
**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

MODIFICATION OF INTERCHANGE AND) Docket No. RM08-7-001
TRANSMISSION LOADING RELIEF)
RELIABILITY STANDARDS; AND)
ELECTRIC RELIABILITY ORGANIZATION)
INTERPRETATION OF SPECIFIC)
REQUIREMENTS OF FOUR RELIABILITY)
STANDARDS)

**MOTION FOR LEAVE TO ANSWER AND ANSWER OF THE
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION**

Pursuant to Rules 212 and 213 of the Federal Energy Regulatory Commission’s (“Commission” or “FERC”) Rules of Practice and Procedure, 18 C.F.R. §§ 385.212 and 385.213, the North American Electric Reliability Corporation (“NERC”) hereby moves for leave to answer and answers the comments submitted by NRG Companies in the above-referenced proceeding.

I. PROCEDURAL HISTORY

On December 21, 2007, NERC submitted for Commission approval modifications to Reliability Standard IRO-006-4 (Reliability Coordination – Transmission Loading Relief).¹ The modifications simply “extract” from the current Reliability Standard IRO-006-3 business practices and commercial requirements as the first step in a three phase project to improve the Reliability Standard. Those business practices and commercial requirements were transferred to a North American Energy Standards Board (“NAESB”)

¹ *North American Electric Reliability Corporation*, “Petition of the North American Electric Reliability Corporation for Approval of Proposed Reliability Standard,” *Docket No. RM08-7-000*, (December 21, 2007).

business practices document. The NAESB business practices and commercial requirements are included in Version 001 of the NAESB Wholesale Electric Quadrant (“WEQ”) Standards which NAESB filed with the Commission on the same day.² Further, the modified Reliability Standard includes changes directed by the Commission in Order No. 693 related to the appropriateness of using the TLR procedure to mitigate violations of interconnection reliability operating limits (“IROL”).³

On July 21, 2008, the Commission issued Order No. 713 that approved five of six modified Reliability Standards submitted for approval by NERC and, in paragraph 50, directed NERC to submit a filing explaining one aspect of the sixth modified Reliability Standard, IRO-006-4.⁴

On September 11, 2008, NERC submitted its compliance filing in response to paragraph 50 of the Commission’s July 21, 2008 Order No. 713, which directed NERC to provide an explanation regarding Requirements R1 and R1.1 of IRO-006-4.

On October 10, 2008, the NRG Companies⁵ submitted comments in the proceeding in response to NERC’s September 11, 2008 filing.⁶

By this filing NERC requests leave to file this answer and hereby answers the issues raised in NRG’s comments.

² *Standards for Business Practices and Communication Protocols for Public Utilities*, “Report of the North American Energy Standards Board,” Docket No. RM05-5-005 (December 21, 2007).

³ An 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.

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).

⁵ Louisiana Generating LLC (“LaGen”), Bayou Cove Peaking Power LLC, Big Cajun I Peaking Power LLC, NRG Sterlington Power LLC, and NRG Power Marketing, LLC.

⁶ *Modification of Interchange and Transmission Loading Relief Reliability Standards; and Electric Reliability Organization Interpretation of Specific Requirements of Four Reliability Standards*, “Comments of the NRG Companies,” (October 10, 2008) (NRG Comments).

II. NOTICES AND COMMUNICATIONS

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

Rick Sergel
President and Chief Executive Officer
David N. Cook*
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

Rebecca J. Michael*
Assistant General Counsel
North American Electric Reliability
Corporation
1120 G Street, N.W.
Suite 990
Washington, D.C. 20005-3801
(202) 393-3998
(202) 393-3995 – facsimile
rebecca.michael@nerc.net

*Persons to be included on the Commission's official service list.

III. MOTION FOR LEAVE TO FILE ANSWER

The Commission's rules permit the filing of answers to motions in which parties seek substantive relief. The Commission's rules generally do not permit the filing of answers to protests, unless otherwise permitted by the Commission.⁷ However, the Commission has granted motions for leave to file such answers if they will clarify issues in dispute, ensure a complete and accurate record or otherwise provide information to assist the Commission in its decision-making process.⁸ NERC's Answer is limited and will clarify certain concerns raised in NRG's comments. In addition, this Answer will

⁷ See 18 C.F.R. §385.213(a)(2).

