

Alberta Reliability Standards Program Work Plan

Update: April 2020
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NERC and WECC Standards		Type	Applicability ¹	Related ISO Rules	Stakeholder Consultation	Forward to the AUC	Forecast Effective Date ²
1. Standards Approved by the AUC							
CIP-014-AB-2	Physical Security	New	ISO/MP	Remove ISO rules Section 501.2	May 31, 2018 - Jun 15, 2018	July 18, 2018	July 1, 2020
IRO-001-4	Reliability Coordination -- Responsibilities	Revision	ISO		N/A	-June 12, 2019	-December 1, 2019
IRO-002-5	Reliability Coordination -- Monitoring and Analysis	Revision	ISO		N/A	-June 12, 2019	-December 1, 2019
IRO-003-AB-2	Reliability Coordination -- Wide Area View	New	ISO		N/A	-June 12, 2019	-December 1, 2019
IRO-005-AB-3.1a	Reliability Coordination -- Current Day Operations	Revision	ISO		N/A	-June 12, 2019	-December 1, 2019
IRO-008-2	Reliability Coordinator Operational Analyses and Real-time Assessments	Revision	ISO		N/A	-June 12, 2019	-December 1, 2019
IRO-009-2	Reliability Coordinator Actions to Operate within IROLs	Revision	ISO		N/A	-June 12, 2019	-December 1, 2019
IRO-010-2	Reliability Coordinator Data Specification and Collection	Revision	ISO		N/A	-June 12, 2019	-December 1, 2019
IRO-014-3	Coordination Among Reliability Coordinators	Revision	ISO		N/A	-June 12, 2019	-December 1, 2019
IRO-015-AB-1	Notifications and Information Exchange Between Reliability Coordinators	New	ISO		N/A	-June 12, 2019	-December 1, 2019
IRO-016-AB-1	Coordination of Real-time Activities Between Reliability Coordinators	New	ISO		N/A	-June 12, 2019	-December 1, 2019
IRO-017-1	Outage Coordination	New	ISO		N/A	-June 12, 2019	-December 1, 2019
IRO-018-1(i)	Reliability Coordinator Real-time Reliability Monitoring and Analysis Capabilities	New	ISO		N/A	-June 12, 2019	-December 1, 2019
PRC-018-AB-1	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	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-023-AB-4	Transmission Relay Loadability	Revision	ISO/MP		January 10, 2019 - January 31, 2019	May 30, 2019	July 1, 2020
PRC-025-AB-2	Generator Relay Loadability	New	MP	Section 502.5 of the ISO rules	January 10, 2019 - January 31, 2019	May 30, 2019	October 1, 2024
TOP-001-4	Transmission Operations	N/A	N/A		N/A	-June 12, 2019	-December 1, 2019
TOP-002-4	Operation Planning	N/A	N/A		N/A	-June 12, 2019	-December 1, 2019
TOP-003-3	Operational Reliability Data	N/A	N/A		N/A	-June 12, 2019	-December 1, 2019
TOP-005-AB3-1	Operational Reliability Information-	Retire	N/A		N/A	-June 12, 2019	-December 1, 2019
TOP-006-2	Monitoring System Conditions-	Retire	N/A		N/A	-June 12, 2019	-December 1, 2019
TOP-010-1(i)	Real Time Reliability Monitoring and Analysis Capabilities	N/A	N/A		N/A	-June 12, 2019	-December 1, 2019
2. Standards Forwarded to the AUC							
None at this time							
3. Standards Under Development							
BES Definition, Radial Circuit, System Access Service ⁷	bulk electric system, Radial Circuit, System Access Service	Revision / New / New	ISO/MP		July 23, 2019 - August 6, 2019	Q4-2020 Q2 2020	TBD
COM-001-AB-3	Communications	Revision	N/A-ISO/MP	Sections 502.17 and 502.4 of the ISO rules	Q4-2019 Q2 2020	Q3 2020	TBD
COM-002-AB-4	Operating Personnel Communications Protocols	Revision	ISO/MP		March 19, 2019 - April 3, 2019	Q3 2020	TBD
EOP-001-AB1-2.1b	Emergency Operations Planning	Retire	ISO/MP		Q1-2020 February 27 - March 25, 2020	Q1-2020 Q2 2020	January 1, 2022
EOP-002-AB1-2	Capacity and Energy Emergencies	Retire	ISO/MP		Q1-2020 February 27 - March 25, 2020	Q1-2020 Q2 2020	January 1, 2022
EOP-003-AB1-1	Load Shedding Plans	Retire	ISO/MP		Q1-2020 February 27 - March 25, 2020	Q1-2020 Q2 2020	January 1, 2022
EOP-011-AB-1	Emergency Operations	New	ISO/MP	Sections 202.2 and 305.1 of the ISO rules	Q1-2020 February 27 - March 25, 2020	Q1-2020 Q2 2020	January 1, 2022
PER-006-AB-1 ⁷	Specific Training for Personnel	New	MP		Q2 2020	Q2 2020	TBD
PRC-001-AB4-1.1(ii)	System Protection Coordination	Retire R3 & R4	MP		Q1-2020 Q2 2020	Q1-2020 Q3 2020	TBD
PRC-005-AB2-6	Protection System, Automatic Reclosing and Sudden Pressure Relaying Maintenance	Revision	MP		April	Q2 2020	TBD

