130 FERC ¶ 61,033
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

[Docket No. RM10-9-000]

Transmission Loading Relief Reliability Standard and Curtailment Priorities

(Issued January 21, 2010)

AGENCY: Federal Energy Regulatory Commission.

ACTION: Notice of Inquiry

SUMMARY: The Commission requests comment on the interplay between Reliability Standard IRO-006-4 (Reliability Coordination – Transmission Loading Relief) and the curtailment priorities set forth in the Commission's pro forma open access transmission tariff, particularly sections 13.6 and 14.7.

DATES: Comments are due **60 days after publication in the FEDERAL REGISTER**

ADDRESSES: You may submit comments, identified by docket number by any of the following methods:

- Agency Web Site: http://www.ferc.gov. Documents created electronically using word processing software should be filed in native applications or print-to-PDF format and not in a scanned format.
- Mail/Hand Delivery: Commenters unable to file comments electronically must mail or hand deliver an original and 14 copies of their comments to: Federal Energy Regulatory Commission, Office of the Secretary, 888 First Street, NE, Washington, DC 20426.

Instructions: For detailed instructions on submitting comments and additional

information on the rulemaking process, see the Comment Procedures Section of this document.

FOR FURTHER INFORMATION CONTACT:

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UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
Marc Spitzer, Philip D. Moeller,
and John R. Norris.

Transmission Loading Relief Reliability Standard and Curtailment Priorities — Docket No. RM10-9-000

NOTICE OF INQUIRY

(Issued January 21, 2010)

1. In this Notice of Inquiry (NOI), the Commission requests comments from industry and stakeholders regarding the interplay between Reliability Standard IRO-006-4 (Reliability Coordination – Transmission Loading Relief) and curtailment priorities in Commission-approved Open Access Transmission Tariffs (OATT). The Commission seeks further information, comments and data on whether Reliability Standard IRO-006-4 directs a reliability coordinator to curtail a firm interchange transaction crossing over a constrained flowgate prior to curtailing a non-firm native network load transaction across the same flowgate.

I. Background

2. On December 21, 2007, the North American Electric Reliability Corporation (NERC), the Commission-certified electric reliability organization (ERO), submitted for Commission approval modifications to Reliability Standard IRO-006-3, known as the transmission loading relief (TLR) procedure.[1] As discussed in greater detail below,

[1] Reliability Standard IRO-006-4 modifies Reliability Standard IRO-006-3, which (continued)

Reliability Standard IRO-006-4 provides Interconnection-wide transmission loading relief procedures that can be used to prevent or manage potential or actual system operating limit or interconnection reliability operating limit violations.[2]

3. As discussed below, the NRG Companies filed comments on Reliability Standard IRO-006-4, asserting that the proposed modified Reliability Standard is not consistent with the requirements of the Commission-approved pro forma OATT. They asserted that, due to flaws in the Interchange Distribution Calculator,[3] firm transactions may be curtailed prior to non-firm transactions, resulting in an OATT violation. They also argued that the Interchange Distribution Calculator is flawed for several reasons, including that it does not take native load transactions into account when determining which transactions should be curtailed to relieve congestion. The Constellation Energy Commodities Group, Inc. filed comments in support of the NRG Companies' comments,

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the Commission approved in Order No. 693. Mandatory Reliability Standards for the Bulk-Power System, Order No. 693, FERC Stats. & Regs. ¶ 31,242, order on reh'g, Order No. 693-A, 120 FERC ¶ 61,053 (2007).

[2] A System Operating Limit or SOL is the value (such as MW, MVar, amperes, frequency or volts) that satisfies the most limiting of the prescribed operating criteria for a specified system configuration to ensure operation within acceptable reliability criteria. NERC Glossary of Terms Used in Reliability Standards at 19, available at http://www.nerc.com/files/Glossary_12Feb08.pdf (NERC Glossary). An Interconnection Reliability Operating Limit or IROL is a system operating limit that, if violated, could lead to instability, uncontrolled separation, or cascading outages that adversely impact the reliability of the Bulk-Power System. Id. at 10.

