



AESO Reliability Standards Monthly Report

April 2011

Comments/Questions

For comments or questions about the reliability standards or

to submit comments on NERC or WECC reliability standards for AESO consideration contact:

Mark Thompson

External Reliability Standards Coordinator

T: 403-539-2625

E: mark.thompson@aeso.ca

Related Links

- [NERC Standards Development](#)
- [WECC Standards Development](#)
- [AESO Reliability Standards Monthly Reports](#)
- [AESO Reliability Committee](#)
- [Alberta Reliability Standards](#)

In This Issue

The Reliability Standards Monthly Report provides an overview of the AESO's activities related to NERC and WECC standards, business practices and criterion that are posted for review, comment or balloting.

The AESO consults with internal subject matter experts and the Standards Review Committee (SRC) of the ISO/RTO Council (IRC) when responding to NERC and WECC on the standards.

NERC Standards

Standard	Name/Description	Status	Due Date
COM-001-1.1	Real-Time Tools	Comment Period Ended	2011-04-04
EOP-004-2	Impact Event and Disturbance Assessment, Analysis, and Reporting	Comment Period Ended	2011-04-08
CIP-005-4	Cyber Security — Electronic Security Perimeter(s)	Comment and Ballot Period	2011-04-28
FAC-008-3	Facility Ratings Methodology	Comment Period	2011-05-02
PRC-005-2	Protection System Maintenance	Comment and Ballot Period	2011-05-12
TPL-001-2	Transmission System Planning Performance Requirements	Comment and Ballot Period	2011-05-31
TOP-001 to 003	Real-Time Operations	Comment Period and Join Ballot Pool	2011-06-09

WECC Standards and Criterion

Standard or Criterion	Name/Description	Status	Due Date
WECC-0083 BAL-002- WECC-1	Contingency Reserves	Comment Period	2011-04-11
WECC-0074 MOD-(11&13)- WECC-CRT-1	Steady State and Dynamic Data	Comment Period	2011-04-22
WECC-0075 INT-019- WECC-CRT-2	After-the-Fact Tagging Guidelines	Comment Period	2011-04-27
WECC-0065 PRC-006- WECC-CRT-01	Underfrequency Load Shedding	Comment Period	2011-05-06
WECC-071 TPL-001- WECC-CRT-2	System Performance Criteria	Comment Period	2011-05-09
WECC-0068 BAL-004- WECC-2	Automatic Time Error Correction	Comment Period	2011-06-01
WECC-0076 to 0082 INT Criterion	Interchange Rewrite Project	Comment Period	2011-06-09



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COM-001-1.1 - Real-time Reliability Monitoring and Analysis Capabilities

Purpose:

Draft 3 SAR and Concept White Paper, posted for comment.

Current Standard:

COM-001-1.1 was approved by the NERC Board of Trustees on October 29, 2008.

Proposed Standard:

The new or revised standard(s) will establish requirements for the functionality, performance, and change management of Real-time capabilities for Reliability Coordinators, Transmission Operators, Generator Operators, and Balancing Authorities for use by their System Operators in support of reliable System operations.

The scope of the SAR is to establish requirements for the monitoring and analysis capabilities provided to System Operators and used to support Real-time System Operations. The SAR addresses availability parameters, performance metrics, and procedures for failure notification, maintenance coordination, and change management. The intent is to describe 'what' needs to be done but not 'how' to do it.

Applicability:

Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator

Current Status:

The SAR was posted for comment until April 4. The AESO signed on to comments submitted by the Standards Review Committee (SRC) of the ISO/RTO Council. The comments can be seen using the link below.

NERC Link:

[Real-time Reliability](#)

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EOP-004-2 - Impact Event and Disturbance Assessment, Analysis, and Reporting

Purpose:

Draft 2 Standard, posted for comment.

Current Standards:

CIP-001-1 deals with sabotage reporting and EOP-004 -1 deals with disturbance reporting.

Proposed Standard(s):

This project involves revising and combining existing standards CIP-001-1 — Sabotage Reporting and EOP-004-1 — Disturbance Reporting to eliminate redundancies and provide clarity on sabotage events. The project will address several issues identified by stakeholders, as well as FERC directives from Order 693, including a directive to provide greater clarity to requirements associated with “sabotage.”

