

# Alberta Reliability Standards Program Work Plan

Update: September 2021

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NERC and WECC Standards		Type	Applicability <sup>1</sup>	Related ISO Rules	Stakeholder Consultation	Forward to the AUC	Effective Date
<b>1. Standards Approved by the AUC</b>							
EOP-001-AB1-2.1b	Emergency Operations Planning	Retire	ISO/MP	None	February 27 - March 25, 2020	August 21, 2020	January 1, 2022
EOP-002-AB1-2	Capacity and Energy Emergencies	Retire	ISO/MP	None	February 27 - March 25, 2020	August 21, 2020	January 1, 2022
EOP-003-AB1-1	Load Shedding Plans	Retire	ISO/MP	None	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	None	February 27 - March 25, 2020	August 21, 2020	January 1, 2022
PRC-010-2	Undervoltage Load Shedding	Revision	ISO/MP	None	February 27 - March 25, 2020	August 21, 2020	January 1, 2022
PRC-021-AB1-1	Undervoltage Load Shedding Program Data	Retire	ISO/MP	None	February 27 - March 25, 2020	August 21, 2020	January 1, 2022
PRC-022-AB-1	Undervoltage Load Shedding Program Performance	Retire	ISO	None	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
PER-006-AB-1 <sup>7</sup>	Specific Training for Personnel	New	MP	None	Dec 7, 2020 - Jan 12, 2021	March 25, 2021	July 1, 2023
PRC-018-AB-1 <sup>7</sup>	Disturbance Monitoring Equipment Installation and Data Reporting	Retire	ISO/MP	None	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	None	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
VAR-002-AB-4.1 <sup>7</sup>	Generator Operation for Maintaining Network Voltage Schedules	Revision	MP	None	Feb 9, 2021 - Feb 24, 2021	June 1, 2021	June 24, 2021
VAR-002-WECC-AB-1 <sup>7</sup>	Automatic Voltage Regulators	Retire	MP	None	Feb 9, 2021 - Feb 24, 2021	May 20, 2021	June 16, 2021
<b>2. Standards Forwarded to the AUC</b>		<b>Type</b>	<b>Applicability<sup>1</sup></b>	<b>Related ISO Rules</b>	<b>Stakeholder Consultation</b>	<b>Forward to the AUC</b>	<b>Proposed Effective Date<sup>2</sup></b>
None at this time							
<b>3. Standards Under Development</b>		<b>Type</b>	<b>Applicability<sup>1</sup></b>	<b>Related ISO Rules</b>	<b>Stakeholder Consultation</b>	<b>Forward to the AUC</b>	<b>Proposed Effective Date<sup>2</sup></b>
CIP-012-AB-1	Cyber Security – Communications between Control Centers	New	ISO/MP	None	Q4 2021	TBD	TBD
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	None	March 19, 2019 - April 3, 2019	TBD	TBD
EOP-005-AB-3 <sup>7</sup>	System Restoration from Blackstart Resources	Revision	MP	None	Q3-or Q4 2021	Q3 2021	TBD
EOP-006-AB-3 <sup>7</sup>	System Restoration Coordination	Revision	ISO	None	Q3-or Q4 2021	Q3 2021	TBD
PRC-001-AB4-1.1(ii)	System Protection Coordination	Retire R3 & R4	MP	None	Q4 2021	Q3 2021	TBD
PRC-026-AB-1 <sup>7</sup>	Relay Performance During Stable Power Swings	New	ISO/MP	None	TBD	TBD	TBD
PRC-027-AB-1	Coordination of Protection Systems for Performance During Faults	New	MP	None	Q4 2021	Q3 2021	TBD
TPL-001-AB-5.1	Transmission System Planning Performance Requirements	Revision	ISO	None	TBD	TBD	TBD
TPL-002-AB1-0	System Performance Following Loss of a Single BES Element	Retire	ISO	None	TBD	TBD	TBD
TPL-003-AB-0	System Performance Following Loss of Two or More BES Elements	Retire	ISO	None	TBD	TBD	TBD
TPL-004-AB-0	System Performance Following Extreme BES Events	Retire	ISO	None	TBD	TBD	TBD
<b>4. Standards Next in Queue for Development</b>		<b>Type</b>	<b>Applicability<sup>1</sup></b>	<b>Related ISO Rules</b>	<b>Status</b>		

