

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

**Facilities, Design, Connections and Maintenance)
Mandatory Reliability Standards)**

Docket No. RM07-3-000

**COMMENTS OF
NEW YORK INDEPENDENT SYSTEM OPERATOR AND
THE INDEPENDENT ELECTRICITY SYSTEM OPERATOR**

I. INTRODUCTION

The New York Independent System Operator, Inc. (“NYISO”) and the Independent Electricity System Operator of Ontario (“IESO”) ¹ respectfully submit these joint comments on the Commission’s Notice of Proposed Rulemaking on *Facilities, Design, Connections and Maintenance Mandatory Reliability Standards* (the “NOPR”).²

These joint comments are provided from the perspective of a market operator and reliability coordinator within the Northeast Power Coordinating Council, Inc. (“NPCC”). These comments are additional to those submitted to the Commission in this docket by the ISO/RTO Council (“IRC”), to which the above parties are signatories.

II. BACKGROUND

On November 15, 2006, the North American Electric Reliability Corporation (“NERC”) submitted 20 Reliability Standards to the Commission for approval. From NERC’s earlier submission, the Commission is now proposing to approve three FAC Reliability Standards developed by NERC³ and described as follows:

¹ The IESO is not subject to the Commission’s jurisdiction and their endorsement of these reply comments does not constitute agreement or acknowledgement that either can be subject to the Commission’s jurisdiction.

² *Facilities, Design, Connections and Maintenance Mandatory Reliability Standards*, 120 FERC ¶ 62,155 (August 13, 2007) (the “NOPR”).

³ On February 3, 2007, the Commission issued Order No. 672 in which NERC was certified as the Electric

- FAC-010-1 (System Operating Limits Methodology for the Planning Horizon);
- FAC-011-1 (System Operating Limits Methodology for the Operations Horizon); and
- FAC-014-1 (Establish and Communicate System Operating Limits).⁴

In its November submission to the Commission, NERC also proposes the addition or revision of the following terms⁵ in the NERC Glossary of Terms Used in Reliability Standards (NERC glossary):

- cascading outages,
- delayed fault clearing,
- Interconnection Reliability Operating Limit (IROL), and
- Interconnection Reliability Operating Limit T_v (IROL T_v).

III. COMMENTS

A. **FAC-010-1 (System Operating Limits Methodology for the Planning Horizon).**

The Commission proposes to approve Reliability Standard FAC-010-1 as a mandatory and enforceable Reliability Standard but the Commission “seeks ERO clarification and public comment on several matters.”⁶ The following joint comments will focus solely on the other matters dealing with loss of load.

(i). **Reliability Standard FAC-010-1:Other Matters**

(1) **“Loss of Load” Language Clarification.**

FAC-010-1 applies to “planning authorities” in the planning horizon to “ensure

Reliability Organization (“ERO”). *North American Electric Reliability Corp.*, 116 FERC ¶ 61,602 (ERO Certification Order), *order on reh’g & compliance*, 117 FERC ¶ 61,126 (2006), *order on compliance*, 118 FERC ¶ 61,030 (January 2007).

⁴ NOPR at P 4.

⁵ NOPR at P 5.

⁶ NOPR at P 15.

that System Operating Limits (SOLs) used in the reliable planning of the Bulk Electric System (BES) are determined based on an established methodology or methodologies.”⁷ Requirement R2.3 permits a response to a single contingency may include, *inter alia*, “planned or controlled interruptions of electric supply to radial customers or some local network customers connected to or supplied by the Faulted Facility or by the affected areas.” The Commission seeks clarification whether this provision is limited to the loss of load that is a direct result of the contingency (*i.e.*, consequential load), or whether this provision allows firm load shedding and firm transmission curtailment following a single contingency.⁸

We interpret the provision in Requirement R2.3 to mean the loss of load that is a direct result of the contingency (*i.e.*, consequential load). This is also the general planning philosophy that has been adopted in the NPCC region. NPCC Document A-2, Section 6.3, allows firm-load curtailment only following a recognized contingency if reliability of the system for the next subsequent contingency cannot be assured through normal control actions such as readjustment of generation, direct current sources, etc. In other words, non-consequential loss of load, *i.e.*, the shedding of firm load, cannot and should not be relied upon to achieve the required performance in response to a recognized contingency; it is only allowed in subsequent adjustment of the system in preparation for the next contingency.

B. FAC-011-1 (System Operating Limits Methodology for the Operations Horizon).

The Commission proposes to approve Reliability Standard FAC-011-1 as a mandatory and enforceable Reliability Standard but the Commission “seeks ERO

⁷ NERC FAC- 010-1 A, 3. Purpose

⁸ NOPR at P 21.

clarification and public comment on several matters.”⁹ The comments below will focus solely on the Commission’s dealings with the Consistency with Order No. 890.

(i). **Consistency with Order No. 890.**

FAC-011-1 applies to “reliability coordinators” in the operating horizon to “ensure that System Operating Limits (SOLs) used in the reliable operation of the Bulk Electric System (BES) are determined based on an established methodology or methodologies.”¹⁰

The Commission seeks comment on whether the development of a methodology for calculation of SOLs for the operating horizon pursuant to proposed Reliability Standard FAC-011-1 and the calculation of ATC for the long-term pursuant to NERC’s Modeling, Data, and Analysis (MOD) Reliability Standards results in the consistent use of assumptions as required by Order No. 890. The Commission identified two concerns in particular.