⁸ *San Diego Gas & Electric v. Sellers of Energy and Ancillary Services*, 108 FERC ¶ 61,219, at P14, n. 7 (2004) (answer was accepted as it "provided information that assisted [FERC in its] decision-making process"); see also *Michigan Electric Transmission Co.*, 106 FERC ¶ 61,064, at P 3 (2004) (the permitted answer "provides information that clarifies the issues"); *North American Electric Reliability Corporation, Order Certifying NERC as the Electric Reliability Organization and Ordering Compliance Filing*, 116 FERC ¶ 61,062, at P 24 (2006) (reply comments of NERC and others accepted "because they have provided information that assisted us in our decision-making process"); *North American Electric Reliability Corporation, Order Conditionally Accepting 2007 Business Plan and Budget of the North American Electric Reliability Corporation, Approving Assessments to Fund Budgets and Ordering Compliance Filings*, 117 FERC ¶ 61,091, at P 18 (2006) (same); *North American Electric Reliability Corporation*, 119 FERC ¶ 61,248 (2007) at P 6 (same).

provide information that will assist the Commission in its decision-making process.

Accordingly NERC requests permission to submit this Answer.

IV. ANSWER

In its comments, NRG points to two issues: current use of TLR, particularly as applied by the Entergy Independent Coordinator of Transmission, and perceived shortcomings of the Interchange Distribution Calculator (“IDC”). Neither of these issues should stand in the way of Commission approval of the modified Reliability Standard IRO-006-4 which is the subject of the NERC’s initial request for approval and subsequent compliance filing. NRG requests that the Commission “direct NERC to address the suggestions made by NRG and other companies in this proceeding through its stakeholder process.”⁹ The suggestions NRG proposes are already in the process of being evaluated and initiated through the NERC Standards Development Process as requested by PJM Interconnection (“PJM”), the Midwest Independent Transmission System Operator (“Midwest ISO”) and the Southwest Power Pool (“SPP”). Similarly, the associated business practice effort has been identified and incorporated within the annual plans of the North American Energy Standards Board (“NAESB”), again at the request of PJM, the Midwest ISO and SPP. While that work moves forward, however, approval of the modified Reliability Standard IRO-006-4 is appropriate because it improves the current Reliability Standard IRO-006-3. Specifically, it includes changes directed by the Commission related to the appropriateness of the NERC TLR Procedure with regard to mitigating violations of IROLs, and it makes necessary changes associated with the transfer of the business practice aspects of the standard to NAESB. Other than meeting these two objectives, the modified Reliability Standard does not modify the

⁹ NRG Comments at 4.

remaining reliability requirements. Thus, while NERC understands that NRG has suggestions on how to improve how TLR is being used and the function of the IDC, those suggestions are more appropriately addressed in the on-going and subsequent phases of the Standard Development Process at both NERC and NAESB.

In order to assist the Commission in the decision making process, NERC provides the following additional information on specific points raised by NRG.

A. Issues with Respect to the Current IDC

NRG makes several references to the way in which the IDC operates and concludes that the IDC fails to perform adequately:

Notably, LaGen continues to experience curtailment of its firm transmission contracts, while other non-firm transactions continue to flow across constrained flowgates due to the problems with the IDC.¹⁰

For example, a single [independent power producers] IPP located in the Entergy balancing authority and simultaneously selling firm power to LaGen and non-firm power to Entergy could have its firm transmission to LaGen curtailed by the IDC, while the non-firm transmission purchased by Entergy would remain intact.¹¹

NRG fails to explain that a solution already exists to mitigate the problems it describes. That solution is based on how the IDC functions.

The IDC curtails transactions on the basis of the Transfer Distribution Factor (“TDF”) calculation of that transaction’s impact on the constrained flowgate. The TDF is a balancing authority-to-balancing authority calculation and generally uses a 5% cut-off below which transactions are not included in any required curtailment. By default, an intra-balancing authority transaction has a TDF of 0%; hence, it is not subject to TLR

¹⁰ *Id* at 5.

¹¹ *Id* at 15.

curtailment. This seemingly inherent inaccuracy can be solved by the involved parties agreeing to form a placeholder balancing authority within the IDC model. In the specific instance raised by NRG, agreement between LaGen and Entergy would be required.

Following agreement, this solution only requires the tagging of all transactions, firm and non-firm, from the placeholder-balancing authority to the host balancing authority. Thus, the IDC model can currently function to address NRG's concerns and is not fundamentally flawed.

NRG continues by stating:

The two most serious issues with the IDC are:

- (1) The generation and load data relied on by the IDC is static, with no requirement that it is regularly updated or accurately reflect real-time conditions; and
- (2) The IDC methodology does not curtail certain schedules or determine NNL obligations accurately in some cases, leading to a discriminatory assignment of reliability obligations.

