

Order 693 Paragraph 866

Project 2008-12 Coordinate Interchange Standard Drafting Team Solution
June 2013 (revised December 2013)

In Order No. 693, FERC issued several directives pertaining to the INT standards. This white paper explains how the Coordinate Interchange Standard Drafting Team (CISDT) proposes to address one of those directives through an equal and effective alternative.

Paragraph 866:

866. Accordingly, the Commission approves Reliability Standard INT-006-1 as mandatory and enforceable. In addition, the Commission directs the ERO to develop a modification to INT-006-1 through the Reliability Standards development process that: (1) makes it applicable to reliability coordinators and transmission operators and (2) requires reliability coordinators and transmission operators to review energy interchange transactions from the wide-area and local area reliability viewpoints respectively and, where their review indicates a potential detrimental reliability impact, communicate to the sink balancing authorities necessary transaction modifications before implementation. We also direct that the ERO consider the suggestions made by EEI and TVA and address the questions raised by Entergy and Northern Indiana in the course of the Reliability Standards development process.

Based on feedback from the NERC Operating Committee as well as drafting team input, the CISDT proposes an equally efficient and effective method to address the directive, by revising an existing, approved NERC Glossary term, Operational Planning Analysis. The CISDT proposes revising the term as follows:

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, [Interchange](#), and known system constraints (transmission facility outages, generator outages, equipment limitations, etc.).

The term **Operational Planning Analysis** is used in standards that apply to both the Reliability Coordinator and the Transmission Operator entities.¹ Proposed Reliability Standard INT-006-4, Requirement R6 requires Interchange information to be provided to the Reliability Coordinator. This is typically achieved using the electronic tagging function.

R6.Each Sink Balancing Authority shall distribute all notifications of whether an Arranged

¹ A comprehensive list of each Reliability Standard and Requirement that contains the tem Operational Planning Analysis is at the end of this document.

Interchange was transitioned to Confirmed Interchange to the following entities, and notifications of on-time Confirmed Interchange shall be distributed such that they are delivered in time to be incorporated into scheduling systems prior to ramp start as specified in Attachment 1, Column D: [Violation Risk Factor: Lower] [Time Horizon: Operations Planning, Same-day Operations, Real-time Operations]

- 6.1. *The Source Balancing Authority,*
- 6.2. *Each Intermediate Balancing Authority,*
- 6.3. *Each Reliability Coordinator associated with each Balancing Authority included in the Arranged Interchange,*
- 6.4. *Each Transmission Service Provider included in the Arranged Interchange, and*
- 6.5. *Each Purchasing Selling Entity included in the Arranged Interchange.*

The IRO standards apply to the Reliability Coordinator, and Operational Planning Analysis is referenced in the requirements of IRO-008-1. Requirement R1 of IRO-008-1 specifies that the Reliability Coordinator must perform an Operational Planning Analysis:

R1. Each Reliability Coordinator shall perform an Operational Planning Analysis to assess whether the planned operations for the next day within its Wide Area, will exceed any of its Interconnection Reliability Operating Limits (IROLs) during anticipated normal and Contingency event conditions. (Violation Risk Factor: Medium) (Time Horizon: Operations Planning)

By explicitly including “Interchange” in the definition of Operational Planning Analysis, the Reliability Coordinator must consider Interchange when performing the study. When the results of this study indicate the need for action, the Reliability Coordinator is required to share the results per Requirement R3 of IRO-008-1:

R3. When a Reliability Coordinator determines that the results of an Operational Planning Analysis or Real-Time Assessment indicates the need for specific operational actions to prevent or mitigate an instance of exceeding an IROL, the Reliability Coordinator shall share its results with those entities that are expected to take those actions. (Violation Risk Factor: Medium) (Time Horizon: Real-time Operations or Same Day Operations)

TOP-002-3 contains requirement for the Transmission Operator to perform an Operational Planning Analysis (Requirement R1) and to develop plans for reliable operations based on the results of the Operational Planning Analysis and notify other entities as to their role in those plans (Requirement R3).

*R1. Each Transmission Operator shall have an **Operational Planning Analysis** that represents projected System conditions that will allow it to assess whether the planned operations for the next day within its Transmission Operator Area will exceed any of its Facility Ratings or Stability Limits during anticipated normal and Contingency event conditions. [Violation Risk Factor: Medium] [Time Horizon: Operations Planning]*

*R2. Each Transmission Operator shall **develop a plan** to operate within each Interconnection Reliability Operating Limit (IROL) and each System Operating Limit (SOL) which, while not an IROL, has been identified by the Transmission Operator as supporting reliability internal to its*

Transmission Operator Area, identified as a result of the Operational Planning Analysis performed in Requirement R1. [Violation Risk Factor: Medium] [Time Horizon: Operations Planning]

*R3. Each Transmission Operator **shall notify all NERC registered entities identified in the plan(s) cited in Requirement R2 as to their role in those plan(s).** [Violation Risk Factor: Medium] [Time Horizon: Operations Planning]*

While the INT standards do not require Interchange information to be provided to the Transmission Operator, it is expected that the Transmission Operator will rely on TOP-003-2, Requirements R1, R3, and R5 to obtain the information from Balancing Authorities.

