



## Activities Related to NERC/WECC Reliability Standards Report to March 17, 2008

Click on a Standard Activity to get information on recent developments.

Developer	Standard Activities	Name/Description	Purpose	Status	Due Date
NERC	<a href="#">PRC-023-1</a>	Transmission Relay Loadability	Revised Standard	Recirculation ballot	Approved
NERC	<a href="#">PER-003-0</a>	Certifying System Operators	Draft SAR Version 2	Comment period closed	NERC Responses pending
NERC	<a href="#">EOP-005-2</a> <a href="#">EOP-006-2</a>	System Restoration and Blackstart Resources - Operations	Revised Standard, Version 2	Comment period closed	NERC Responses pending
NERC	<a href="#">All Standards</a>	Violation Severity Levels	Revised Standard	Recirculation ballot completed	8 of 9 Approved
NERC	<a href="#">MOD-001-1</a> <a href="#">004-1</a> <a href="#">008-1</a> <a href="#">028-1</a> <a href="#">029-1</a> <a href="#">030-1</a>	ATC/TTC and CBM/TRM	Revised Standard - SAR	Ballot period ended	All 6 Standards not approved
NERC	<a href="#">FAC-010-1</a> <a href="#">FAC-011-1</a>	Facility Ratings	Draft SAR Version 1	Comment period closed	NERC Responses pending
NERC	<a href="#">INT-005-3</a> <a href="#">INT-006-3</a> <a href="#">INT-008-3</a>	Coordinate Interchange Timing Tables	SAR	Comment period closed	NERC Responses pending
NERC	<a href="#">FAC-011-1</a>	Credible Multiple Contingencies	Draft SAR Version 1	Comment period closed	NERC Responses pending
NERC	<a href="#">EOP-008-1</a>	Loss of Control Center Functionality	Draft Standard Version 1	Comment period closed	NERC Responses pending
NERC	<a href="#">IRO-006-4</a>	Reliability Coordination - TLR	Reference Manual	Comment period	Mar. 29.2008
NERC	<a href="#">PER-005-1</a>	System Personnel Training	3 <sup>rd</sup> Draft Proposed Standard	Comment period	Apr. 9, 2008

Developer	Standard Activities	Name/Description	Purpose	Status	Due Date
WECC	<a href="#">FAC-501-WECC-1</a>	Transmission Maintenance	2 <sup>nd</sup> Draft Revised Standard	Approved by Operating Committee	BOD approval Apr. 16, 2008
WECC	<a href="#">VAR-002-WECC-1</a>	Automatic Voltage Regulators	2 <sup>nd</sup> Draft Revised Standard	Approved by Operating Committee	BOD approval Apr. 16, 2008
WECC	<a href="#">VAR-501-WECC-1</a>	Power System Stabilizer	2 <sup>nd</sup> Draft Revised Standard	Approved by Operating Committee	BOD approval Apr. 16, 2008
WECC	<a href="#">BAL-002-WECC-1</a>	Contingency Reserves	2 <sup>nd</sup> Draft Revised Standard	Approved by Operating Committee	BOD approval Apr. 16, 2008
WECC	<a href="#">TOP-007-WECC-1</a>	System Operating Limits	2 <sup>nd</sup> Draft Revised Standard	Approved by Operating Committee	BOD approval Apr. 16, 2008
WECC	<a href="#">IRO-006-WECC-1</a>	Qualified Transfer Path Unscheduled Flow Relief	2 <sup>nd</sup> Draft Revised Standard	Approved by Operating Committee	BOD approval Apr. 16, 2008
WECC	<a href="#">PRC-004-WECC-1</a>	Protection System and Remedial Action Scheme Misoperation	2 <sup>nd</sup> Draft Revised Standard	Approved by Operating Committee	BOD approval Apr. 16, 2008
WECC	<a href="#">INT-BPS-001-2</a>	Tagging Protocols	Draft Standard	Approved by Operating Committee	BOD approval Apr. 16, 2008
WECC	<a href="#">INT-BPS-009-1</a>	Capacity Tag Functionality	Draft Standard	Approved by Operating Committee	BOD approval Apr. 16, 2008
WECC	<a href="#">INT-BPS-011-1</a>	Ten Minute Recallable E-Tag Functionality For Reserves	Draft Standard	Approved by Operating Committee	BOD approval Apr. 16, 2008
WECC	<a href="#">PRC-024-WECC-1-CR</a>	Generator Low Voltage Ride-Through Criterion	Draft Standard	Posted for comment	Apr. 18, 2008