[3] The Interchange Distribution Calculator is a mechanism used by the reliability coordinators in the Eastern Interconnection to calculate the distribution of interchange transactions over specific flowgates. It includes a database of all interchange transactions and a matrix of the distribution factors for the Eastern Interconnection. Id. at 9.

arguing that the use of the Interchange Distribution Calculator has resulted in unjust and discriminatory curtailments, particularly firm transactions before non-firm transactions.

4. On July 21, 2008, the Commission issued Order No. 713, which, inter alia, directed NERC to submit a filing explaining one aspect of the TLR procedure before such procedure could be approved.[4] Following NERC's response, on March 19, 2009, the Commission approved Reliability Standard IRO-006-4 in Order No. 713-A. In addition, the Commission directed NERC to develop modifications to IRO-006-4, pursuant to section 215(d)(5) of the Federal Power Act (FPA).[5] In response to comments regarding competitive concerns and the application of the Interchange Distribution Calculator, the Commission concluded:

> The above comments on suggested improvements to the [transmission loading relief] procedure are beyond the scope of this proceeding, which pertains to the separation of business practices from the ERO's [transmission loading relief] procedure and implementation of the Commission's directives set forth in Order No. 693. We note, however, that the ERO indicated in its December 21, 2007 filing that it has a three-phase plan to improve the [transmission loading relief] procedures, and the

[4] Modification of Interchange and Transmission Loading Relief Reliability Standards; and Electric Reliability Organization Interpretation of Specific Requirements of Four Reliability Standards, Order No. 713, 124 FERC ¶ 61,071 (2008), order on reh'g, Order No. 713-A, 126 FERC ¶ 61,252 (2009), *order on reh'g*, Order No. 713-B, 130 FERC ¶ 61,032 (2010). The Commission sought clarification of whether the removal and transfer to NAESB of business-related requirements formerly contained in Reliability Standard IRO-006-3 would impact bulk-power system reliability, an issue unrelated to the current proceeding. Order No. 713, 124 FERC ¶ 61,071 at P 50.

[5] 16 U.S.C. 824o(d)(5) (2006). The modifications relate to the use of the term "alone" in Requirement R1.1 and changes to the Violation Risk Factors for Requirements R1 through R4 to "high," and are not related to the issues discussed in this NOI. Order No. 713-A, 126 FERC ¶ 61,252 at P 36, 59.

> third phase will consist of "a complete redrafting to incorporate enhancement and changes beyond the separation of reliability and business practice issues." Therefore, the phase three proceeding would provide a proper forum for commenters to raise their concerns. The Commission believes that NRG and other commenters raise valid issues and urges the commenters to raise—and expects the ERO to consider—these matters in an appropriate proceeding. We also note that NERC states it is currently updating the [Interchange Distribution Calculator] to more accurately determine the impacts of native load and network service.[6]

5. In a request for rehearing of Order No. 713-A, the NRG Companies, the Electric Power Supply Association, and Constellation Energy Commodities Group (Rehearing Parties) challenged the Reliability Standard on several grounds.[7] First, they assert that Reliability Standard IRO-006-4 violates the curtailment priorities established in Order Nos. 888[8] and 890[9] and the pro forma OATT approved by the Commission in those proceedings, because the standard favors native network load transactions over

[6] Order No. 713-A, 126 FERC ¶ 61,252 at P 21 (footnotes omitted).

[7] Request for Rehearing and Clarification of the NRG Companies, the Electric Power Supply Association and Constellation Energy Commodities Group, Docket No. RM08-7-002 (Apr. 20, 2009) (Request for Rehearing).

[8] Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, Order No. 888, FERC Stats. & Regs. ¶ 31,036 (1996), order on reh'g, Order No. 888-A, FERC Stats. & Regs. ¶ 31,048, order on reh'g, Order No. 888-B, 81 FERC ¶ 61,248 (1997), order on reh'g, Order No. 888-C, 82 FERC ¶ 61,046 (1998), aff'd in relevant part sub nom. Transmission Access Policy Study Group v. FERC, 225 F.3d 667 (D.C. Cir. 2000), aff'd sub nom. New York v. FERC, 535 U.S. 1 (2002).