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PRC-006-AB-3	Automatic Underfrequency Load Shedding	New	ISO/MP	OPP 804	Q1-2020 February 27 - March 25, 2020	Q1-2020 Q2 2020	January 1, 2022
PRC-009-AB-0	UFLS Performance Following an Underfrequency Event	Retire	ISO		Q1-2020 February 27 - March 25, 2020	Q1-2020 Q2 2020	January 1, 2022
PRC-010-2	Undervoltage Load Shedding	Revision	ISO/MP		Q1-2020 February 27 - March 25, 2020	Q1-2020 Q2 2020	January 1, 2022
PRC-021-AB1-1	Undervoltage Load Shedding Program Data	Retire	ISO/MP		Q1-2020 February 27 - March 25, 2020	Q1-2020 Q2 2020	January 1, 2022
PRC-022-AB-1	Undervoltage Load Shedding Program Performance	Retire	ISO		Q1-2020 February 27 - March 25, 2020	Q1-2020 Q2 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	Q1-2020 February 25, 2020	Q1-2020 Q2 2020	January 1, 2022
PRC-026-AB-1 ⁷	Relay Performance During Stable Power Swings	New	ISO/MP		Q1-2020 Q2 2020	Q1-2020 Q3 2020	TBD
PRC-027-AB-1	Coordination of Protection Systems for Performance During Faults	New	MP		Q1-2020 Q2 2020	Q1-2020 Q3 2020	TBD
TPL-001-AB-4 or 5	Transmission System Planning Performance Requirements	Revision	ISO		Q1-2020 Q2 2020	Q1-2020 Q3 2020	TBD
TPL-002-AB1-0	System Performance Following Loss of a Single BES Element	Retire	ISO		Q1-2020 Q2 2020	Q1-2020 Q3 2020	TBD
TPL-003-AB-0	System Performance Following Loss of Two or More BES Elements	Retire	ISO		Q1-2020 Q2 2020	Q1-2020 Q3 2020	TBD
TPL-004-AB-0	System Performance Following Extreme BES Events	Retire	ISO		Q1-2020 Q2 2020	Q1-2020 Q3 2020	TBD
VAR-002-AB-4.1 ⁷	Generator Operation for Maintaining Network Voltage Schedules	Revision	MP		Q2 2020	Q3 2020	TBD
VAR-002-WECC-AB-1 ⁷	Automatic Voltage Regulators	Retire	MP		Q2 2020	Q2 2020	TBD
4. Standards Next in Queue for Development					Status		
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-013-1 ⁴	Cyber Security – Supply Chain Risk Management	New	ISO/MP		In effect in US, July 1, 2020		
EOP-005-3	System Restoration from Blackstart Resources	Revision	MP		In effect in US, April 1, 2019		
EOP-006-3	System Restoration Coordination	Revision	ISO		In effect in US, April 1, 2019		
IRO-002-6	Reliability Coordination - Monitoring and Analysis	Revision	ISO		In effect in the US, January 1, 2020		
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		
VAR-002-AB-4.1	Generator Operation for Maintaining Network Voltage Schedules	Revision	MP		In effect in US, September 26, 2017		
5. High Priority Standards for Development					Status		
None at this time							
6. Medium Priority Standards for Development					Status		
BAL-004-WECC-3	Automatic Time Error Correction	Revision	ISO		FERC Approved May 30, 2018 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-005-3	System Restoration from Blackstart Resources	Revision	MP		In effect in US, April 1, 2019		
EOP-006-3	System Restoration Coordination	Revision	ISO		In effect in US, April 1, 2019		
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		
PER-006-1	Specific Training for Personnel	New	MP		In effect in the US, October 1, 2020		
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-007-34	Transmission System Planned Performance for Geomagnetic Disturbance Events	New	ISO/MP		In effect in the US July 1, 2019-FERC Approved March 19, 2020		
VAR-002-WECC-2	Automatic Voltage Regulators	Retire	MP		Inactive in US, September 5, 2018		
VAR-501-WECC-3.1	Power System Stabilizer	Revision	MP		In effect in US, September 26, 2017		
7. Lower Priority Standards for Development					Status		
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)		