NERC Standards Development page is on-line at:

[http://www.nerc.com/~filez/standards/Reliability\\_Standards\\_Under\\_Development.html](http://www.nerc.com/~filez/standards/Reliability_Standards_Under_Development.html)

WECC Standards Development page is on-line at:

<http://www.wecc.biz/index.php?module=pnForum&func=viewforum&forum=1>

## **NERC Reliability Standards**

### **PRC-023-1 - Transmission Relay Loadability**

*Purpose:* Revisions to current standard

*Current Standard:*

This standard was developed to address the cascading transmission outages that occurred in the August 2003 blackout when backup distance and phase relays operated on high loading and low voltage without electrical faults on the protected lines. This is the so-called 'zone 3 relay' issue, which has been expanded to address other protection devices subject to unintended operation during extreme system conditions.

*Proposed Standard:*

The proposed standard establishes minimum loadability criteria for these relays to minimize the chance of unnecessary line trips during a major system disturbance.

*Applicability:* Transmission Owners, Generator Owners, Distribution Providers, Planning Coordinators

*Current Status:*

10 day recirculation ballot ended February 9, 2008 and was approved. The AESO cast an affirmative ballot.

### **PER-003-0 - Certifying System Operators**

*Purpose:* Draft Standard Authorization Request (SAR) Version 2. Comment period ended.

*Current Standard:*

Project 2007-04 — Certifying System Operators proposes modifying PER-003-0 — Operating Personnel Credentials to address relevant directives from FERC Order 693, to address Version 0 comments from stakeholders, and to incorporate the content, structure, and language to bring the standard into conformance with the Reliability Standards Development Procedure and the ERO Sanctions Guidelines.

*Applicability:* Transmission Operators, Balancing Authorities, Reliability Coordinators.

*Current Status:*

Comment period ended January 31, 2008. All comments are posted on the NERC site at: [ftp://www.nerc.com/pub/sys/all\\_updl/standards/sar/Comments\\_SAR\\_PER-003\\_Project2007-04\\_31Jan07.pdf](ftp://www.nerc.com/pub/sys/all_updl/standards/sar/Comments_SAR_PER-003_Project2007-04_31Jan07.pdf). The AESO posted comments as part of the ISO/RTO Council (IRC). NERC response to comments is pending.

### **EOP-005-2 — System Restoration and Blackstart Resources — Operations and EOP-006-2 — System Restoration and Blackstart Resources — Coordination**

*Purpose:* Standard Version 2, comment period ended.

*Current Standard:*

EOP-005 — System Restoration Plans

EOP-006 — Reliability Coordination - System Restoration

EOP-007 — Establish, Maintain, and Document a Regional Blackstart Capability Plan

EOP-009 — Documentation of Blackstart Generating Unit Test Results

EOP-005 is a Version 0 standard that was modified to add some requirements that were translated from the Phase III & IV measures; EOP-006, EOP-007, and EOP-009 are Version 0 standards. As the electric reliability organization begins enforcing compliance with reliability standards under Section 215 of the Federal Power Act in the United States and applicable statutes and regulations in Canada, the industry needs a set of clear, measurable, and enforceable reliability standards. The Version 0 standards and the translation of Phase III & IV planning measures, while a good foundation, were translated from historical operating and planning policies and guides that were appropriate in an era of voluntary compliance. The Version 0 standards, Phase III & IV standards, and recent updates were put in place as a temporary starting point to start up the electric reliability organization and begin enforcement of mandatory standards. However, it is important to update the standards in a timely manner, incorporating improvements to make the standards more suitable for enforcement and to capture prior recommendations that were deferred during the Version 0 and Phase III & IV translations.

*Proposed Standards:*

The revisions will

1. Provide an adequate level of reliability for the North American bulk power systems - the standards are complete and the requirements are set at an appropriate level to ensure reliability.
2. Ensure they are enforceable as mandatory reliability standards with financial penalties - the applicability to bulk power system owners, operators, and users, and as appropriate particular classes of facilities, are clearly defined; the purpose, requirements, and measures are results-focused and unambiguous; the consequences of violating the requirements are clear.
3. Incorporate other general improvements described in the standards development work plan. (See attachments)
4. Consider stakeholder comments received during the initial development of the standards and other comments received from ERO regulatory authorities, as noted in the attached review sheets.
5. Satisfy the standards procedure requirement for five-year review of the standards.

