 08540-5721
(609) 452-8060
(609) 452-9550 – facsimile
david.cook@nerc.net

Holly A. Hawkins
Attorney
Willie L. Phillips
Attorney
North American Electric Reliability Corporation
1120 G Street, N.W.
Suite 990
Washington, D.C. 20005-3801
(202) 393-3998
(202) 393-3955 – facsimile
holly.hawkins@nerc.net
willie.phillips@nerc.net

CERTIFICATE OF SERVICE

I hereby certify that I have served a copy of the foregoing document upon all parties listed on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, D.C. this 24th day of January, 2011.

/s/ Holly A. Hawkins
Holly A. Hawkins
Attorney for North American Electric Reliability Corporation