(1) **Potential For Undue Discrimination in the Calculation of ATC.**

*Is there a potential for the exercise of undue discrimination against transmission customers where, for example, a reliability coordinator’s SOL methodology calls for the application of a single contingency in determining SOLs pursuant to FAC-011-1 and the reliability coordinator and planning authority calculate ATC for the short-term using the assumption of multiple contingencies? Do the Order No. 890 transparency requirements mitigate any potential for the exercise of undue discrimination in this respect?*¹¹

(2) **Calculation of ATC, TTC and SOLs.**

The Commission seeks comment on whether the SOLs developed pursuant to FAC-011-1 are essentially the same as TTC used for ATC calculation.

⁹ NOPR at P 28.

¹⁰ NERC FAC-011-1 A, 1. Purpose

¹¹ NOPR at P 29 (1).

*If so, should NERC address SOLs, transfer capability and TTC in a coordinated and consistent manner?*¹²

The IESO and NYISO concur that the potential for undue discrimination may continue to exist in areas without an independent transmission provider despite the Commission's earlier efforts to require transparency of ATC methodologies.¹³ We believe this potential can be reduced through a requirement for consistent assumptions (i.e., performance criteria) and contingency requirements applied to the methodologies used for determining ATC for the long-term, through TTC calculations, and for SOL calculations in the shorter term. Apart from addressing the potential for undue discrimination, this approach would also help to establish consistency between the reliability boundary conditions for long-term planning and near-term operation – a basic philosophy that has been adopted in the NPCC region of which IESO and NYISO are long time members.

As the Commission correctly surmises, the different criteria applied in the determination of long-term ATC, through TTC calculations based on more stringent criteria, may leave transfer capability unavailable when a potentially larger SOL is calculated using less stringent criteria for the near-term. Thus, a larger SOL would permit a greater utilization of available transfer capacity in the operating horizon. On this point, we believe there is little reason for differing long-term ATC and SOL basic criteria. Within NPCC, members are required to utilize the NPCC Document A-2¹⁴

¹² NOPR at P 29 (2).

¹³ FERC Order 890, P 290-295

¹⁴ NPCC Document A-2, "Basic Criteria for Design and Operation Of Interconnected Power Systems" includes consistent criteria for the transmission design (Section 5.0) and normal transfers for transmission operating (Section 6.0) in real-time. Thus, SOL and IROLs are developed using consistent and transparent set of criteria in both the planning and operating time horizons.

design and operating criteria in the determination of TTC¹⁵ that are to be equally applied to SOL, IROL and long-term ATC calculations. NPCC's more stringent design and operating criteria are similar to the Category C contingency requirements stipulated in the NERC standards TPL-003. The FAC-011-1 standard, however, does not require the application of the Category C contingency requirements to determine SOLs in the operating horizon, as required in the planning horizon stated by FAC-010-1.

The consistent and transparent application of the more stringent TTC calculation criteria, within the long-term ATC methodology, as the basis for SOL calculation in the operating horizon, is a reasonable and prudent step in Commission's goal to prevent undue discrimination by requiring responsible entities to work from the same starting point in their limit and transfer capability calculations.

To pursue this, we suggest that the Commission direct NERC to utilize the Reliability Standards Development process¹⁶ to address the SOL/ATC/TTC consistency issue through the modification of the FAC-011-1 Reliability Standard. Through modification of this FAC Reliability Standard, the planning criteria defined in the TPL Reliability Standards and used in the transparent TTC calculations for long-term ATC in the MOD Reliability Standards will become the basis for the consistent methodologies to develop SOLs and IROLs for the operating horizon.

¹⁵ "NPCC CO-13 Whitepaper on Regional Methodology and Guidelines for Forecasting TTC and ATC", Nov 9, 2005, states at Section 4.2, "The TTC across a transmission Path is the pre-contingency level of power that can be transferred over said Path in such a way that following the most severe contingency of the network, system security (thermal, voltage and stability limits) is maintained in concordance with NPCC design and operating criteria as well as rules and practices adopted by the affected systems and Control Areas." [Empphasis added.]

¹⁶ Order 693-A, P40 states that the Commission may provide specific directions on the modification of a reliability standard but only "to provide useful guidance to assist in the Reliability Standards development process."

IV. CONCLUSION

For the reason set forth above we respectfully requests that the Commission adopt the recommendations set forth above and expeditiously issue a final rule in this proceeding.

Respectfully submitted,

/s/ Kim Warren

Kim Warren
Manager, Regulatory Affairs
**Independent Electricity System
Operator of Ontario**
655 Bay Street, Suite 410
Toronto, Ontario, M5G-2K4

Robert E. Fernandez

Robert E. Fernandez
Vice President and General Counsel
Elaine Robinson
Director of Regulatory Affairs
**New York Independent System
Operator, Inc.**
290 Washington Avenue Extension
Albany, N.Y. 12203

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