In addition, FERC indicated it will not propose to accept or remand EOP-007-0, as it applies only to regional reliability organizations.

*Applicability:* Transmission Operators, Balancing Authorities.

*Current Status:*

Comment period ended February 5, 2008. All comments are posted on the NERC site at: [ftp://www.nerc.com/pub/sys/all\\_updl/standards/sar/Comments\\_System\\_Restoration\\_Blackstart\\_05Feb08.pdf](ftp://www.nerc.com/pub/sys/all_updl/standards/sar/Comments_System_Restoration_Blackstart_05Feb08.pdf). The AESO posted comments as part of the ISO/RTO Council (IRC). NERC response to comments is pending.

## **Violation Severity Levels – All Standards**

*Purpose:* Recirculation ballot complete.

*Current Standard:*

The Standards Committee appointed the Violation Severity Level Drafting Team (VSL DT) to draft guidelines for the development of VSLs and to coordinate the development of VSLs with industry stakeholders. The VSL DT posted the draft VSL Development Guidelines Criteria (VSL Guidelines) and a proposed set of VSLs for the 83-FERC-approved standards and the NUC-001-1 reliability standard for comment.

*Proposed Standard:*

The VSL DT made conforming changes to the VSL Guidelines and to more than half of the VSLs but does not have time to collect additional feedback on the acceptability of the modifications before proceeding to ballot. (Note that the VSLDT is finalizing the production of the revised VSL Development Guidelines and will post the revised document no later than January 4, 2008)

There are 739 sets of VSLs (each set is associated with a requirement or sub-requirement) and these sets of VSLs have been grouped into nine ‘ballots.’ Each ballot has its own ballot pool.

*Applicability:* All entities

*Current Status:*

Recirculation Ballot ended February 19, 2008. All but one of the 9 sets of VSLs were approved. The EOP VSLs were not approved. The AESO voted to abstain, as the VSLs do not apply in Alberta.

## **MOD-001-1, 004-1, 008-1, 028-1, 029-1 & 030-1 - ATC/TTC and CBM/TRM**

*Purpose:* Standard Authorization Request (SAR) to revise the Standards.

*Current Standard:*

- MOD-001 — Available Transfer Capability — An “umbrella” standard requires the selection of a methodology, the updating of values, and the sharing of procedures and data.
- MOD-004 — Capacity Benefit Margin — A standard that describes the requesting, calculation, and use of CBM.
- MOD-008 — Transmission Reliability Margin — A standard that describes the calculation and use of TRM.
- MOD-029 — Rated System Path Methodology — A standard that describes the calculation of TTC and ATC, as performed primarily in the Western Interconnection.
- MOD-028 and 030 are methodologies not used in the WECC.

*Proposed Standard:*

This set of standards is aimed at ensuring the consistent and transparent calculation, verification, and use of CBM, TRM, TTC, AFC, and ATC. The standards have been revised based on stakeholder comments, coordination with NAESB, and the directives in the FERC Orders 693 and 890.

*Applicability:* Transmission Service Provider, Transmission Operator, Load-Serving Entity, Planned Resource Sharing Group, Balancing Authority, Transmission Planners.

*Current Status:*

The ballot period is complete and none of the 6 Standards were approved. The NERC Drafting Team will decide on how they want to proceed. The AESO cast ballots against 001, abstained from 004 and in favour of 008. There was a glitch in the ballot pools for 028, 029 & 030 and we were unable to cast a ballot. We were planning on voting in favour of 029, which is used in the WECC and abstaining from 028 and 030.

**FAC-010-1- System Operating Limits Methodology for the Planning Horizon and FAC-011-1 - System Operating Limits Methodology for the Operations Horizon**

*Purpose:* Draft SAR, Version 1, comment period closed.

*Current Standard:*

FERC has requested that some terms used in the standards be further clarified.

*Proposed Standard:*

The purpose of revising these standards is a result of:

FERC Order 705, the Commission directed NERC to make the following modifications:

- FAC-010-1 Requirement R2.3 — clarify what is meant by the term, “consequential load”
- FAC-011-1 Requirement R2.3 — clarify what is meant by the term, “consequential load”
- FAC-011-1 Requirement R2.3.2 — eliminate the phrase, “load greater than studied”

In addition, the Commission remanded the definition of “Cascading Outage” and this term should be withdrawn from the NERC Glossary of Reliability Terms.