[9] Preventing Undue Discrimination and Preference in Transmission Service, Order No. 890, FERC Stats. & Regs. ¶ 31,241, order on reh'g, Order No. 890-A, FERC Stats. & Regs. ¶ 31,261 (2007), order on reh'g, Order No. 890-B, 123 FERC ¶ 61,299 (2008), order on reh'g, Order No. 890-C, 126 FERC ¶ 61,228 (2009).

interchange transactions with respect to curtailment priority, and allows the curtailment of firm transactions before non-firm transactions.

6. The Rehearing Parties assert that, under sections 13.6 and 14.7 of the Commission's pro forma OATT, non-firm transmission services must be curtailed before firm transmission services, and firm point-to-point and network integration transmission service customers have an equal priority with the transmission provider's use of the system to deliver Network Resources to its native load. They maintain that, because of its reliance on the flawed Interchange Distribution Calculator, Reliability Standard IRO-006-4 would direct a reliability coordinator[10] to curtail a firm interchange transaction crossing over a constrained flowgate prior to curtailing a non-firm native network load transaction across the same flowgate. The Rehearing Parties also assert that the Commission has recognized such flaws in the Interchange Distribution Calculator and has directed NERC to address them.[11]

[10] The NERC Glossary defines a reliability coordinator as: "The entity that is the highest level of authority who is responsible for the reliable operation of the Bulk Electric System, has the Wide Area view of the Bulk Electric System, and has the operating tools, processes and procedures, including the authority to prevent or mitigate emergency operating situations in both next-day analysis and real-time operations. The Reliability Coordinator has the purview that is broad enough to enable the calculation of Interconnection Reliability Operating Limits, which may be based on the operating parameters of transmission systems beyond any Transmission Operator's vision." NERC Glossary at 16.

[11] Request for Rehearing at 8 n.12, citing North American Electric Reliability Council, 85 FERC ¶ 61,353 (1998).

II. Discussion

A. OATT Requirements

7. Curtailment priorities are largely set forth in two sections of the Commission's pro forma OATT. Section 13.6 of the Commission's pro forma OATT, entitled Curtailment of Firm Transmission Service, provides that:

> Curtailments will be made on a non-discriminatory basis to the transaction(s) that effectively relieve the constraint. Transmission Provider may elect to implement such Curtailments pursuant to the Transmission Loading Relief procedures specified in Attachment J. If multiple transactions require Curtailment, to the extent practicable and consistent with Good Utility Practice, the Transmission Provider will curtail service to Network Customers and Transmission Customers taking Firm Point-To-Point Transmission Service on a basis comparable to the curtailment of service to the Transmission Provider's Native Load Customers. All Curtailments will be made on a non-discriminatory basis, however, Non-Firm Point-To-Point Transmission Service shall be subordinate to Firm Transmission Service. . . . [T]he Transmission Provider reserves the right to Curtail, in whole or in part, any Firm Transmission Service provided under the Tariff when, in the Transmission Provider's sole discretion, an emergency or other unforeseen condition impairs or degrades the reliability of its Transmission System. . . . .[12]

8. Section 14.7 of the Commission's pro forma OATT, entitled Curtailment or Interruption of Service, provides that:

> The Transmission Provider reserves the right to Curtail, in whole or in part, Non-Firm Point-To-Point Transmission Service provided under the Tariff for reliability reasons . . . . Transmission Provider may elect to implement such Curtailments pursuant to the Transmission Loading Relief procedures specified in Attachment J. The Transmission Provider reserves the right to Interrupt, in whole or in part, Non-Firm Point-To-Point Transmission Service provided under the Tariff for economic reasons in order to accommodate (1) a request for Firm Transmission Service, (2) a

[12] Order No. 890-B, 123 FERC ¶ 61,299, Pro Forma OATT 13.6 (emphasis added).