... Accordingly, the IDC calculations which determine flowgate relief are incorrect since they are solving for constraints based on a transmission topology which differs from real-time system topology.¹²

With respect to the first issue, it is important to note that currently the load, transmission and generation outage data used by the IDC model is routinely updated using the System Data Exchange ("SDX"), a system and protocol through which such information is shared among balancing authorities and reliability coordinators in the Eastern Interconnection. As such, NRG is incorrect in its assertion that the transmission topology upon which the IDC's calculations are based differs from real-time system topology.

¹² *Id.* at 13-14.

With regard to generation output, as related earlier, PJM, the Midwest ISO and the SPP have requested that such information (or a derivative thereof representing actual flows) be incorporated into the IDC. Their request is being evaluated at both NERC and NAESB, and, if approved, will likely address the second issue raised by NRG. Note that the priority for curtailment of non-firm Native and Network Load (“NNL”) transactions is a business practice issue and will not be addressed by NERC. The issue of curtailment priority was transferred to NAESB as part of the Reliability Standard modifications made to IRO-006-4. NERC and NAESB will work together in a coordinated fashion to ensure that when changes are made to the manner in which NNL flows from both designated and non-designated resources are modeled in the IDC, business practices will be developed to identify their appropriate curtailment priorities.

B. Use of TLR

NRG claims that “excessive use of TLRs is reducing system reliability in some non-organized markets”¹³ and suggests that the Commission “should require NERC to modify its TLR rules to limit the excessive use of TLRs.”¹⁴ TLR actions do not cause a lowering of system reliability, but limiting their use when needed to control flows simply because the number of times they are used has exceeded some preset limit would have a detrimental effect on reliability. In creating such a preset limit, Reliability Coordinators (“RCs”) would have one of their tools for managing reliability eliminated based solely on an arbitrary limit. In general, NERC has relied on the experience of its RCs to determine the appropriate actions to take in a given situation. Overriding their authority and discarding that experience by creating arbitrary criteria or limits that reduce their ability

¹³ *Id.* at 12.

¹⁴ *Id.*

to respond to congestion events would inevitably result in situations where the use of TLR would be the “right” answer from an engineering perspective, but the “wrong” answer from a policy perspective. To the extent NRG believes there are commercial inequities occurring due to the manner in which entities use TLR, it should pursue redress through the appropriate channels – not through challenges of the TLR process itself. In addition, there are numerous examples across the Eastern Interconnection where local area operation procedures are used to mitigate a transmission constraint. For example, LaGen and other Balancing Authorities in a portion of the Entergy service area have agreed to implement local area redispatch procedures, thus avoiding the use of TLR Level 5 to curtail firm transactions and NNL. Furthermore, the use of these local area redispatch procedures, in some instances, eliminates the need to implement Energy Emergency Alert procedures by neighboring balancing authorities as cited by NRG.

The Commission has determined that the TLR process is equitable.¹⁵ While the 2003 Blackout Report determined that the procedure may not be fast enough when used alone to control transmission flows during emergency conditions, the use of TLR is appropriate for controlling flows resulting from the impacts of multiple transactions. In each case where TLR is employed to control flows on the transmission system, there must be an underlying cause for those high flows. The underlying cause is made public when a given situation calls for TLR to reach level 5,¹⁶ the point at which NNL and Firm

¹⁵ NERC's TLR procedures, which address multi-system transactions and parallel flows, were designed to implement the curtailment priorities of the Commission's pro forma open access tariff. The Commission found the procedures to be generally consistent with or superior to the pro forma tariff with respect to these issues. *North American Electric Reliability Council*, “Order on Petition For Declaratory Order,” 85 FERC ¶ 61,353 (1998).

¹⁶ TLR Level 5a is described as “Reallocation of Transmission Service by curtailing Interchange Transactions using Firm Point-to-Point Transmission Service on a pro rata basis to allow additional Interchange Transactions using Firm Point-to-Point Transmission Service” and TLR Level 5b is described

Transmission Service is held or curtailed. In that event, the circumstances surrounding the situation are documented by the RC calling for TLR and are reviewed by NERC's Reliability Coordinator Working Group. The final reports are available to the public and posted on the NERC Web site. This provides appropriate levels of transparency such that entities may identify any inappropriate behaviors and request they be investigated, either by NERC or by others.

NRG recommends that the Commission take action to order a specific lower threshold for transactions to be curtailed in order to address their specific concerns without considering the consequences on other transactions on the system.

By allowing non-firm transactions with a TDF of less than 5% to continue to flow, the TLR procedures violate the [Open Access Transmission Tariff] OATT requirement that all contributing non-firm transactions be curtailed first.