*Applicability:* Planning Authority, Reliability Coordinator

*Current Status:*

Comment period ended Mar. 8, 2008. All comments are posted on the NERC site at: [ftp://www.nerc.com/pub/sys/all\\_updl/standards/sar/Comments\\_Project2008-04\\_FAC-010-FAC-011\\_07Mar08.pdf](ftp://www.nerc.com/pub/sys/all_updl/standards/sar/Comments_Project2008-04_FAC-010-FAC-011_07Mar08.pdf). The AESO posted comments as part of the ISO/RTO Council (IRC). NERC response to comments is pending.

**INT-005-3, 006-3 and 008-3 – Coordinate Interchange Timing Tables**

*Purpose:* SAR posted for comment.

*Current Standard:*

The Coordinate Interchange Timing Table Standard Drafting Team made additional modifications to the timing tables in response to stakeholder comments and made a minor clarification to INT-006-2, Requirement R1.

The drafting team is posting the revised standards INT-005, INT-006, and INT-008 for additional modifications to the timing tables beginning January 24, 2008.

*Proposed Standard:*

An Urgent Action SAR to modify the Timing Table in three of the Coordinate Interchange standards (INT-005, INT-006, and INT-008) was approved by its ballot pool on March 30, 2007. The Urgent Action SAR modified the timing table so that the reliability assessment period for

**WECC** was lengthened from 5 minutes to 10 minutes for e-tags submitted less than 1 hour and greater than 20 minutes prior to ramp start. Under the Reliability Standards Development Procedure, a change made to a standard with the Urgent Action process is not "permanent" — an urgent action change to a standard expires unless that change is vetted through the full standards development process.

The new SAR proposes to make the above changes to the timing table permanent, and also proposes to bring the timing table into alignment with the categories (On-time, Late, After-the-fact) used in the latest E-Tag Specification with respect to receipt of an Arranged Interchange.

*Applicability:* Interchange Authority, Balancing Authority, Transmission Service Provider

*Current Status:*

Was posted for comment until Mar 8, 2008. The comments have not yet been posted on the NERC site. The AESO posted comments as part of the ISO/RTO Council (IRC).

### **FAC-011-1 – System Operating Limits Methodology for the Operations Horizon**

*Purpose:* Draft SAR, Version 1, posted for comment.

*Current Standard:*

In 2007, stakeholders approved a set of Urgent Action modifications to the Timing Tables in INT-005-1, INT-006-1, and INT-008-1.

The modifications lengthened the reliability assessment period for **WECC** from 5 minutes to 10 minutes for e-tags submitted less than 1 hour and greater than 20 minutes prior to ramp start. Under the Reliability Standards Development Procedure, these Urgent Action modifications will expire unless they are replaced with permanent changes that go through the full standards development procedure.

*Proposed Standard:*

The Coordinate Interchange Timing Table Standard Drafting Team made additional modifications to the timing tables in response to stakeholder comments and made a minor clarification to INT-006-2, Requirement R1. The revised standards have been posted for comment.

*Applicability:* Reliability Coordinator, Planning Coordinator, Transmission Planner, Transmission Operator

*Current Status:*

Comment period ended Feb. 22, 2008. All comments are posted on the NERC site at: [ftp://www.nerc.com/pub/sys/all\\_updl/standards/sar/Comments\\_Project2008-05\\_Credible\\_Multiple\\_Contingencies\\_22Feb08.pdf](ftp://www.nerc.com/pub/sys/all_updl/standards/sar/Comments_Project2008-05_Credible_Multiple_Contingencies_22Feb08.pdf). The AESO did not comment on this version of the Standard. NERC response to comments is pending.

### **EOP-008-1 – Loss of Control Center Functionality**

*Purpose:* Draft Standard, Version 1

*Current Standard:*

The Version 0 Standard has 1 requirement with 8 sub-requirements.

*Proposed Standard:*

The Version 1 Standard has 13 requirements plus sub-requirements. The revised standard will:

- Provide an adequate level of reliability for the North American bulk power systems — the standards are complete and the requirements are set at an appropriate level to ensure reliability.
- Ensure they are enforceable as mandatory reliability standards with financial penalties — the applicability to bulk power system owners, operators, and users, and as appropriate particular classes of facilities, is clearly defined; the purpose, requirements, and measures are results-focused and unambiguous; the consequences of violating the requirements are clear.
- Incorporate other general improvements described in the standards development work plan (see attachments).
- Consider stakeholder comments received during the initial development of the standards and other comments received from ERO regulatory authorities as noted in the attached review sheets.
- Satisfy the standards procedure requirement for five-year review of the standards.

