

Interim Compliance Report

ISO Rules and Operations and Planning Alberta Reliability Standards

January 2018 through November 2019

Introduction

The MSA has a broad mandate of surveillance, investigation, and enforcement in respect of the Alberta electricity market. Through enforcement of ISO Rules and Alberta Reliability Standards, the MSA contributes to the reliability and competitiveness of the Alberta electric system and promotes a culture of compliance and accountability among market participants.

Market participants play a crucial role in promoting compliance. As such, the MSA encourages market participants to self-report instances of non-compliance. When self-reporting, market participants are invited to set out a case for forbearance if they are able to demonstrate how section 23.1 of the *Transmission Regulation* (AR 86/2007) has been satisfied.

The MSA works collaboratively with the Alberta Electric System Operator (AESO) and the Western Electricity Coordinating Council (WECC) regarding compliance issues, including the referral of suspected contraventions to the MSA and the interpretation of ISO Rules and Alberta Reliability Standards. These entities also provide the MSA with subject matter expertise and technical assessments for events under consideration, upon request. This collaboration continues to pay dividends, ensuring rigorous enforcement decisions are made by the MSA, while processes are refined to enhance efficiency.

This Report

This report represents a departure from the MSA's usual practice. The MSA's usual practice has been to issue a compliance report in February of each year, addressing the activities of the prior year. That report addressed both Critical Infrastructure Protection (CIP) and non-CIP matters. In contrast, this report relates only to ISO Rules and Operations and Planning Alberta Reliability Standards. Some unexpected events have caused the MSA to depart in 2019 from previous practice.

The first reason relates to a discovery in late 2018 that there was a significant backlog in CIP matters. The MSA notified the General Counsels of both the Alberta Utilities Commission (AUC) and the AESO of this backlog. The CIP matters were both new and complicated and the MSA did not have the resources in place to adequately address this new line of inquiry. The MSA created two new committees: one committee is responsible for CIP matters to address this issue and the second is responsible for the non-CIP matters. Experts and additional personnel were added to the CIP Committee. A decision was made to refrain from CIP compliance reporting until the MSA had a better understanding of the issues. At the same time, the MSA decided to refrain from further reporting on the non-CIP matters. The attention required to address the CIP matters diverted resources from the non-CIP matters and a backlog developed in that area as well.

The other issue that has complicated the compliance reporting is a determination that inappropriate rules were being used to determine whether a forbearance should be granted. The *Transmission Regulation* (AR 86/2007) provides that the MSA may grant forbearance where a finding can be made that the integrity of the Alberta Interconnected Electric System (AIES) is not compromised by the alleged breach of the rules. In the past, no such specific

findings were being made. In fact, forbearance was being granted where the contravention was a self-report.¹ In accordance with an independent legal opinion, any and all forbearances must directly meet the requirements of the *Transmission Regulation* (AR 86/2007). Self-reports receive a penalty discount of up to 50% according to AUC Rules, but these do not necessarily receive forbearance or no penalty. As a result of this change in procedure, the percentage of files receiving forbearance has declined from approximately 85% to 55% of files that were found to be contraventions.

This change in procedure has also led to certain enhancements in the manner in which the alleged contraventions are analyzed. The MSA and the AESO have agreed on a procedure whereby the AESO will provide the MSA with a technical assessment regarding the impact to the AIES, where the MSA does not have the information to make that judgement. The MSA also encourages any market participants who file a self-report to provide evidence as to the impact of the breach on the AIES.

There is a third reason for the delay in compliance reporting by the MSA. The current AUC Rules require the MSA to report publicly with respect to all compliance breaches, whether they are CIP or non-CIP. However, the CIP cases present a concern not present with non-CIP matters. CIP matters often deal with cyber security issues and there is a growing concern in both Canada and the United States that broad public reporting creates a security risk in itself. In the United States, the Federal Energy Regulatory Commission (FERC) currently has a proceeding underway to address this very issue. The MSA has raised this concern with both the AESO and the AUC. A detailed submission was made to the AUC as part of that agency's review of its regulatory activities going forward.² The MSA's concern also related to the use of North American Electric Reliability Corporation (NERC) guidelines regarding CIP compliance matters.

