

Implementation Plan

Project 2014-03 Revisions to TOP/IRO Reliability Standards

Requested Approvals

- TOP-001-3 Transmission Operations
- TOP-002-4 Operations Planning
- TOP-003-3 Operational Reliability Data
- IRO-001-4 Reliability Coordination - Responsibilities and Authorities
- IRO-002-4 Reliability Coordination — Analysis Tools
- IRO-008-2 Reliability Coordinator Operational Analyses and Real-time Assessments
- IRO-010-2 Reliability Coordinator Data Specification and Collection
- IRO-014-3 Coordination Among Reliability Coordinators
- IRO-017-1 Outage Coordination

Requested Retirements

Existing Approved Standards

- TOP-001-1a Reliability Responsibilities and Authorities
- TOP-002—2.1b Normal Operations Planning
- TOP-003-1 Planned Outage Coordination
- TOP-004-2 Transmission Operations
- TOP-005-2a Operational Reliability Information
- TOP-006-2 Monitoring System Conditions
- TOP-007-0 Reporting System Operating Limit (SOL) and Interconnection Reliability Operating Limit (IROL) Violations
- TOP-008-1 Response to Transmission Limit Violations
- IRO-001-1.1 Reliability Coordination — Responsibilities and Authorities
- IRO-002-2 Reliability Coordination — Facilities
- IRO-003-2 Reliability Coordination – Wide Area View
- IRO-004-2 Reliability Coordination – Operations Planning
- IRO-005-3.1a Reliability Coordination — Current Day Operations
- IRO-008-1 Reliability Coordinator Operational Analyses and Real-time Assessments
- IRO-010-1a Reliability Coordinator Data Specification and Collection
- IRO-014-1 Coordination Among Reliability Coordinators
- IRO-015-1 Notifications and Information Exchange Between Reliability Coordinators
- IRO-016-1 Coordination of Real-time Activities Between Reliability Coordinators
- PER-001-0.2 Operating Personnel Responsibility and Authority

Filed with FERC but not approved – these standards were filed with FERC but never approved and will be retired as part of this project, and upon Board approval of replacement standards, NERC will petition FERC to withdraw its petition for approval of these standards:

- TOP-001-2 Transmission Operations
- TOP-002-3 Operations Planning
- TOP-003-2 Operational Reliability Data
- IRO-001-3 Reliability Coordination - Responsibilities and Authorities
- IRO-002-3 Reliability Coordination — Analysis Tools
- IRO-005-4 Reliability Coordination — Current Day Operations
- IRO-014-2 Coordination Among Reliability Coordinators
- PRC-001-2 System Protection Coordination

Prerequisite Approvals

Definition of Operating Instruction (filed with proposed COM-002-4).

Revisions to Defined Terms in the NERC Glossary

The Standards Drafting Team proposes retiring the following Board-approved definitions:	
Reliability Directive	Original definition – approved by the Board but never adopted by FERC; will be withdrawn as part of this project: <i>A communication initiated by a Reliability Coordinator, Transmission Operator, or Balancing Authority where action by the recipient is necessary to address an Emergency or Adverse Reliability Impacts.</i>
The Standards Drafting Team proposes revising the following Board-approved definitions:	
Operational Planning Analysis	<p>Original definition: <i>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.).</i></p> <p>Revised definition: <i>An evaluation of projected system conditions to assess anticipated (pre-Contingency) and potential (post-Contingency) conditions for next-day operations. The evaluation shall reflect inputs including, but not limited to, load forecasts; generation output levels; Interchange; known Protection System and Special Protection System status or degradation; Transmission outages; generator outages; Facility Ratings; and identified phase angle and equipment limitations. (Operational Planning Analysis may be provided through internal systems or through contracted services.)</i></p>
Real-time Assessment	Original definition: <i>An examination of existing and expected system conditions, conducted by collecting and reviewing immediately available data.</i>

	<p>Revised definition: <i>An evaluation of system conditions using Real-time data to assess existing (pre-Contingency) and potential (post-Contingency) operating conditions. The assessment shall reflect inputs including, but not limited to: load, generation output levels, known Protection System and Special Protection System status or degradation, Transmission outages, generator outages, Interchange, Facility Ratings, and identified phase angle and equipment limitations. (Real-time Assessment may be provided through internal systems or through contracted services.)</i></p>
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The definitions were revised in response to issues raised in NOPR paragraphs 55, 73, and 74 on analysis and monitoring of SOLs in all time horizons, NOPR paragraph 70 (updating study results in Real-time), and NOPR paragraph 78 (Protection System coordination). The phase angle item was added in response to SW Outage Report recommendation 27.

Background

On April 16, 2013, NERC submitted two petitions requesting Commission approval of TOP and IRO standards. [One petition](#) addresses three revised TOP Reliability Standards: TOP-001-2 (Transmission Operations), TOP-002-3 (Operations Planning), TOP-003-2 (Operational Reliability Data), and one Protection Systems (PRC) Reliability Standard, PRC-001-2 (System Protection Coordination) (collectively, the “TOP Standards”) to replace the eight currently-effective TOP standards. The [second petition](#) addresses four revised IRO Reliability Standards: IRO-001-3 (Responsibilities and Authorities), IRO-002-3 (Analysis Tools), IRO-005-4 (Current Day Operations), and IRO-014-2 (Coordination Among Reliability Coordinators) (collectively, the “IRO Standards”) to replace six currently-effective IRO standards.

