

NERC and WECC Standards		Type	Applicability <sup>1</sup>	Related ISO Rules	Stakeholder Consultation	Forward to the AUC	Forecast Effective Date <sup>2</sup>
<b>1. Standards Approved by the AUC</b>							
BES Definition <sup>7</sup>	Bulk Electric System	Revision	ISO/MP		October 2, 2020	October 23, 2020	Refer to the AESO Consolidated Authoritative Document Glossary
EOP-001-AB1-2.1b	Emergency Operations Planning	Retire	ISO/MP		February 27 - March 25, 2020	August 21, 2020	January 1, 2022
EOP-002-AB1-2	Capacity and Energy Emergencies	Retire	ISO/MP		February 27 - March 25, 2020	August 21, 2020	January 1, 2022
EOP-003-AB1-1	Load Shedding Plans	Retire	ISO/MP		February 27 - March 25, 2020	August 21, 2020	January 1, 2022
EOP-011-AB-1	Emergency Operations	New	ISO/MP	Section 305.1 of the ISO rules	February 27 - March 25, 2020	August 21, 2020	January 1, 2022
PRC-006-AB-3	Automatic Underfrequency Load Shedding	New	ISO/MP	OPP 804	February 27 - March 25, 2020	August 21, 2020	January 1, 2022
PRC-009-AB-0	UFLS Performance Following an Underfrequency Event	Retire	ISO		February 27 - March 25, 2020	August 21, 2020	January 1, 2022
PRC-010-2	Undervoltage Load Shedding	Revision	ISO/MP		February 27 - March 25, 2020	August 21, 2020	January 1, 2022
PRC-021-AB1-1	Undervoltage Load Shedding Program Data	Retire	ISO/MP		February 27 - March 25, 2020	August 21, 2020	January 1, 2022
PRC-022-AB-1	Undervoltage Load Shedding Program Performance	Retire	ISO		February 27 - March 25, 2020	August 21, 2020	January 1, 2022
PRC-024-2	Generator Frequency and Voltage Protective Relay Settings	N/A	Possibly N/A	Sections 502.6, 502.16 and 502.15 of the ISO rules	February 27 - March 25, 2020	August 21, 2020	January 1, 2022
PRC-018-AB-1 <sup>7</sup>	Disturbance Monitoring Equipment Installation and Data Reporting	Retire	ISO/MP		September 19, 2018	November 23, 2018	See Implementation Plan PRC-002-AB-2, Appendix 2. Retirement of existing PRC-018-AB-1 effective midnight on September 30, 2025.
PRC-019-AB-2 <sup>7</sup>	Coordination of Generating Unit or Plant Capabilities, Voltage Regulating Controls, and Protection	New	ISO/MP		June 21, 2018 - July 12, 2018	August 31, 2018	January 1, 2022
PRC-025-AB-2 <sup>7</sup>	Generator Relay Loadability	New	MP	Section 502.5 of the ISO rules	January 10, 2019 - January 31, 2019	May 30, 2019	October 1, 2024
<b>2. Standards Forwarded to the AUC</b>							
None at this time							
<b>3. Standards Under Development</b>							
COM-001-AB-3	Communications	Revision	ISO/MP	Sections 502.17 and 502.4 of the ISO rules	TBD	TBD	TBD
COM-002-AB-4	Operating Personnel Communications Protocols	Revision	ISO/MP		March 19, 2019 - April 3, 2019	TBD	TBD
EOP-005-3 <sup>7</sup>	System Restoration from Blackstart Resources	Revision	MP		Q1 2021	Q1 2021	TBD
EOP-006-3 <sup>7</sup>	System Restoration Coordination	Revision	ISO		Q1 2021	Q2 2021	TBD
PER-006-AB-1 <sup>7</sup>	Specific Training for Personnel	New	MP		Dec 7, 2020 - Jan 12, 2021	Q1 2021	TBD
PRC-001-AB4-1.1(ii)	System Protection Coordination	Retire R3 & R4	MP		TBD	TBD	TBD
PRC-026-AB-1 <sup>7</sup>	Relay Performance During Stable Power Swings	New	ISO/MP		TBD	TBD	TBD
PRC-027-AB-1	Coordination of Protection Systems for Performance During Faults	New	MP		TBD	TBD	TBD
TPL-001-AB-5.1	Transmission System Planning Performance Requirements	Revision	ISO		TBD	TBD	TBD
TPL-002-AB1-0	System Performance Following Loss of a Single BES Element	Retire	ISO		TBD	TBD	TBD
TPL-003-AB-0	System Performance Following Loss of Two or More BES Elements	Retire	ISO		TBD	TBD	TBD
TPL-004-AB-0	System Performance Following Extreme BES Events	Retire	ISO		TBD	TBD	TBD
VAR-002-AB-4.1 <sup>7</sup>	Generator Operation for Maintaining Network Voltage Schedules	Revision	MP		<del>Dec 10, 2020 - Jan 12, 2021</del> Feb 9, 2021 - Feb 24, 2021	Q1 2021	TBD
VAR-002-WECC-AB-1 <sup>7</sup>	Automatic Voltage Regulators	Retire	MP		<del>Dec 10, 2020 - Jan 12, 2021</del> Feb 9, 2021 - Feb 24, 2021	Q1 2021	TBD
<b>4. Standards Next in Queue for Development</b>							
CIP-013-1 <sup>4</sup>	Cyber Security – Supply Chain Risk Management	New	ISO/MP		<b>Status</b> In effect in US, July 1, 2020		
IRO-002-67	Reliability Coordination - Monitoring and Analysis	Revision	ISO		In effect in the US, January 1, 2020		