Going Forward

The MSA has requested that the AUC hold consultations in the near future with respect to the issues raised by the MSA regarding public reporting of CIP breaches and the use of NERC guidelines.

The MSA will, on an ongoing basis, issue two compliance reports: one addressing CIP matters and another addressing the non-CIP matters. This is the first of the non-CIP reports. The first CIP report will be issued only after the AUC's decision following the proposed consultation and will reflect that decision.

¹ Approximately 95% of self-reports were granted forbearance.

² [MSA Submission related to the AUC's 2019-2022 Strategic Plan](#)

Going forward, there will be an annual report for both CIP and non-CIP and quarterly reports. The annual report will be issued in mid-February of each year and the quarterly reports will be issued one month after the end of each quarter. The MSA welcomes any comments from market participants as to how MSA reports might be improved. The MSA would like to receive those comments prior to issuing the final report for 2019, and would ask market participants to submit comments prior to the end of January 2020.³

This report presents interim statistics regarding compliance with ISO Rules and the Operations and Planning Alberta Reliability Standards from January 1, 2018 through November 30, 2019.

Gordon Kaiser



Market Surveillance Administrator

³ Please submit comments to andrew.wilkins@albertamsa.ca

ISO Rules Enforcement (January 1, 2019 to November 30, 2019)

Activity Levels

ISO Rules promote orderly and predictable actions on the part of market participants and support the role of the AESO in coordinating those actions. From January 1 to November 30, 2019, the MSA addressed 423 ISO Rules compliance matters, and an additional 195 matters were carried forward to the next month. The MSA issued 155 notices of specified penalty, totaling \$268,500⁴ in financial penalties. As indicated in Figure 1, four market participants were issued more than \$10,000 each in total notices of specified penalty over this period.

Table 1: ISO Rules Compliance Decisions Forbearance vs. Penalties (% of the Total Shown in Parentheses)⁵

Section of ISO Rules	Total	Forbearance	Notice of Specified Penalty
201.3	12	7 (58%)	5 (42%)
201.7	29	16 (55%)	13 (45%)
203.3	76	53 (70%)	23 (30%)
203.4	79	50 (63%)	29 (37%)
203.6	36	23 (64%)	13 (36%)
205.3	19	11 (58%)	8 (42%)
205.4	6	6 (100%)	0 (0%)
205.5	19	7 (37%)	12 (63%)
205.6	30	5 (17%)	25 (83%)
205.8	5	3 (60%)	2 (40%)
303.1	13	1 (8%)	12 (92%)
306.4	9	6 (67%)	3 (33%)
306.5	11	6 (55%)	5 (45%)
502.6	5	5 (100%)	0 (0%)
Total	349	199 (57%)	150 (43%)