On November 21, 2013, the Commission issued a [NOPR](#) in response to these petitions. The NOPR proposed to remand the proposed TOP and IRO Standards. In the NOPR, the Commission raises a concern that NERC “has removed critical reliability aspects that are included in the currently-effective standards without adequately addressing these aspects in the proposed standards.” For example, the Commission cites the fact that the proposed TOP standards do not require Transmission Operators to plan and operate within all System Operating Limits (“SOLs”), which is a requirement in the currently effective standards.

On December 20, 2013, NERC filed a [motion](#) requesting that the Commission defer action on the NOPR until January 31, 2015 to provide NERC and the industry the opportunity to thoroughly examine the technical concerns raised in the NOPR. This deferral would provide an opportunity for the industry, NERC, and FERC to work toward a common understanding and afford time to review the proposed TOP and IRO standards through the NERC standards development process to address the concerns set forth in the NOPR. That motion to defer action was granted by the Commission on January 14, 2014.

On February 12, 2014, the Standards Committee appointed a Standard Drafting Team to take on the task of revising the aforementioned standards in response to the NOPR issues and the recommendations made by the Independent Expert Review Panel, the IRO FYRT, and the SW Outage Report and this implementation plan is developed from the changes made to the standards revised by that project.

General Considerations

The twelve month implementation period for all of the standards except TOP-003-3 and IRO-010-2 is intended to allow time for entities to update processes and train operators on the revised requirements. All of the Requirements in proposed TOP-003-3 and IRO-010-2 except TOP-003-3, Requirements R5 and IRO-010-2, Requirement R3 become effective two months earlier, in order to provide recipients of data requests from their RCs, TOPs, and/or BAs time to respond to the request for data.

Applicable Entities

- Reliability Coordinator
- Balancing Authority
- Interchange Authority
- Transmission Owner
- Transmission Operator
- Distribution Provider
- Generator Owner
- Generator Operator
- Load-Serving Entity
- Transmission Service Provider
- Planning Coordinator
- Transmission Planner

Effective Date for Standards

- **For all standards except proposed TOP-003-3 and proposed IRO-010-2:**
The standard shall become effective on the first day of the first calendar quarter that is twelve (12) months after the date that the standard is approved by an applicable governmental authority or as otherwise provided for in a jurisdiction where approval by an applicable governmental authority is required for a standard to go into effect. Where approval by an applicable governmental authority is not required, the standard shall become effective on the first day of the first calendar quarter that is twelve (12) months after the date the standard is adopted by the NERC Board of Trustees or as otherwise provided for in that jurisdiction.
- **For proposed TOP-003-3:**
All requirements except Requirement R5 shall become effective on the first day of the first calendar quarter that is ten (10) months after the date that the standard is approved by an

applicable governmental authority or as otherwise provided for in a jurisdiction where approval by an applicable governmental authority is required for a standard to go into effect. Where approval by an applicable governmental authority is not required, the standard shall become effective on the first day of the first calendar quarter that is ten (10) months after the date the standard is adopted by the NERC Board of Trustees or as otherwise provided for in that jurisdiction.

Requirement R5 shall become effective on the first day of the first calendar quarter that is twelve (12) months after the date that the standard is approved by an applicable governmental authority or as otherwise provided for in a jurisdiction where approval by an applicable governmental authority is required for a standard to go into effect. Where approval by an applicable governmental authority is not required, the standard shall become effective on the first day of the first calendar quarter that is twelve (12) months after the date the standard is adopted by the NERC Board of Trustees or as otherwise provided for in that jurisdiction.

The reason for the difference in effective dates for proposed TOP-003-3 is to allow applicable entities to have time to properly respond to the data specification requests.

- **For proposed IRO-010-2:**

Requirement R1 and R2 shall become effective on the first day of the first calendar quarter that is ten (10) months after the date that the standard is approved by an applicable governmental authority or as otherwise provided for in a jurisdiction where approval by an applicable governmental authority is required for a standard to go into effect. Where approval by an applicable governmental authority is not required, Requirements R1 and R2 shall become effective on the first day of the first calendar quarter that is ten (10) months after the date the standard is adopted by the NERC Board of Trustees or as otherwise provided for in that jurisdiction.

Requirement R3 shall become effective on the first day of the first calendar quarter that is twelve (12) months after the date that the standard is approved by an applicable governmental authority or as otherwise provided for in a jurisdiction where approval by an applicable governmental authority is required for a standard to go into effect. Where approval by an applicable governmental authority is not required, Requirement R3 shall become effective on the first day of the first calendar quarter that is twelve (12) months after the date the standard is adopted by the NERC Board of Trustees or as otherwise provided for in that jurisdiction.

The reason for the difference in effective dates for proposed IRO-010-2 is to allow applicable entities to have time to properly respond to the data specification requests.

- **Standards for Retirement:**

Midnight of the day immediately prior to the Effective Date in the particular jurisdiction in which the new standard or definition is becoming effective.

Implementation Plan for Definitions

The definitions of Operational Planning Analysis and Real-time Assessment shall become effective on the first day of the first calendar quarter that is ten (10) months after the date that the definitions are approved by an applicable governmental authority or as otherwise provided for in a jurisdiction where approval by an applicable governmental authority is required for a definitions to go into effect. Where approval by an applicable governmental authority is not required, the definitions shall become effective on the first day of the first calendar quarter that is ten (10) months after the date the definitions are adopted by the NERC Board of Trustees or as otherwise provided for in that jurisdiction.

The definitions are used in proposed IRO-010-2, Requirements R1 and R2 and in proposed TOP-003-3, Requirements R1 and R3 so it is necessary that the definitions become effective concurrent with those requirements.

The two definitions are also employed in the following proposed project standards: TOP-001-3, TOP-002-4, and IRO-008-2. These definitions are not used in any other standards, either approved or in development in any other project.