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IRO-006-WECC-3	Qualified Path Unscheduled Flow Relief	Revision	ISO			In effect in the US, October 1, 2019	
PRC-002-AB1-2	Disturbance Monitoring and Reporting Requirements	Revision	ISO/MP			An Alberta variance is being proposed	
<b>5. High Priority Standards for Development</b>							<b>Status</b>
None at this time							
<b>6. Medium Priority Standards for Development</b>							<b>Status</b>
BAL-004-WECC-3	Automatic Time Error Correction	Revision	ISO			In effect in the US October 1, 2018	
CIP-008-6	Cyber Security – Incident Reporting and Response Planning	Revision	ISO/MP			In effect in US, April 1, 2020	
EOP-010-1	Geomagnetic Disturbance Operations	New	ISO/MP			In effect in US, April 1, 2015; R5 in effect on April 1, 2017	
FAC-003-4	Transmission Vegetation Management	Revision	MP			In effect in US, October 1, 2016	
FAC-011-3	System Operating Limits Methodology for the Operations Horizon	Revision	ISO			In effect in the US, April 1, 2017	
PRC-004-WECC-2	Protection System and Remedial Action Scheme Misoperation	Retire	ISO/MP			Retire in the US, January 1, 2021 with the effective date of PRC-012-2	
PRC-012-2	Remedial Action Schemes	N/A?	ISO/MP			In effect in the US, January 1 2021, will result in retirement of PRC-004-WECC-2	
PRC-015-1	Special Protection System Data and Documentation	New	MP			In effect in the US, April 1, 2017	
PRC-016-1	Remedial Action Scheme Misoperations	New	MP			In effect in the US, April 1, 2017	
TPL-007-4	Transmission System Planned Performance for Geomagnetic Disturbance Events	New	ISO/MP			FERC Approved March 19, 2020	
VAR-501-WECC-3.1	Power System Stabilizer	Revision	MP			In effect in US, September 26, 2017	
<b>7. Lower Priority Standards for Development</b>							<b>Status</b>
BAL-002-WECC-AB-2a	Contingency Reserve	Revision	ISO			Being superceded by V3 that was filed with FERC on Sept 6, 2019	
CIP-002-5.1a	Cyber Security - BES Cyber System Categorization	Revision	ISO/MP			In effect in US, December 27, 2016	
CIP-003-8	Security Management Controls	Revision	ISO/MP			In effect in US, April 1, 2020	
CIP-004-6	Cyber Security - Personnel and Training	Revision	ISO/MP			In effect in US, October 1 2016 (R2.3, 4.3,4.4 in effect July 1, 2017)	
CIP-005-6	Cyber Security – Electronic Security Perimeter(s)	Revision	ISO/MP			In effect in US, July 1, 2020	
CIP-006-6	Cyber Security - Physical Security of BES Cyber Systems	Revision	ISO/MP			In effect in US, July 1, 2016 (R3.1 in effect July 1, 2017)	
CIP-007-6	Cyber Security - System Security Management	Revision	ISO/MP			In effect in US, July 1, 2016	
CIP-009-6	Cyber Security - Recovery Plans for BES Cyber Systems	Revision	ISO/MP			In effect in US, July 1, 2016 (R2.1 -2.2 in effect July 1, 2017)	
CIP-010-3	Cyber Security – Configuration Change Management and Vulnerability Assessments	Revision	ISO/MP			In effect in US, July 1, 2020	
CIP-011-2	Cyber Security - Information Protection	Revision	ISO/MP			In effect in US, July 1, 2016	
CIP-012-1	Cyber Security – Communications between Control Centers	New	ISO/MP			Approved by FERC January 23, 2020	
EOP-004-4	Event Reporting	Revision	ISO/MP			In effect in US, April 1, 2019	
EOP-008-2	Loss of Control Center Functionality	Revision	ISO/MP			In effect in US, April 1, 2019	
FAC-001-3	Facility Interconnection Requirements	Revision	ISO/(MP?)			In effect in the US January 1 2019	
FAC-002-2	Facility Interconnection Studies	Revision	ISO/MP			In effect in US, January 1, 2016. Being superceded by version 3.	
FAC-010-3	System Operating Limits Methodology for the Planning Horizon	Revision	ISO			In effect in the US, April 1, 2017	
FAC-013-2 <sup>5</sup>	Assessment of Transfer Capability for the Near-term Transmission Planning Horizon	Retire	ISO			In effect in US, April 1, 2013	
FAC-501-WECC-2	Transmission Maintenance	Revision	MP			In effect in the US, July 1, 2018	
MOD-001-1a <sup>5</sup>	Available Transmission System Capability	Retire	ISO			In effect in the US, April 1, 2011	
MOD-008-1	TRM Calculation Methodology	N/A?	ISO			In effect in the US, April 1, 2011	
MOD-010&012-AB-0	Steady-State and Dynamic Data for Transmission System Modeling and Simulation	Retire	ISO/MP			Propose to retire with adoption of MOD-032-1 and MOD-033-1	
MOD-029-2a <sup>5</sup>	Rated System Path Methodology	Retire	ISO			In effect in US, July 1, 2014	
MOD-032-1	Data for Power System Modeling and Analysis (retires MOD-010&012)	New	ISO/MP			In effect in US, July 1, 2015	
MOD-033-1	Steady-State and Dynamic System Model Validation	New	ISO/(MP?)			In effect in US, July 1, 2017. Being superceded by version 2.	
PER-003-2	Personnel Credentials	Revision	ISO/MP			In effect in the US, July 1, 2019	
PER-004-AB-2	Reliability Coordinator Staffing	Retire	ISO			PER-004-2 retired at NERC as part of NERC Project 2017-02	
PRC-004-5(i)	Protection System Misoperation Identification and Correction	New	MP			In effect in US, April 2, 2017. Being superceded by version 6.	
VAR-001-5	Voltage and Reactive Control	Revision	ISO/MP			In effect in US, January 1, 2019	
<b>8. Standards Not Yet Prioritized for Development</b>							
BAL-003-2	Frequency Response and Frequency Bias Setting	Revision	ISO			Approved by FERC on July 15, 2020	
FAC-002-3	Facility Interconnection Studies	Revision	ISO/MP			In effect in the US, April 1, 2021	
INT-004-3.1 <sup>5</sup>	Dynamic Transfers	Retire	N/A			Filed with FERC June 7, 2019	
INT-006-5 <sup>5</sup>	Evaluation of Interchange Transactions	Retire	ISO			In effect in the US, April 1, 2021	
INT-009-3 <sup>5</sup>	Implementation of Interchange	Retire	ISO			In effect in the US, April 1, 2021	
INT-010-2.1 <sup>5</sup>	Interchange Initiation and Modification for Reliability	Retire	ISO			Filed with FERC June 7, 2019	
IRO-002-7 <sup>5</sup>	Reliability Coordination - Monitoring and Analysis	Retire	ISO			In effect in the US, April 1, 2021	
IRO-010-3	Reliability Coordinator Data Specification and Collection	Revision	ISO/MP			In effect in the US, April 1, 2021	
MOD-020-0	Providing Interruptible Demands and Direct Control Load Management Data to System Operators and Reliability Coordinators	Retire	ISO/MP			Retired at NERC on December 14, 2020	
MOD-031-3	Demand and Energy Data	Revision	ISO/MP			In effect in the US, April 1, 2021	
MOD-033-2	Steady-State and Dynamic System Model Validation	Revision	ISO/MP			In effect in the US, April 1, 2021	
NUC-001-4	Nuclear Plant Interface Coordination	N/A	N/A			In effect in the US, April 1, 2021	
PRC-004-6 <sup>6</sup>	Protection System Misoperation Identification and Correction	Retire	MP			In effect in the US, April 1, 2021	