*Applicability:* Reliability Coordinator, Transmission Operator, Balancing Authority

*Current Status:*

Comment period ended Mar. 7, 2008. All comments are posted on the NERC site at: [ftp://www.nerc.com/pub/sys/all\\_updl/standards/sar/Comments\\_Project2006-04\\_Backup\\_Facilities\\_07Mar08.pdf](ftp://www.nerc.com/pub/sys/all_updl/standards/sar/Comments_Project2006-04_Backup_Facilities_07Mar08.pdf). The AESO posted comments as part of the ISO/RTO Council (IRC). NERC response to comments is pending.

**IRO-006-4 - Reliability Coordination — Transmission Loading Relief (TLR)  
Reference Manual for the Eastern Interconnection**

*Purpose:* Reference Manual posted for comment until Mar. 29, 2008.

*Current Standard:*

Reliability Standard IRO-006-4 provides interconnection-wide transmission loading relief (TLR) procedures that can be used to prevent or manage potential or actual SOL and IROL violations. The requirements in IRO-006-4 only address the reliability-related aspects of transmission loading relief — the business-related aspects of transmission loading relief are addressed in NAESB's TLR Business Practices for the Eastern Interconnection.

*Proposed Standard:*

The Joint NERC/NAESB System Operator's TLR Reference Manual provides a single reference that consolidates the TLR requirements of the NERC reliability standard and the NAESB business practice into a single reference document.

NERC and NAESB are soliciting comments on the manual in an effort to ensure it meets industry needs and is as complete and accurate as possible. The intent is to submit the final version of the manual to the Standards Committee for its approval. If approved by the Standards Committee, the reference manual will be posted as a "Supporting Document," with a link to reliability standard IRO-006-4 — Reliability Coordination – Transmission Loading Relief.

*Comment Form:*

Available on line at: [ftp://www.nerc.com/pub/sys/all\\_updl/standards/sar/Comment\\_Form\\_NERC-NAESB\\_TLR\\_Manual\\_08Feb08.doc](ftp://www.nerc.com/pub/sys/all_updl/standards/sar/Comment_Form_NERC-NAESB_TLR_Manual_08Feb08.doc)

*Applicability:* Eastern Reliability Coordinators, Transmission Operators and Balancing Authorities

*Current Status:* Posted for comment until Mar. 29, 2008.

## **PER-005-1 – System Personnel Training**

*Purpose:* Proposed Standard posted for comment.

*Current Standard:*  
PER-005-1 will replace PER-002-0 and parts of PER-004-1.

*Proposed Standard:*  
A training standard is required to set the minimum acceptable requirements for the development, implementation and maintenance of initial and continuing System Personnel Training programs. This standard is needed to help insure that system personnel throughout the industry are provided with an adequate amount of training in order to promote the reliability and adequacy of the North American Interconnections and their bulk electrical systems.

*Comment Form:*  
Available on line at:  
<https://www.nerc.net/nercsurvey/Survey.aspx?s=6863d9b1e9c745ccbfbf8e8681f26d97>

*Applicability:* Reliability Coordinator, Balancing Authority and Transmission Operator.

*Current Status:* Posted for comment until April 9, 2008.

## **WECC Reliability Standards**

### **FAC-501-WECC-1 – Transmission Maintenance**

*Purpose:* Second Draft of Standard, comment period complete.

*Current Standard:*  
PRC-STD-005-1

*Proposed Standard:*  
The purpose of this standard is to create a permanent replacement standard for PRC-STD-005-1. In response to comments, the drafting team changed name of the standard from PRC-005-WECC-1 to FAC-501-WECC-1 to better align with the NERC numbering system. FAC-501-WECC-1 is designed to implement the directives of FERC and recommendations of NERC when PRC-STD-005-1 was approved as a NERC reliability standard. This is the second posting of this standard for comment.

*Applicability:* Transmission Owners

*Current Status:*  
The WECC Operating Committee approved the new Standard on March 6. The standard will go to the WECC Board of Directors for approval at their April 16 meeting.

*AESO Submitted Comments:*

We would like to see the term "Compliance Enforcement Authority", in section D 1.1, defined within the standard. The acronym used in D 1.1 (CEA) is defined on the WECC website in the Glossary/Acronyms link as the Canadian Electricity Association.