NERC and WECC Standards		Type	Applicability <sup>1</sup>	Related ISO Rules	Stakeholder Consultation	Forward to the AUC	Effective Date
BAL-002-WECC-3 <sup>4</sup>	Contingency Reserve	Revision	ISO	TBD		Approved by FERC on April 15, 2021	
BAL-003-2	Frequency Response and Frequency Bias Setting	Revision	ISO	TBD		Approved by FERC on July 15, 2020	
CIP-012-4	Cyber Security – Communications between Control Centers	New	ISO/MP	None		In effect in the US, July 1, 2022	
CIP-013-1	Cyber Security – Supply Chain Risk Management	New	ISO/MP	None		In effect in US, October 1, 2022	
IRO-002-7 <sup>6</sup>	Reliability Coordination - Monitoring and Analysis	Revision	ISO	Section 502.8		In effect in the US, January 1, 2020	
IRO-006-WECC-3	Qualified Path Unscheduled Flow Relief	Revision	ISO	None		In effect in the US, October 1, 2019	
PRC-002-AB1-2	Disturbance Monitoring and Reporting Requirements	Revision	ISO/MP	TBD		An Alberta variance is being proposed	
<b>5. High Priority Standards for Development</b>		<b>Type</b>	<b>Applicability<sup>1</sup></b>	<b>Related ISO Rules</b>		<b>Status</b>	
None at this time							
<b>6. Medium Priority Standards for Development</b>		<b>Type</b>	<b>Applicability<sup>1</sup></b>	<b>Related ISO Rules</b>		<b>Status</b>	
BAL-004-WECC-3	Automatic Time Error Correction	Revision	ISO	TBD		In effect in the US October 1, 2018	
CIP-003-8	Security Management Controls	Revision	ISO/MP	TBD		In effect in US, April 1, 2020	
CIP-005-7	Cyber Security – Electronic Security Perimeter(s)	Revision	ISO/MP	TBD		In effect in the US, October 1, 2022	
CIP-008-6	Cyber Security – Incident Reporting and Response Planning	Revision	ISO/MP	TBD		In effect in US, April 1, 2020	
CIP-010-4	Cyber Security - Configuration Change Management and Vulnerability Assessments	Revision	ISO/MP	TBD		In effect in the US, October 1, 2022	
EOP-010-1	Geomagnetic Disturbance Operations	New	ISO/MP	TBD		In effect in US, April 1, 2015; R5 in effect on April 1, 2017	
FAC-001-3	Facility Interconnection Requirements	Revision	ISO/(MP?)	TBD		In effect in the US January 1 2019	
FAC-003-4	Transmission Vegetation Management	Revision	MP	TBD		In effect in US, October 1, 2016	
FAC-011-3	System Operating Limits Methodology for the Operations Horizon	Revision	ISO	TBD		In effect in the US, April 1, 2017	
FAC-501-WECC-2	Transmission Maintenance	Revision	MP	TBD		In effect in the US, July 1, 2018	
INT-006-5 <sup>6</sup>	Evaluation of Interchange Transactions	Retire	ISO	TBD		In effect in the US, April 1, 2021	
INT-009-3 <sup>6</sup>	Implementation of Interchange	Retire	ISO	TBD		In effect in the US, April 1, 2021	
INT-010-2.1 <sup>5</sup>	Interchange Initiation and Modification for Reliability	Retire	ISO	TBD		Filed with FERC June 7, 2019	
MOD-010&012-AB-0	Steady-State and Dynamic Data for Transmission System Modeling and Simulation	Retire	ISO/MP	TBD		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	TBD		In effect in US, July 1, 2014	
MOD-032-1	Data for Power System Modeling and Analysis (retires MOD-010&012)	New	ISO/MP	TBD		In effect in US, July 1, 2015	