*R1. Each Transmission Operator shall create a documented specification for the **data necessary for it to perform its Operational Planning Analyses and Real-time monitoring.** The specification shall include: [Violation Risk Factor: Low] [Time Horizon: Operations Planning]*

1.1. A list of data and information needed by the Transmission Operator to support its Operational Planning Analyses and Real-time monitoring.

1.2. A mutually-agreeable format.

1.3. A periodicity for providing data.

1.4. The deadline by which the respondent is to provide the indicated data.

*R3. Each Transmission Operator shall **distribute its data specification, as developed in Requirement R1 to entities that have data required by the Transmission Operator's Operational Planning Analysis and Real-time monitoring process** used in meeting its NERC-mandated reliability requirements. [Violation Risk Factor: Low] [Time Horizon: Operations Planning]*

*R5. Each Transmission Operator, Balancing Authority, Generator Owner, Generator Operator, Interchange Authority, Load-Serving Entity, Transmission Owner, and Distribution Provider receiving a data specification in Requirement R3 or R4 **shall satisfy the obligations of the documented specifications for data.** [Violation Risk Factor: Medium] [Time Horizon: Operations Planning]*

The IRO standards shown above are mandatory and enforceable. The TOP standards are pending before FERC.

List of Requirements Containing the Term Operational Planning Analysis

Mandatory and Enforceable Standards:

- **IRO-008-1 – Reliability Coordinator Operational Analyses and Real-time Assessments, Requirements R1 and R3:**

R1. Each Reliability Coordinator shall perform an Operational Planning Analysis to assess whether the planned operations for the next day within its Wide Area, will exceed any of its Interconnection Reliability Operating Limits (IROLs) during anticipated normal and Contingency event conditions. (Violation Risk Factor: Medium) (Time Horizon: Operations Planning)

R3. When a Reliability Coordinator determines that the results of an Operational Planning Analysis or Real-Time Assessment indicates the need for specific operational actions to prevent or mitigate an instance of exceeding an IROL, the Reliability Coordinator shall share its results with those entities that are expected to take those actions. (Violation Risk Factor: Medium) (Time Horizon: Real-time Operations or Same Day Operations)

Board-approved Standards Pending Regulatory Approval

- **IRO-005-4 — Reliability Coordination — Current Day Operations, Requirement R1:**

*R1. When the results of an **Operational Planning Analysis** or Real-time Assessment indicate an anticipated or actual condition with Adverse Reliability Impacts within its Reliability Coordinator Area, each Reliability Coordinator shall notify all impacted Transmission Operators and Balancing Authorities in its Reliability Coordinator Area. [Violation Risk Factor: High] [Time Horizon: Real-time Operations, Same Day Operations and Operations Planning]*

- **TOP-001-2 — Transmission Operations, Requirements R1 and R8:**

R3. Each Transmission Operator shall inform its Reliability Coordinator and Transmission Operator(s) that are known or expected to be affected by each actual and anticipated Emergency based on its assessment of its Operational Planning Analysis. [Violation Risk Factor: High] [Time Horizon: Operations Planning,]

R8. Each Transmission Operator shall inform its Reliability Coordinator of each SOL which, while not an IROL, has been identified by the Transmission Operator as supporting reliability internal to its Transmission Operator Area based on its assessment of its Operational Planning Analysis. [Violation Risk Factor: Medium] [Time Horizon: Operations Planning]

- **TOP-002-3 — Operations Planning, Requirements R1 and R2:**

*R1. Each Transmission Operator shall have an **Operational Planning Analysis** that represents projected System conditions that will allow it to assess whether the planned operations for the next day within its Transmission Operator Area will exceed any of its Facility Ratings or Stability Limits during anticipated normal and Contingency event conditions. [Violation Risk Factor: Medium] [Time Horizon: Operations Planning]*

R2. Each Transmission Operator shall develop a plan to operate within each Interconnection Reliability Operating Limit (IROL) and each System Operating Limit (SOL) which, while not an IROL, has been identified by the Transmission Operator as supporting reliability internal to its Transmission Operator Area, identified as a result of the Operational Planning Analysis performed in Requirement R1. [Violation Risk Factor: Medium] [Time Horizon: Operations Planning]

- **TOP-003-2 — Operational Reliability Data, Requirements R1 and R3:**

*R1. Each Transmission Operator shall create a documented specification for the **data necessary for it to perform its Operational Planning Analyses and Real-time monitoring**. The specification shall include: [Violation Risk Factor: Low] [Time Horizon: Operations Planning]*

1.1. A list of data and information needed by the Transmission Operator to support its Operational Planning Analyses and Real-time monitoring.

1.2. A mutually-agreeable format.

1.3. A periodicity for providing data.

1.4. The deadline by which the respondent is to provide the indicated data.

R3. Each Transmission Operator shall distribute its data specification, as developed in Requirement R1, to entities that have data required by the Transmission Operator's Operational Planning Analysis and Real-time monitoring process used in meeting its NERC-mandated Reliability requirements. [Violation Risk Factor: Low] [Time Horizon: Operations Planning]