Pending clarification of the term noted above the AESO has no concerns on the requirements but would like to emphasize that although Path 1 is included in the list, the standard is not enforceable in Alberta until it has received Regulatory Approval here.

**VAR-002-WECC-1 – Automatic Voltage Regulators**

*Purpose:* Second Draft of Standard, comment period complete.

*Current Standard:*

VAR-STD-002a-1

*Proposed Standard:*

The purpose of this standard is to create a permanent replacement standard for VAR-STD-002a-1. VAR-002-WECC-1 is designed to implement the directives of FERC and recommendations of NERC when VAR-STD-002a-1 was approved as a NERC reliability standard.

In the Western Interconnection, System Operating Limits for transmission paths in the Bulk Electric System assume that Automatic Voltage Regulators are in service to control voltage to support the transfer capability. The requirements in VAR-002-WECC-1 are to ensure that the generator provides the proper voltage support when generation and transmission outages occur.

*Applicability:* Generator Operators, Transmission Operators

Standard only applies to synchronous generators and synchronous condensers that are connected to the interconnected transmission system.

*Current Status:*

The WECC Operating Committee approved the new Standard on March 6. The standard will go to the WECC Board of Directors for approval at their April 16 meeting.

*AESO Submitted Comments:*

The AESO currently reports AVR data to the WECC on behalf of all Generator Operators in Alberta, instead of each GOP reporting individually.

It may be worthwhile to review how and if R1.1 fit in the overall R1 requirement together with the other listed "exceptions". It would seem logical, and R1 does seem to imply that, if a generator was operated for less than 5% of time in a calendar quarter, then the generator (versus the time period when AVR was not in service) is to be excluded from the 98% requirement. However, the wording in R1 doesn't quite say that literally. Please review and revise as required.

**VAR-501-WECC-1 – Power System Stabilizer**

*Purpose:* Second Draft of Standard, comment period complete.

*Current Standard:*  
VAR-STD-002b-1

*Proposed Standard:*

The purpose of this standard is to create a permanent replacement standard for VAR-STD-002b-1. VAR-501-WECC-1 is designed to implement the directives of FERC and recommendations of NERC when VAR-STD-002b-1 was approved as a NERC reliability standard.

In the Western Interconnection, System Operating Limits for transmission paths in the Bulk Electric System assume that Power System Stabilizers are in service to enhance system damping. The requirements in VAR-501-WECC-1 are to ensure that the generator provides the proper damping to maintain system stability when generation and transmission outages occur.

*Applicability:* Generator Operators

*Current Status:*

The WECC Operating Committee approved the new Standard on March 6. The standard will go to the WECC Board of Directors for approval at their April 16 meeting.

*AESO Submitted Comments:*

The AESO currently reports PSS data to the WECC on behalf of all Generator Operators in Alberta, instead of each GOP reporting individually.

It may be worthwhile to review how and if R1.1 fit in the overall R1 requirement together with the other listed "exceptions". It would seem logical, and R1 does seem to imply that, if a generator was operated for less than 5% of time in a calendar quarter, then the generator (versus the time period when PSS was not in service) is to be excluded from the 98% requirement. However, the wording in R1 doesn't quite say that literally. Please review and revise as required.

## **BAL-002-WECC-1 - Contingency Reserves**

*Purpose:* Second Draft of Standard, comment period complete..

*Current Standard:*  
BAL-STD-002-0

*Proposed Standard:*

The purpose of this standard is to create a permanent replacement standard for BAL-STD-002-0. BAL-002-WECC-1 is designed to implement the directives of FERC and recommendations of NERC when BAL-STD-002-0 was approved as a NERC reliability standard. The drafting team implemented in the standard additional refinements to address concerns as explained in the document titled, "WECC Standard BAL-002-WECC-1 Contingency Reserves." To assist in understanding the refinements made to the standard, the drafting team has developed a document that compares BAL-002-WECC-1, the permanent replacement standard, with the existing BAL-STD-002-0.

*Applicability:* Balancing Authority, Reserve Sharing Group

*Current Status:*

The WECC Operating Committee approved the new Standard on March 6. The standard will go to the WECC Board of Directors for approval at their April 16 meeting.

*AESO Submitted Comments:*

It is not clear in R3 whether some of the listed type of services can be used to meet the spinning reserve requirement in R2. For example, if spinning reserve is contracted from an external source to the BA area, it should contribute to the meeting of the spinning requirement in R2. And, if an energy or capacity emergency alert has been issued for the BA, then load can be used to meet the CR requirement in R1 as well as the spinning reserve requirement in R2.