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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	
FAC-010-3	System Operating Limits Methodology for the Planning Horizon	Revision	ISO			In effect in the US, April 1, 2017	
FAC-013-2 ⁵	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 ⁵	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 ⁵	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	
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	
VAR-001-5	Voltage and Reactive Control	Revision	ISO/MP			In effect in US, January 1, 2019	
8. Standards Not Yet Prioritized for Development							
CIP-008-6-	Cyber Security – Incident Reporting and Response Planning	Revision	ISO/MP			In effect in US, April 1, 2020	
CIP-012-1	Cyber Security – Communications between Control Centers	New				Approved by FERC January 23, 2020	
FAC-501-WECC-2	Transmission Maintenance	Revision	MP			In effect in the US, July 1, 2018	
IRO-002-6	Reliability Coordination - Monitoring and Analysis	Revision	ISO			In effect in the US, January 1, 2020	
IRO-006-WECC-3	Qualified Path Unscheduled Flow Relief	Revision	ISO			In effect in the US, October 1, 2019	
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	
TPL-001-5	Transmission System Planning Performance Requirements	Revision	ISO			Approved by FERC January 23, 2020	
VAR-001-5	Voltage and Reactive Control	Revision	ISO/MP			In effect in US, January 1, 2019	
9. Standards Approved by NERC and Filed with FERC						Status	
BAL-002-WECC-3	Contingency Reserve	Revision	ISO			Filed with FERC September 6, 2019	
CIP-003-8	Cyber Security - Security Management Control	Revision				Filed with FERC May 21, 2019	
CIP-012-1	Cyber Security – Communications between Control Centers	New				Filed with FERC September 18, 2018 (FERC proposes to approve and proposes to direct NERC	
FAC-002-3	Facility Interconnection Studies	Revision				Filed with FERC February 21, 2020	
FAC-008-4 ⁶	Facility Ratings	Revision				Filed with FERC June 7, 2019	
INT-004-3.1 ⁵	Dynamic Transfers	Retire	N/A			Filed with FERC June 7, 2019	
INT-006-5 ⁶	Evaluation of Interchange Transactions	Revision				Filed with FERC June 7, 2019	
INT-009-3 ⁶	Implementation of Interchange	Revision				Filed with FERC June 7, 2019	
INT-010-2.1 ⁵	Interchange Initiation and Modification for Reliability	Retire	ISO			Filed with FERC June 7, 2019	
IRO-010-3	Reliability Coordinator Data Specification and Collection	Revision				Filed with FERC February 21, 2020	
IRO-002-7 ⁶	Reliability Coordination - Monitoring and Analysis	Revision				Filed with FERC June 7, 2019	
MOD-004-1 ⁵	Capacity Benefit Margin	Retire	N/A			Filed with FERC June 7, 2019	
MOD-008-1 ⁵	Transmission Reliability Margin Calculation Methodology	Retire	N/A			Filed with FERC June 7, 2019	
MOD-028-2 ⁵	Area Interchange Methodology	Retire	N/A			Filed with FERC June 7, 2019	
MOD-030-3 ⁵	Flowgate Methodology	Retire	N/A			Filed with FERC June 7, 2019	
MOD-031-3	Demand and Energy Data	Revision				Filed with FERC February 21, 2020	
MOD-033-2	Steady-State and Dynamic System Model Validation	Revision				Filed with FERC February 21, 2020	
PRC-004-6 ⁶	Protection System Misoperation Identification and Correction	Revision				Filed with FERC June 7, 2019	
PRC-006-4	Automatic Underfrequency Load Shedding	Revision				Filed with FERC February 21, 2020	
PRC-024-3	Frequency and Voltage Protection Settings for Generating Resources	Revision				Filed with FERC March 20, 2020	
TOP-001-5 ⁶	Transmission Operations	N/A?				Filed with FERC June 7, 2019	
TOP-003-4	Operational Reliability Data	Revision				Filed with FERC February 21, 2020	
VAR-001-6 ⁶	Voltage and Reactive Control	Revision				Filed with FERC June 7, 2019	
TPL-001-5	Transmission System Planning Performance Requirements	Revision	ISO			Filed with FERC December 7, 2018	
10. Standards Approved by NERC and Awaiting Filing with FERC						Status	
None at this time							

Changes from the last posting are in red text.

NERC and WECC Standards	Type	Applicability ¹	Related ISO Rules	Stakeholder Consultation	Forward to the AUC	Forecast Effective Date ²
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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 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 that are part of the reliability coordinator initiative
	Standards related to the development of PRC-027-AB-1 Coordination of Protection Systems for Performance During Faults
	Relay Loadabiity standards
	Transmission Planning standards