> request for Non-Firm Point-To-Point Transmission Service of greater duration, (3) a request for Non-Firm Point-To-Point Transmission Service of equal duration with a higher price, (4) transmission service for Network Customers from non-designated resources, or (5) transmission service for Firm Point-to-Point Transmission Service during conditional curtailment periods . . . . Where required, Curtailments or Interruptions will be made on a non-discriminatory basis to the transaction(s) that effectively relieve the constraint, however, Non-Firm Point-To-Point Transmission Service shall be subordinate to Firm Transmission Service. . . . Transmission service for Network Customers from resources other than designated Network Resources will have a higher priority than any Non-Firm Point-To-Point Transmission Service under the Tariff.[13]

9. As indicated by the above-quoted text, the pro forma OATT provides that when curtailments are necessary, non-firm service shall be subordinate to firm service.

B. Reliability Standard IRO-006-4

10. Reliability Standard IRO-006-4, which is applicable to balancing authorities, reliability coordinators and transmission operators, establishes transmission loading relief procedures:

> The purpose of this standard is to provide Interconnection-wide transmission loading relief procedures that can be used to prevent or manage potential or actual [system operating limit] and [interconnection reliability operating limit] violations to maintain reliability of the Bulk Electric System.

11. The Reliability Standard contains five requirements. Requirement R1 obligates a reliability coordinator experiencing a potential or actual system operating limit or interconnection reliability operating limit violation within its reliability coordinator area to select one or more procedures to mitigate potential or actual transmission overloads.

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[13] Order No. 890-B, 123 FERC ¶ 61,299, Pro Forma OATT 14.7 (emphasis added).

Pursuant to the Commission's direction in Order No. 693,[14] sub-requirement R1.1 specifically notes:

> The [transmission loading relief] procedure alone is an inappropriate and ineffective tool to mitigate an [interconnection reliability operating limit] violation due to the time required to implement the procedure. Other acceptable and more effective procedures to mitigate actual [interconnection reliability operating limit] violations include: reconfiguration, redispatch, or load shedding.

12. Requirement R2 mandates that the reliability coordinator only use local transmission loading relief or congestion management procedures to which the transmission operator experiencing the potential or actual system operating limit or interconnection reliability operating limit is a party. Requirement R3 establishes that a reliability coordinator with a transmission loading relief obligation from an interconnection-wide procedure follow the curtailments as directed by the interconnection-wide procedure. It also requires that a reliability coordinator desiring to use a local procedure as a substitute for curtailments as directed by the interconnection-wide procedure must obtain prior approval from the ERO. Requirement R4 mandates that each reliability coordinator comply with interconnection-wide procedures, once they are implemented, to curtail transactions that cross interconnection boundaries. Requirement R5 directs balancing authorities and reliability coordinators to comply with applicable interchange-related Reliability Standards during the implementation of transmission loading relief procedures.

[14] Order No. 693, FERC Stats. & Regs. ¶ 31,242 at P 577.

13. NERC has established 7 TLR levels.[15] At Level 1, the reliability coordinator notifies of a potential system operating limit or interconnection reliability operating limit violation. At Level 2, the reliability coordinator holds interchange transactions at current levels to prevent operating limit violations. At Level 3, the reliability coordinator reallocates transmission by curtailing non-firm interchange transactions to allow higher-priority transactions to continue, and/or curtails non-firm interchange transactions to prevent further operating limit violations. At Level 4, the reliability coordinator reconfigures the transmission system to allow firm transactions to continue. At Level 5, the reliability coordinator curtails firm interchange transactions, either to allow certain other firm transactions to continue or to mitigate any further operating limit violations. At Level 6, the reliability coordinator implements emergency procedures. At Level 0, the TLR has concluded.