EOP-004-2 was drafted using the “results-based” criteria for developing a reliability standard. The results-based approach includes considerably more emphasis on the “concepts and assumptions” underlying the development of requirements and goes beyond the steps most drafting teams have previously used when developing a standard. Accordingly, the “look and feel” of a results-based standard is quite different than NERC’s existing standards. However, at the core is a set of mandatory and enforceable requirements with useful guidance supporting these requirements, an approach NERC’s legal counsel has reviewed and finds acceptable.

Applicability:

Reliability Coordinator, Balancing Authority, Transmission Operator, Transmission Owner, Generator Operator, Generator Owner, Load-Serving Entity, Regional Reliability Organization

Current Status:

The draft standard was posted for comment until April 8. The AESO signed on to comments submitted by the SRC. The comments can be seen using the link below.

NERC Link:

[Sabotage and Disturbance Reporting](#)

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CIP-005-4 - Cyber Security — Electronic Security Perimeter(s)

Purpose:

Draft 2 of expedited revisions to CIP-005-3.

Current Standard:

CIP-005-3 was approved by the NERC BOT on December 16, 2009.

Proposed Standard:

The purpose of these expedited revisions to CIP-005 is to add a requirement to identify the controls an entity must have in place before it grants remote access to Critical Cyber Assets within its Electronic Security Perimeters. This new requirement closes an identified gap in the scope of requirements aimed at protecting critical cyber assets from unauthorized access.

Applicability:

Reliability Coordinator, Balancing Authority, Interchange Authority, Transmission Service Provider, Transmission Owner, Transmission Operator, Generator Owner, Generator Operator, Load Serving Entity, NERC, Regional Entity

Current Status:

CIP-005-4 was posted for comment and ballot until April 28. The AESO cast an affirmative ballot and commented. The standard did not receive ballot body approval and will go back to the standard drafting team. Full ballot results and the AESO comments can be seen using the link below.

NERC Link:

[CIP-005-4](#)

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FAC-008-3 – Facility Ratings

Purpose:

Draft 1 Supplemental SAR posted for comment

Current Standard:

There were two Facility Ratings Standards, FAC-008-1 and FAC-009-1, being modified to address concerns raised by FERC and industry stakeholders. FAC-008-2 was approved by the NERC ballot body after concerns with one of the requirements, R7, were addressed. However FERC has not approved the standard.

Proposed Standard:

The revisions to these two standards will result in a single standard (FAC-008-2 — Facility Ratings) that is responsive to the recommended changes identified in the Standard Review Guidelines attached to this SAR and to two of the three applicable FERC directives in Order 693.

The proposed changes to FAC-008-1 and FAC-009-1 have already been through stakeholder review and reached consensus in 2008 on all requirements except Requirement R7, developed to meet the FERC directive in Order 693 that required identification of the most limiting component of a facility and the theoretical increase in rating if the limitation were removed. Stakeholders indicated that Requirement R7 did not have a reliability-related benefit, and voted against the inclusion of a requirement to meet this directive.

The sole focus of this supplemental SAR and proposed revisions to FAC-008-2 – Facility Ratings is to address a directive from Order 693 that is related to FAC-008-1 and was not addressed in the development of FAC-008-2. NERC is required to file a version of FAC-008 that addresses all directives from Order 693 related to FAC-008 by June 15, 2011.

Applicability:

Transmission Owners, Generation Owners

Current Status:

The standard was posted for comment and then ballot until May 2. The AESO cast an affirmative ballot, but did not submit comments. The standard did not receive ballot body approval.

NERC Link:

[Facility Ratings](#)

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PRC-005-2 - Protection System Maintenance

Purpose:

Draft 4 of PRC-005-2, posted for comment and ballot.

Current Standard:

On March 18, 2010 FERC issued Order 733 which approved Reliability Standard PRC-023-1 but also directed NERC to develop certain modifications to the PRC-023-1 standard through its Reliability Standards development process.

Proposed Standard:

The proposed PRC-005-2 – Protection System Maintenance standard addresses FERC directives from FERC Orders 693 and 733, as well as issues identified by stakeholders. In accordance with the FERC directives, this draft standard establishes requirements for a time-based maintenance program, where all relevant devices are maintained according to prescribed maximum intervals. It further establishes requirements for a condition-based maintenance program, where the hands-on maintenance intervals are adjusted to reflect the known and reported condition of the relevant devices. For a performance-based maintenance program, it ascertains where the hands-on maintenance intervals are adjusted to reflect the historical performance of the relevant devices.