**TOP-007-WECC-1 - System Operating Limits**

*Purpose:* Second Draft of Standard, comment period complete.

*Current Standard:*  
TOP-STD-007-0

*Proposed Standard:*

The purpose of this standard is to create a permanent replacement standard for TOP-STD-007-0. TOP-007-WECC-1 is designed to implement the directives of FERC and recommendations of NERC when TOP-STD-007-0 was approved as a NERC reliability standard.

This draft standard incorporates the following refinements to the first draft of TOP-007-WECC-1 in response to comments received during the first comment period that ended November 5, 2007.

Refine R1 to remove the requirement to return a path to within its limit in 20 minute for SOLs based upon Transient Stability and Voltage Stability. Refine R2 to limit the compliance period for the Net Scheduled Interchange to the real-time schedules for the next hour. Change M2 based upon the refinements to R2. Base the violation severity levels for R2 upon magnitude.

*Applicability:* Transmission Operators

*Current Status:*

The WECC Operating Committee approved the new Standard on March 6. The standard will go to the WECC Board of Directors for approval at their April 16 meeting.

*AESO Submitted Comments:*

The AESO is still of the opinion that SOL, by definition, defines how much power can be transferred over a transmission path while meeting system reliability criteria. It is the actual power transfer that should be monitored, not the scheduled power transfer. To apply SOL in a scheduling application does not seem to make sense for the proper application of SOL.

**IRO-006-WECC-1 – Qualified Transfer Path Unscheduled Flow Relief**

*Purpose:* Second Draft of Standard, comment period complete.

*Current Standard:*  
IRO-STD-006-0

*Proposed Standard:*

The purpose of this standard is to create a permanent replacement standard for IRO-STD-006-0. IRO-006-WECC-1 is designed to implement the directives of FERC and recommendations of NERC when IRO-STD-006-0 was approved as a NERC reliability standard. The standard

addresses mitigation of transmission overloads due to unscheduled flow on Qualified Transfer Paths.

*Applicability:* Balancing Authorities, Reliability Coordinators

*Current Status:*

The WECC Operating Committee approved the new Standard on March 6. The standard will go to the WECC Board of Directors for approval at their April 16 meeting.

The AESO did not comment on this standard.

### **PRC-004-WECC-1 – Protection System and Remedial Action Scheme Misoperation**

*Purpose:* Second Draft of Standard, comment period complete.

*Current Standard:*

PRC-STD-001-1 and PRC-STD-003-1

*Proposed Standard:*

The purpose of this standard is to create a permanent replacement standard for PRC-STD-001-1 and PRC-STD-003-1. PRC-004-WECC-1 is designed to implement the directives of FERC and recommendations of NERC when PRC-STD-001-1 and PRC-STD-003-1 were approved as NERC reliability standards. The new standard addresses the following areas:

1. Requirements for investigating operations to check for Misoperations.
2. Mitigation requirements after security-based Misoperations for redundant or non-redundant Protection Systems or Remedial Action Schemes.
3. Mitigation requirements after dependability-based Misoperations that do not adversely affect the reliability of the Bulk Electric System.

Several significant changes were made to PRC-STD-001 and PRC-STD-003 and they are itemized here:

1. PRC-STD-003 was renumbered to PRC-004-WECC-1. This makes both the PRC-004 and the Regional PRC-004-WECC-1 standards applicable to similar entities. PRC-003 is applicable to the RRO.
2. Standard PRC-STD-001 will be retracted because the requirements are covered by other standards per description below:

PRC-STD-001 requirements B-WR1-a,b,c are covered under PRC-001

PRC-STD-001 requirement B-WR1-d is covered in the this standard PRC-004-WECC-1

PRC-STD-001 requirement B-WR1-e is covered under TOP-005-1

*Applicability:* Transmission Owners, Generator Owners, Transmission Operators

*Current Status:*

The WECC Operating Committee approved the new Standard on March 6. The standard will go to the WECC Board of Directors for approval at their April 16 meeting.

*AESO Submitted Comments:*

The reporting schemes for Alberta Transmission Owners and Generation Owners to the WECC are under review in Alberta and future changes may be necessary.

The RAS scheme for Path 1 pertaining to curtailment of generation north of SOK should be reviewed for accuracy.

There seems to be a discrepancy between the wording in R1.1 and M1.1 where one refers to "within 24 hours" and the other "within one business day".