NRG understands that the purpose of the TDF threshold is to focus on those transactions that have the greatest potential for effective relief; however, non-firm transactions at some level below a 5% TDF threshold (e.g., anything with a TDF above 1%) should be curtailed before curtailing firm transmission service. This will reduce the severity of OATT violations that are inherent in the current TLR procedure. Moreover, this change should be fairly easy to implement since it simply requires a reduction in the threshold used in the IDC.¹⁷

The TDF threshold represents the amount of relief that can be provided from a curtailment of energy flows from one area to another. The establishment of any threshold below which the impact of a transaction is deemed too small to consider needs to recognize two points: the effectiveness of reducing transactions (as NRG states) and the number of transactions that need to be curtailed in order to effect even a small change in the flow on the critical facility. When TLR is employed by an RC, the simple fact is that

as "Curtailed Interchange Transactions using Firm Point-to-Point Transmission Service to mitigate an SOL or IROL violation"

¹⁷ NRG Comments at 17-18.

the system is being utilized too heavily. That heavy utilization needs to decrease in order to maintain reliability, and a RC needs to determine which transaction(s) within the group to be considered for curtailment will have an impact on the critical facility. NRG's solution to set the threshold at 1% would have the consequence of requiring the reduction of transactions between balancing authorities extremely distant from the critical facility. The lower threshold would also mean that many more transactions would be impacted and many more changes made for little impact; using a 1% threshold, the curtailment of a one hundred megawatt transaction could result only in a single megawatt of relief being provided. While implementing a lower threshold in a general matter would be inappropriate, the IDC does not restrict systems from choosing another (lower) threshold in specific circumstances to address specific needs. For example, PJM and Progress Energy – Carolina ("PEC") are currently operating under a Commission approved agreement,¹⁸ wherein non-firm transactions sourcing in PJM and sinking in PEC or vice versa that impact a constraint within the PJM footprint may be curtailed based on a 3% curtailment threshold prior to moving to a TLR level 5.

Finally, NRG's suggests the Commission direct NERC to change Section 2.2.2 of the TLR procedure that calls for a hold to be placed on balancing area to balancing area transactions that have a TDF greater than 5%. Their proposed solution is:

The Commission should direct NERC to immediately change the TLR procedure to require that all new transactions impacting the constraint be held during the TLR. Such a hold would prevent the transmission provider from scheduling any new non-firm transactions with a TDF of less than 5% on the constrained flowgate.¹⁹

¹⁸ See generally *PJM Interconnection, L.L.C.*, "Order Conditionally Accepting Local Transmission Loading Relief Procedures," 124 FERC ¶ 61,006 at P 3 and n.3 (2008).

¹⁹ NRG Comments at 19.

The heart of NRG's issue is again one of equity and better addressed outside of a reliability standard. With respect to this proceeding, the Commission should consider the consequences of NRG's proposed action. The implementation of a hold on "all new transactions," while not seeming to impact reliability on the surface, would apply to both firm and non-firm transactions and to NNL. Carrying this to its conclusion, Load-Serving Entities would not be able to increase flowgate loading resulting from providing service to NNL customers during a TLR event. That action would clearly result in lower reliability to NNL customers as it may mean reducing customer load when further adjustments to transactions might otherwise allow the load to be served. Additionally, it is important to note that these "holds" would apply to transactions occurring significantly remote from the actual constraint. Even if it is assumed that this suggestion only applied to transactions with TDFs of between 1% and 5%, many "off-path" transactions (*i.e.*, transactions that impact the constraint through parallel flows, rather than directly through transmission service sold for wheeling in the constrained area) would be impacted. Note that NRG did not propose the use of a lower bound TDF at all, which would theoretically mean that, for example, extremely remote transactions flowing between the Western Area Power Administration ("WAPA") and the Midwest ISO could be "held" due to constraints in Louisiana.

V. **CONCLUSION**

The North American Electric Reliability Corporation respectfully requests that the Commission accept this Answer and issue an order consistent with the comments set forth herein.

Rick Sergel
President and Chief Executive Officer
David N. Cook
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

Respectfully submitted,

/s/ Rebecca J. Michael
Rebecca J. Michael
Assistant General Counsel
North American Electric Reliability
Corporation
1120 G Street, N.W.
Suite 990
Washington, D.C. 20005-3801
(202) 393-3998
(202) 393-3955 – facsimile
rebecca.michael@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 October, 2008.

/s/ Rebecca J. Michael
Rebecca J. Michael

*Attorney for North American Electric
Reliability Corporation*