MOD-033-2	Steady-State and Dynamic System Model Validation	Revision	ISO/MP	TBD		In effect in the US, April 1, 2021	
PER-004-AB-2	Reliability Coordinator Staffing	Retire	ISO	TBD		PER-004-2 retired with adoption of PER-003-2 as part of NERC Project 2017-02	
PRC-004-WECC-2	Protection System and Remedial Action Scheme Misoperation	Retire	ISO/MP	TBD		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	TBD		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	TBD		In effect in the US, April 1, 2017	
PRC-016-1	Remedial Action Scheme Misoperations	New	MP	TBD		In effect in the US, April 1, 2017	
PRC-024-3	Frequency and Voltage Protection Settings for Generating Resources	Revision	MP	TBD		In effect in the US, October 1, 2022	
TOP-001-5.1 <sup>6</sup>	Transmission Operations	Retire	ISO/MP	TBD		In effect in the US, July 1, 2023	
TPL-007-4	Transmission System Planned Performance for Geomagnetic Disturbance Events	New	ISO/MP	TBD		FERC Approved March 19, 2020	
VAR-501-WECC-3.1	Power System Stabilizer	Revision	MP	TBD		In effect in US, September 26, 2017	
<b>7. Lower Priority Standards for Development</b>		<b>Type</b>	<b>Applicability<sup>1</sup></b>	<b>Related ISO Rules</b>		<b>Status</b>	
CIP-002-5.1a	Cyber Security - BES Cyber System Categorization	Revision	ISO/MP	TBD		In effect in US, December 27, 2016	
CIP-004-6	Cyber Security - Personnel and Training	Revision	ISO/MP	TBD		In effect in US, October 1 2016 (R2.3, 4.3.4.4 in effect July 1, 2017)	
CIP-006-6	Cyber Security - Physical Security of BES Cyber Systems	Revision	ISO/MP	TBD		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	TBD		In effect in US, July 1, 2016	
CIP-009-6	Cyber Security - Recovery Plans for BES Cyber Systems	Revision	ISO/MP	TBD		In effect in US, July 1, 2016 (R2.1 -2.2 in effect July 1, 2017)	
CIP-011-2	Cyber Security - Information Protection	Revision	ISO/MP	TBD		In effect in US, July 1, 2016	
EOP-004-4	Event Reporting	Revision	ISO/MP	TBD		In effect in US, April 1, 2019	
EOP-008-2	Loss of Control Center Functionality	Revision	ISO/MP	TBD		In effect in US, April 1, 2019	
FAC-002-3	Facility Interconnection Studies	Revision	ISO/MP	TBD		In effect in the US, April 1, 2021	
FAC-010-3	System Operating Limits Methodology for the Planning Horizon	Revision	ISO	TBD		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	TBD		In effect in US, April 1, 2013	
INT-004-3.1 <sup>5</sup>	Dynamic Transfers	Retire	N/A	TBD		Filed with FERC June 7, 2019	
IRO-010-3	Reliability Coordinator Data Specification and Collection	Revision	ISO/MP	TBD		In effect in the US, April 1, 2021	
MOD-001-1a <sup>5</sup>	Available Transmission System Capability	Retire	ISO	TBD		In effect in the US, April 1, 2011	
MOD-008-1	TRM Calculation Methodology	N/A?	ISO	TBD		In effect in the US, April 1, 2011	
MOD-020-0	Providing Interruptible Demands and Direct Control Load Management Data to System Operators and Reliability Coordinators	Retire	ISO/MP	TBD		Retired at NERC on December 14, 2020	
MOD-031-3	Demand and Energy Data	Revision	ISO/MP	TBD		In effect in the US, April 1, 2021	
NUC-001-4	Nuclear Plant Interface Coordination	N/A	N/A	TBD		In effect in the US, April 1, 2021	