14. As previously noted, the Interchange Distribution Calculator is a mechanism used by the reliability coordinators in the Eastern Interconnection to calculate the distribution of interchange transactions over specific flowgates. It includes a database of all interchange transactions and a matrix of the distribution factors for the Eastern Interconnection.[16]

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[15] Transmission Loading Relief Procedures, TLR Levels, available at http://www.nerc.com/page.php?cid=5|67|205.

[16] NERC Glossary at 9.

C. Concerns Regarding Reliability Standard IRO-006-4

15. In Docket No. RM08-7-000, both the NRG Companies and the Rehearing Parties raised concerns regarding Reliability Standard IRO-006-4. In comments filed in response to the Commission's Notice of Proposed Rulemaking regarding Reliability Standard IRO-006-4, the NRG Companies argued that certain flaws in the Interchange Distribution Calculator result in violations of sections 13.6 and 14.7 of the Commission's pro forma OATT. First, NRG Companies asserted that there are flaws in the Interchange Distribution Calculator, which allows certain types of transactions to avoid curtailment.[17] NRG Companies explained that, for example, the Interchange Distribution Calculator does not take into account internal non-firm transactions, defined as those with a source and sink in the same Balancing Area, and will curtail firm transactions before these internal non-firm transactions. As a result, NRG Companies assert that interchange transactions bear a disproportionate share of the system's reliability obligations. Further, NRG Companies argue, the Interchange Distribution Calculator does not distinguish between firm and non-firm native load transmission services, assuming that all internal transactions are firm and assigning firm curtailment priorities to them.[18]

16. Following issuance of Order No. 713-A, the Rehearing Parties sought rehearing, asserting that Reliability Standard IRO-006-4 is not just and reasonable because it results

[17] Comments of the NRG Companies at 8, 16-17, Docket No. RM08-7-000 (Oct. 10, 2008) (NRG Comments).

[18] NRG Comments at 4.

in OATT violations and discriminates in favor of native load transactions made by a load serving entity over similar transactions entered into by an otherwise similarly-situated transmission-dependent utility or merchant generator. The Rehearing Parties cite to NRG's comments in the underlying proceeding that point to problems with the Interchange Distribution Calculator, upon which the Reliability Standard relies to determine curtailments.[19] They assert that sections 13.6 and 14.7 of the Commission's pro forma OATT require that non-firm transmission services be curtailed before firm transmission services, and state that firm point-to-point and network integration transmission service customers have an equal priority with the transmission provider's use of the system to deliver network resources to its native load.[20]

17. According to the Rehearing Parties, because of its reliance on the flawed Interchange Distribution Calculator, which does not take internal native load transactions into account, Reliability Standard IRO-006-4 would direct a reliability coordinator to curtail a firm interchange transaction crossing over a constrained flowgate prior to curtailing a non-firm native network load transaction across the same flowgate. The Rehearing Parties assert that this is a violation of the OATT's curtailment priorities and constitutes undue discrimination in favor of native load transactions. According to the

[19] Request for Rehearing at 7, citing NRG Comments at 12-16.

[20] Id.

Rehearing Parties, earlier reforms to the transmission loading relief procedures and the Interchange Distribution Calculator have not remedied these flaws.[21]

D. Commission Questions

18. In an order issued concurrently with this NOI, the Commission denies the Rehearing Parties' request for rehearing of Order No. 713-A as outside of the scope of the proceeding in Docket No. RM08-7-002.[22] However, the Commission believes that commenters have raised issues regarding Reliability Standard IRO-006-4 that merit further inquiry. Although we have reviewed the comments filed by NRG Companies and the Request for Rehearing in Docket No. RM08-7, we seek broader input from industry before determining how to proceed.

19. Therefore, the Commission seeks public comment on whether the current application of the transmission loading relief procedures and Reliability Standard IRO-006-4 are inconsistent with OATT curtailment priorities and, if so, recommended corrective actions.[23] In addition, the Commission seeks public comment on the following questions:

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[21] Request for Rehearing at 8, citing North Am. Electric Reliability Council, 85 FERC ¶ 61,353 (1998), order on reh'g, 87 FERC ¶ 61,161 (1999).