Applicability:

Transmission Owners, Generator Owners, Distribution Providers

Current Status:

PRC-005-2 is posted for comment and ballot until May 12.

NERC Link:

[Protection System Maintenance and Testing](#)

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TPL-001-2 - Transmission System Planning Performance Requirements

Purpose:

Draft 7, posted for comment.

Current Standards:

There are currently 6 Version 0 TPL standards dealing with transmission system planning performance requirements: TPL-001-0 through TPL-006-0.

Proposed Standard:

TPL-001-1 is designed to be a single, comprehensive, and coordinated standard that merges the requirements of four existing standards: TPL-001-0, TPL-002-0, TPL-003-0, and TPL-004-0. The proposed standard includes several new definitions.

The purpose of the proposed standard is to establish transmission system planning performance requirements within the planning horizon to develop a bulk electric system that will operate reliably over a broad spectrum of system conditions and following a wide range of probable contingencies. The project includes updating and consolidating the following standards:

- TPL-001-0 — System Performance under Normal Conditions
- TPL-002-0 — System Performance Following Loss of a Single BES Element
- TPL-003-0 — System Performance Following Loss of Two or More BES Elements
- TPL-004-0 — System Performance Following Extreme BES Events
- TPL-005-0 — Regional and Interregional Self-Assessment Reliability Reports
- TPL-006-0 — Data from the Regional Reliability Organization Needed to Assess Reliability

This part of the project addresses TPL-001-0 through TPL-004-0. TPL-005 and TPL-006 will be addressed later in the project.

Applicability:

Transmission Planner, Planning Coordinator

Current Status:

The standard is posted for comment and ballot until May 31.

NERC Link:

[Assess Transmission and Future Needs](#)

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TOP-001 to 003 – Real-Time Operations

Purpose:

Draft 5 of Revised Standards.

Current Standards:

The current standards are TOP-001-1, TOP-002-2, TOP-003-0, TOP-004-1, TOP-005-2, TOP-006-1, TOP-007-0, TOP-008-1 and PER-001-0.

Proposed Standards:

The plan is to consolidate the standards into TOP-001-2, TOP-002-3, TOP-003-1 and TOP-004-2.

TOP-005-2, TOP-006-1, TOP-007-0, TOP-008-1 and PER-001-0 will be retired.

The new standards will eliminate redundancy in the Transmission Operations (TOP) family of standards. As part of this process, the drafting team has made an effort to reorganize the standards and requirements in a more logical manner.

Applicability:

Transmission Operator, Transmission Owner, Balancing Authority, Generator Owner, Generator Operator, Interchange Authority, Load-Serving Entity, Distribution Provider

Current Status:

The proposed standards are posted for comment until Jun 9. The opportunity to join the ballot pool ends on May 25, which will be followed by the ballot period, ending on June 9.

NERC Link:

[Real-Time Operations](#)

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WECC-0083 BAL-002-WECC-1 – Contingency Reserves

Purpose:

Draft 2 of the remanded standard, posted for comment.

Current Standard:

The current standard is BAL-STD-002-1, which was NERC BOT approved in October, 2008.

Proposed Standard:

The standard will ensure Contingency Reserve is available for the reliable operation of the interconnected power system. Adequate generating capacity must be available at all times to maintain scheduled frequency, and avoid loss of firm load following transmission or generation contingencies. This generating capacity is necessary to replace generating capacity and energy lost due to forced outages of generation or transmission equipment.

Applicability:

Balancing Authorities, Reserve Sharing Group

Current Status:

Draft 2 of the revised standard was posted for comment until April 11. The AESO submitted comments which can be seen using the link below. The final version of the standard for OC ballot is now posted at the link below.

WECC Link:

[Contingency Reserves](#)

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WECC-0074 MOD-(11 and 13)-WECC-CRT-1 - Steady State and Dynamic Data Criterion

Purpose:

Draft 2 Criterion, posted for comment.

Current Criterion:

There is a new criterion.