## **INT-BPS-001-2 - Tagging Protocols**

*Purpose:* Draft Standard, comment period complete.

*Current Standard:*

WECC Business Practices #1, #3, #4, #6, #7, #8, and #9 – combined

*Proposed Standard:*

Will identify electronic tagging protocols which are not explicitly addressed in NERC Reliability Standards or NAESB Business Practice Standards, but which are considered necessary for transactions sinking within the Western Interconnection.

*Applicability:* Balancing Authorities, Transmission Service Providers, Purchasing-Selling Entities

*Current Status:*

The WECC Operating Committee approved the new Standard on March 6. The standard will go to the WECC Board of Directors for approval at their April 16 meeting.

*AESO Submitted Comments:*

WR1. - Even though this is not a proposed change, the AESO is concerned that the current wording is too restrictive in defining when an etag may be denied. The AESO applies certain validation tests when determining whether an etag is to be approved or denied. One of these tests is checking whether the PSE is a registered market participant with the AESO, as required by our Market Rules.

WR2.1. - Some clarification in wording may be required to indicate that the Approval Entity, who has denied an etag without proper justification, will arrange for a replacement etag to be created and submitted and communicate with all Approval Entities on the replacement etag.

We also recommend that the effective date for the change be revised to a certain time period (e.g. 1 month, 3 months, 6 months) after the next BOT meeting. It is reasonable to expect that once the BOT approves the proposed changes, a WECC notification will then be posted for the industry stakeholders, and a reasonable time period should be allowed before the standard begins to take effect, rather than on the same day as the BOT meeting.

## **INT-BPS-009-1 - Capacity Tag Functionality**

*Purpose:* Draft Standard, comment period complete.

*Current Standard:*  
None

*Proposed Standard:*

Will define the functionality of a Transaction Type Capacity tag, utilize e-tags as a placeholder for reserve transactions, improve efficiencies in the current e-tagging environment, and increase usage of e-tags as the primary method of notification. A capacity e-tag under this business practice is intended for use with On-Demand Spinning and Non-spinning Obligation/Resources products only.

*Applicability:* Balancing Authorities, Interchange Authority, Transmission Service Providers, Generator Operator, Purchasing-Selling Entities, Load-Serving Entity

*Current Status:*

The WECC Operating Committee approved the new Standard on March 6. The standard will go to the WECC Board of Directors for approval at their April 16 meeting.

*AESO Submitted Comments:*

We recommend that the effective date for the change be revised to a certain time period (e.g. 1 month, 3 months, 6 months) after the next BOT meeting. It is reasonable to expect that once the BOT approves the proposed changes, a WECC notification will then be posted for the industry stakeholders, and a reasonable time period should be allowed before the standard begins to take effect, rather than on the same day as the BOT meeting. The time period should take into account any requirement on tool/IT/system changes and operator training.

### **INT-BPS-011-1 - Ten Minute Recallable E-Tag Functionality For Reserves**

*Purpose:* Draft Standard, comment period complete.

*Current Standard:*  
None

*Proposed Standard:*

Will utilize the e-tag tool as a means to identify 10 Minute Recallable Energy for Reserve products to all associated entities of the transaction and defines the use of 10 Minute Recallable Energy for Reserves as both an energy product and a reserve product.

*Applicability:* Balancing Authorities, Interchange Authority, Transmission Service Providers, Generator Operator, Purchasing-Selling Entities, Generation Providing Entity

*Current Status:*

The WECC Operating Committee approved the new Standard on March 6. The standard will go to the WECC Board of Directors for approval at their April 16 meeting.

*AESO Submitted Comments:*

The Alberta Electric System Operator has no comment on the proposed changes but wishes to indicate that this business practice is not applicable to Alberta as our Market Rules currently do not allow for recallable energy.

## **PRC-024-WECC-1-CR - Generator Low Voltage Ride-Through Criterion**

*Purpose:* Draft Standard, posted for comment.

*Current Standard:*

WECC LVRT Standard, dated June 17, 2005.

*Proposed Standard:*

Will ensure that generators will not trip off-line during specified voltage excursions as a result of improper coordination between generator protective relays and generator voltage regulator controls and limit functions (such coordination will include the generating unit's capabilities).

*Current Status:*

Version one of the Standard has its initial posting for comment until April 18, 2008.

### **Comments/Questions**

If you have any comments or questions about the Reliability Standards listed here or have a comment to submit to NERC or WECC on a Reliability Standard that you would like the AESO to consider, please contact either:

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