[22] Modification of Interchange and Transmission Loading Relief Reliability Standards; and Electric Reliability Organization Interpretation of Specific Requirements of Four Reliability Standards, Order No. 713-B, 130 FERC ¶ 61,032 (2010).

[23] This proceeding will not address issues related to the Curtailment Threshold previously approved by the Commission. North Am. Electric Reliability Council, 87 FERC ¶ 61,160 (1999), reh'g denied, 96 FERC ¶ 61,079 (2001).

(a) Whether Reliability Standard IRO-006-4, as implemented by various transmission providers, reliability coordinators and balancing authorities, results in firm service being made subordinate to non-firm service?

(b) How do Transmission Providers currently implement OATT sections 13.6 and 14.7? Specifically, discuss whether Transmission Providers rely solely on the Interchange Distribution Calculator in determining which transactions to curtail, or whether they also take into account non-firm transactions internal to the Balancing Authority which are currently not reflected in the Interchange Distribution Calculator.

(c) If the Interchange Distribution Calculator results in firm service being made subordinate to non-firm service, would including transactions internal to a Balancing Authority help resolve the problem? If so, what parties would be impacted? If there are affected parties, please provide examples of what the impacts on those parties would be.

(d) If the Interchange Distribution Calculator results in firm service being made subordinate to non-firm service, would modifing it to calculate the Transfer Distribution Factors (TDF) for transactions within a Balancing Authority solve the identified issue of firm transactions being curtailed before non-firm transactions within a Balancing Authority?

(e) What is the role and responsibility of the transmission provider, reliability coordinator and balancing authority, in the TLR procedures and curtailment?

(f) As noted above, a Level 5 TLR is called to allow certain firm transactions to continue or to mitigate further operating limit violations and a Level 6 TLR is called to implement emergency procedures. Are commenters aware of Level 5 or Level 6 TLR procedures being called for reasons other than to allow certain other firm transactions to continue or to mitigate any further operating limit violations?

(g) If this is an issue, does it occur in non-RTO/ISO regions, within ISO/RTO footprints, or both?

20. The Commission also seeks an update from the ERO regarding its efforts to make improvements to the Interchange Distribution Calculator.[24]

[24] We understand that the ERO previously estimated that resolving problems in the Interchange Distribution Calculator would take approximately 2 to 5 years; however, (continued)

III. Comment Procedures

21. The Commission invites interested persons to submit comments on the matters and issues proposed in this NOI, including any related matters or alternative proposals that commenters may wish to discuss. Comments are due 60 days from publication in the FEDERAL REGISTER. Comments must refer to Docket No. RM10-9-000, and must include the commenter's name, the organization they represent, if applicable, and their address in their comments.

22. The Commission encourages comments to be filed electronically via the eFiling link on the Commission's web site at http://www.ferc.gov. The Commission accepts most standard word processing formats. Documents created electronically using word processing software should be filed in native applications or print-to-PDF format and not in a scanned format. Commenters filing electronically do not need to make a paper filing.

23. Commenters that are not able to file comments electronically must send an original and 14 copies of their comments to: Federal Energy Regulatory Commission, Office of the Secretary, 888 First Street NE, Washington, DC 20426.

24. All comments will be placed in the Commission's public files and may be viewed, printed, or downloaded remotely as described in the Document Availability section

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more than a year has passed since that estimate. Compliance Filing of the North American Electric Reliability Corporation In Response to Paragraph 50 of Order No. 713 at 10, Docket No. RM08-7-001 (Sept. 11, 2008).

below. Commenters on this proposal are not required to serve copies of their comments on other commenters.

IV. Document Availability

25. In addition to publishing the full text of this document in the Federal Register, the Commission provides all interested persons an opportunity to view and/or print the contents of this document via the Internet through 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.

26. 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.

27. 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 e-mail 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.

By the Commission. Commissioner Norris voting present.

(S E A L)

Kimberly D. Bose,
Secretary.