Proposed Criterion:

The criterion is being developed to coordinate steady-state and dynamic data requirements and reporting procedures used for modeling and analysis of the steady-state and dynamic behavior of the Western Interconnection. This Regional Criterion was developed pursuant to North American Electric Reliability Corporation (NERC) Reliability Standard MOD-11-0 and MOD-13-1. Violation of this criterion may result in a violation of NERC Reliability Standards MOD-11-0 and/or MOD-13-1 as well as any of the NERC Standards that are incorporated by reference into MOD-11-0 and MOD-13-1. Violation of NERC Reliability Standard may result in financial penalties imposed by NERC.

Applicability:

Transmission Owner, Transmission Planner, Generator Owner, Resource Planner, Reliability Assurer

Current Status:

The criterion was posted for comment until April 22. The AESO did not comment.

WECC Link:

[Steady State and Dynamic Data](#)

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WECC-0075 INT-019-WECC-CRT-2- After-the-Fact Tagging Protocol

Purpose:

Draft 3 Guideline or Criterion, posted for comment.

Current Criterion:

There is a new guideline or criterion.

Proposed Criterion:

The guideline or criterion is being developed to establish the criteria for the creation and utilization of After-the-Fact (ATF) e-Tags for scheduled interchange between Balancing Authorities within the WECC excluding Dynamic and Pseudo-Tie transaction type e-Tags and e-Tags for automatic reserve sharing.

Applicability:

Balancing Authorities, Transmission Service Providers, Purchasing and Selling Entities

Current Status:

The criterion was posted for comment until April 27. The AESO did not comment.

WECC Link:

[ATF Tagging](#)

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WECC-0065
PRC-006-WECC-CRT-01 - Under Frequency Load Shedding

Purpose:

Version 2 Criterion, posted for comment.

Current Criterion:

This is a new regional criterion

Proposed Criterion:

The proposed criterion is meant to document the WECC Off-Nominal Frequency Load Shedding Plan (Coordinated Plan), and to assure consistent and coordinated requirements for the Coordinated Plan among all WECC applicable entities.

Applicability:

Planning Coordinator, Balancing Authority, UFLS Entities, Transmission Owner, Distribution Provider, Generator Owner, Transmission Operator, Reliability Assurer

Current Status:

The criterion is posted for comment until May 6.

WECC Link:

[UFLS](#)

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WECC-0071
TPL-001-WECC-CRT-2 – System Performance Criteria

Purpose:

Draft 1 of the criterion, posted for comment.

Current Criterion:

This is a new regional criterion

Proposed Criterion:

The purpose is to revise the current TPL – (001 thru 004) – WECC – 1 – CR - System Performance Criteria requirement WRS1.1 to permit the more efficient use of rights-of-way while promoting the use of separate towers instead of multi-circuit towers and maintaining an acceptable level of reliability for the Western Interconnection. The use of separate towers is preferred to multi-circuit towers.

Applicability:

Planning Authority, Transmission Planner

Current Status:

Draft 1 of the criterion is posted for comment until May 9.

WECC Link:

[System Performance Criteria](#)

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WECC-0068 BAL-004-WECC-2 – Automatic Time Error Correction

Purpose:

Draft 1 of the revised standard, posted for comment.

Current Standard:

The current standard is BAL—004-WECC-1, which was NERC BOT approved in March, 2008.

Proposed Standard:

The revised standard is being written to implement clarifying modifications as directed by FERC and to make additional changes as necessary to clarify the existing standard requirements.

As part of the revision WECC is seeking a variance to NERC standard BAL-001-0.1a.

Applicability:

Balancing Authorities

Current Status:

Draft 1 of the revised standard is posted for comment until June 1.

WECC Link:

[ATEC](#)

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WECC-0076 to 0082 Interchange Rewrite Project

Purpose:

Draft 1 of the criterion, posted for comment.

Current Criterion:

The current regional Criterion are INT-BPS-003, 009, 010, 011, 014, 015 and 016, which were approved in 2007.

Proposed Criterion:

As part of an Operating Committee project spearheaded by the Interchange Scheduling and Accounting Subcommittee (ISAS), the ISAS is facilitating a review of INT criteria 1-17 in an effort to conform the language of those criteria to current drafting conventions and formats.

This team did not address INTs 1, 2, 5, 6, 7, 8, (12 and 13 do not exist) as they have been assigned to other teams.

Applicability:

Balancing Authority, Purchasing-Selling Entity, Transmission Service Provider

Current Status:

Draft 1 of the criterion posted for comment until June 9.

WECC Link:

[Interchange Criterion](#)

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