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PRC-006-4	Automatic Underfrequency Load Shedding	Revision	ISO/MP			In effect in the US, April 1, 2021. Proposed to be superceded by version 5.	
PRC-024-3	Frequency and Voltage Protection Settings for Generating Resources	Revision	MP			Approved by FERC on July 9, 2020	
TOP-001-5 <sup>6</sup>	Transmission Operations	Retire	ISO/MP			In effect in the US, April 1, 2021	
TOP-003-4	Operational Reliability Data	Revision	ISO/MP			In effect in the US, April 1, 2021	
<del>TPL-001-5.1</del>	<del>Transmission System Planning Performance Requirements</del>	<del>Revision</del>	<del>ISO</del>			<del>Approved by FERC on June 10, 2020</del>	
<b>9. Standards Approved by NERC and Filed with FERC</b>							<b>Status</b>
BAL-002-WECC-3	Contingency Reserve	Revision	ISO			Filed with FERC September 6, 2019	
CIP-002-6	Cyber Security – BES Cyber System Categorization	Revision	MP			Filed with FERC June 12, 2020	
CIP-005-7	BES Cyber System Logical Isolation	Revision	ISO/MP			Filed with FERC December 14, 2020	
CIP-010-4	Cyber Security - Configuration Change Management and Vulnerability Assessments	Revision	ISO/MP			Filed with FERC December 14, 2020	
CIP-013-2	Cyber Security - Supply Chain Risk Management	Revision	ISO/MP			Filed with FERC December 14, 2020	
FAC-008-4 <sup>6</sup>	Facility Ratings	Retire R7 & 8				Filed with FERC June 7, 2019	
<del>INT-004-3.1<sup>4</sup></del>	<del>Dynamic Transfers</del>	<del>Retire</del>	<del>N/A</del>			<del>Filed with FERC June 7, 2019</del>	
<del>INT-010-2.1<sup>5</sup></del>	<del>Interchange Initiation and Modification for Reliability</del>	<del>Retire</del>	<del>ISO</del>			<del>Filed with FERC June 7, 2019</del>	
MOD-004-1 <sup>5</sup>	Capacity Benefit Margin	Retire	N/A			Filed with FERC June 7, 2019	
MOD-008-1 <sup>5</sup>	Transmission Reliability Margin Calculation Methodology	Retire	N/A			Filed with FERC June 7, 2019	
MOD-028-2 <sup>5</sup>	Area Interchange Methodology	Retire	N/A			Filed with FERC June 7, 2019	
MOD-030-3 <sup>5</sup>	Flowgate Methodology	Retire	N/A			Filed with FERC June 7, 2019	
PRC-006-5	Automatic Underfrequency Load Shedding	Revision				Filed with FERC October 27, 2020	
VAR-001-6 <sup>6</sup>	Voltage and Reactive Control	Revision				Filed with FERC June 7, 2019	
<b>10. Standards Approved by NERC and Awaiting Filing with FERC</b>							<b>Status</b>
CIP-005-7	Cyber Security – Electronic Security Perimeter(s)	Revision				Adopted by the NERC BOT November 5, 2020	
CIP-010-4	Cyber Security – Configuration Change Management and Vulnerability Assessments	Revision				Adopted by the NERC BOT November 5, 2020	
CIP-013-2	Cyber Security – Supply Chain Risk Management	Revision				Adopted by the NERC BOT November 5, 2020	
PRC-006-5	Automatic Underfrequency Load Shedding	Revision				Adopted by the NERC BOT August 20, 2020	