NERC and WECC Standards		Type	Applicability <sup>1</sup>	Related ISO Rules	Stakeholder Consultation	Forward to the AUC	Effective Date
PER-003-2	Personnel Credentials	Revision	ISO/MP	TBD		In effect in the US, July 1, 2019	
PRC-004-6 <sup>6</sup>	Protection System Misoperation Identification and Correction	Retire	MP	TBD		In effect in the US, April 1, 2021	
PRC-006-5	Automatic Underfrequency Load Shedding	Revision		TBD		In effect in the US, July 1, 2021	
TOP-003-4	Operational Reliability Data	Revision	ISO/MP	TBD		In effect in the US, April 1, 2021	
VAR-001-5	Voltage and Reactive Control	Revision	ISO/MP	TBD		In effect in US, January 1, 2019	
<b>8. Standards Not Yet Prioritized for Development</b>		<b>Type</b>	<b>Applicability<sup>1</sup></b>	<b>Related ISO Rules</b>	<b>Status</b>		
EOP-011-2 <sup>9</sup>	Emergency Preparedness and Operations	Revision	ISO/MP	TBD	Approved by FERC, August 24, 2021		
FAC-001-3 <sup>7</sup>	Facility Interconnection Requirements	Errata	MP	TBD	Approved by FERC, February 19, 2021		
FAC-008-5 <sup>7</sup>	Facility Ratings	Revision	MP	TBD	Approved by FERC, April 7, 2021		
IRO-010-4 <sup>9</sup>	Reliability Coordinator Data Specification and Collection	Revision	ISO/(MP?)	TBD	Approved by FERC, August 24, 2021		
TOP-003-5 <sup>9</sup>	Operational Reliability Data	Revision	ISO/MP	TBD	Approved by FERC, August 24, 2021		
<b>9. Standards Approved by NERC and Filed with FERC</b>		<b>Type</b>	<b>Applicability<sup>1</sup></b>	<b>Related ISO Rules</b>	<b>Status</b>		
CIP-002-6	Cyber Security – BES Cyber System Categorization	Revision	MP	TBD	Filed with FERC June 12, 2020 (Will be medium priority for development when approved by FERC, however NERC submitted a notice of withdrawal to FERC for proposed CIP-002-6 on February 5, 2021.)		
EOP-011-2 <sup>9</sup>	Emergency Preparedness and Operations	Revision	ISO/MP	TBD	Filed with FERC June 17, 2021		
FAC-003-5 <sup>8</sup>	Transmission Vegetation Management	Revision	ISO/MP	TBD	Filed with FERC June 28, 2021		
FAC-008-5 <sup>6</sup>	Facility Ratings	Retire R7	MP	TBD	Filed with FERC February 19, 2021		
FAC-010-3 <sup>8</sup>	System Operating Limits Methodology for the Planning Horizon	Retire Standard	ISO	TBD	Filed with FERC June 28, 2021		
FAC-011-4 <sup>8</sup>	System Operating Limits Methodology for the Operations Horizon	Revision	ISO	TBD	Filed with FERC June 28, 2021		
FAC-014-3 <sup>8</sup>	Establish and Communicate System Operating Limits	Revision	ISO	TBD	Filed with FERC June 28, 2021		
IRO-008-3 <sup>3</sup>	Reliability Coordinator Operational Analyses and Real-time Assessments	Revision	ISO	TBD	Filed with FERC June 28, 2021		
IRO-010-4 <sup>9</sup>	Reliability Coordinator Data Specification and Collection	Revision	ISO/(MP?)	TBD	Filed with FERC June 17, 2021		
MOD-004-1 <sup>5</sup>	Capacity Benefit Margin	Retire	N/A	TBD	Filed with FERC June 7, 2019		
MOD-008-1 <sup>5</sup>	Transmission Reliability Margin Calculation Methodology	Retire	N/A	TBD	Filed with FERC June 7, 2019		
MOD-028-2 <sup>5</sup>	Area Interchange Methodology	Retire	N/A	TBD	Filed with FERC June 7, 2019		
MOD-030-3 <sup>5</sup>	Flowgate Methodology	Retire	N/A	TBD	Filed with FERC June 7, 2019		
PRC-002-3 <sup>8</sup>	Disturbance Monitoring and Reporting Requirements	Revision	ISO/MP	TBD	Filed with FERC June 28, 2021		
PRC-023-5 <sup>8</sup>	Transmission Relay Loadability	Revision	ISO/MP	TBD	Filed with FERC June 28, 2021		
PRC-026-2 <sup>8</sup>	Relay Performance During Stable Power Swings	Revision	ISO/MP	TBD	Filed with FERC June 28, 2021		
TOP-001-6 <sup>8</sup>	Transmission Operations	Revision	ISO/MP	TBD	Filed with FERC June 28, 2021		
TOP-003-5 <sup>9</sup>	Operational Reliability Data	Revision	ISO/MP	TBD	Filed with FERC June 17, 2021		
VAR-001-6 <sup>6</sup>	Voltage and Reactive Control	Revision	ISO	TBD	Filed with FERC June 7, 2019		
<b>10. Standards Approved by NERC and Awaiting Filing with FERC</b>					<b>Status</b>		
FAC-008-5 <sup>7</sup>	Facility Ratings	Revision	MP	TBD	Adopted by the NERC BOT on February 4, 2021		

Changes from the last posting are in red text.

Footnote 1 - Identifies if a standard applies to the ISO and/or a market participant (MP). For new standards, the applicability identifies who the standard applies to; for amendments to existing standards, the applicability identifies who the amendment(s) apply to. The specific market participant(s) that a standard applies to will be identified in the applicability section of the Alberta reliability standard.

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

Footnote 3 - The proposed changes do not directly affect market participants. The AESO will not be consulting with market participants on this standard.

Footnote 4 - The WECC is contemplating the recommendation to retire this standard in its entirety.

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 standard

Footnote 8 - This standard is part of NERC project 2015-09 Establish and Communicate Operating Limits (Includes new defined terms for "system operating limit" and "system voltage limit").

Footnote 9 - This standard is part of NERC project to address the risks posed by cold weather to the reliability of the bulk-power system.

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 herein. 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
	Transmission Planning standards