Changes from the last posting are in red text.

Footnote 1 - For new standards, the applicability represents the entities the standard applies to; for amendments to existing standards, applicability identifies the entities that the amendments apply to.

Footnote 2 - The effective date is not firm and the actual date is dependent upon approval by the Commission.

Footnote 3 - The AESO reviewed the standard and came to the conclusion that the proposed changes do not directly affect market participants. Therefore, the AESO will not be consulting on this standard.

Footnote 4 - Not planning to start development of this standard, for application in Alberta, in 2020.

Footnote 5 - This standard is part of NERC Standards Efficiency Review project and is proposed to be retired with this project.

Footnote 6 - This standard is part of NERC Standards Efficiency Review project and contains proposed partial retirements.

Footnote 7 - No other standards are included with this initiative.

The Alberta Reliability Standards Project Work Plan (the "Work Plan") is for general information purposes only and the Alberta Electric System Operator reserves the right to change or modify the Work Plan at any time without notice. Under no circumstances will the Alberta Electric System Operator, its members, officers, employees, contractors or agents, or any of their respective affiliates, be liable for any errors or omissions in, or any losses, damages or claims whatsoever, whether in contract, tort or otherwise, arising from use of or reliance upon, the Work Plan or any information contained here in. Parties using or relying on the Work Plan do so solely at their own risk, and all information contained herein should be independently verified.

**Legend for Section 3 - Standards Under Development**

- Individual reliability standard or initiative
- Communication related standards
- Standards related to the development of EOP-011-AB-1 Emergency Operations
- Standards related to the development of PRC-027-AB-1 Coordination of Protection Systems for Performance During Faults
- Relay Loadability standards
- Transmission Planning standards