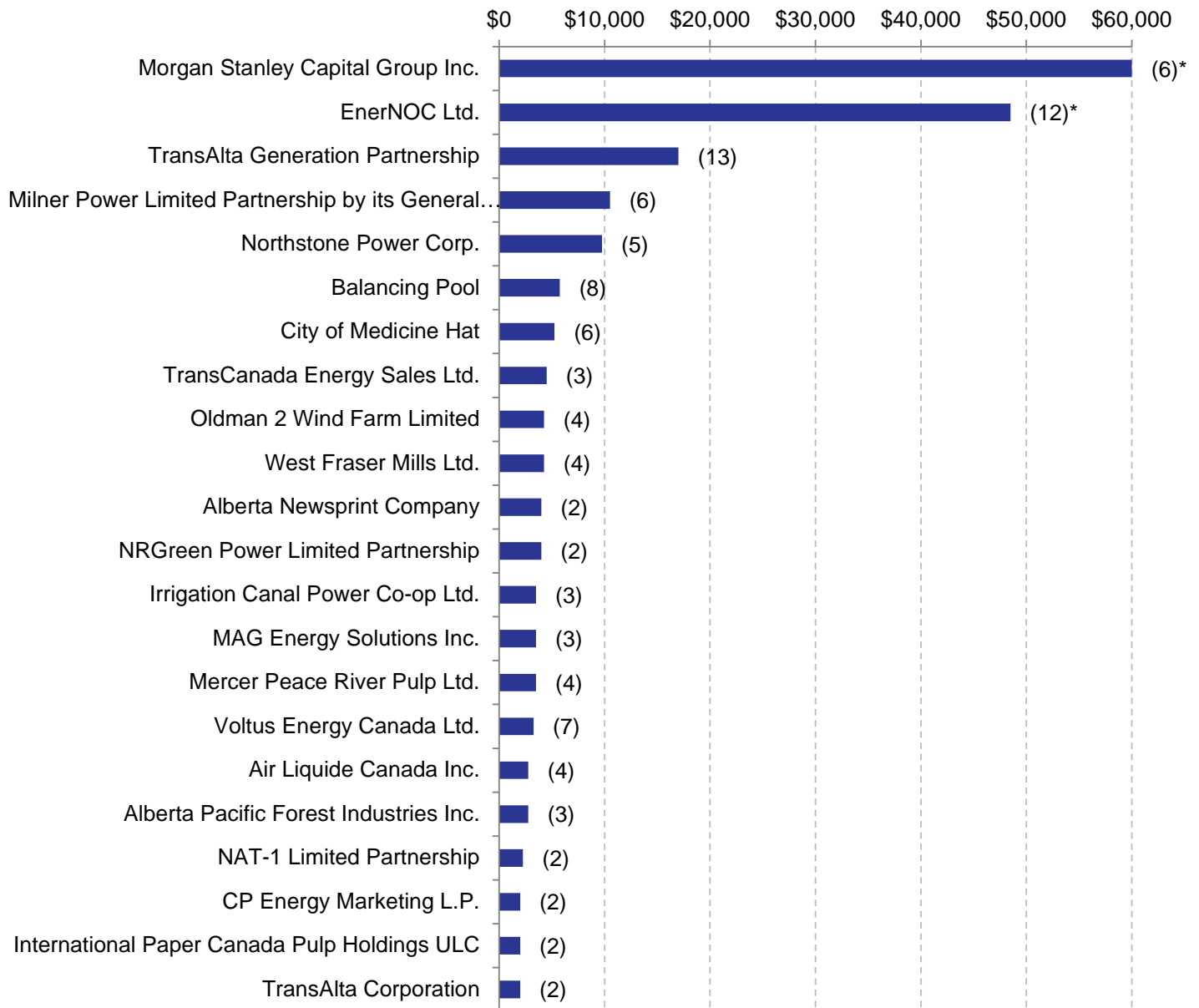
The sections of ISO Rules listed in Table 1 fall into the following categories:

- 201 General (Markets)
- 203 Energy Market
- 205 Ancillary Services Market
- 303 Interties
- 306 Outages and Disturbances
- 502 Technical Requirements

⁴ The Data Supplement: Detailed Specified Penalties Table for ISO Rules attributes \$226,500 in specified penalties issued and paid between January 1 and November 30, 2019 to specific market participants. The \$268,500 noted here includes penalties issued over this time period, but several remained unpaid as of November 30, 2019. As these are paid, they will be included in future compliance statistics reporting.

⁵ This table reports on sections of the ISO Rules with five or more matters during this period from the following categories: forbearance and notice of specified penalty. Accordingly, 15 matters relating to Sections 103.1, 203.1, 304.9, 502.1, 502.3, 502.4, 502.8, 502.15, 505.4 and 9.1.3 were not included, comprising five penalties and 10 forbearance decisions. An additional 18 matters relating to compliance exceptions of Sections 203.4 and 205.5 were also not included, as well as 6 rejected and withdrawn self-reports, and 35 no breach decisions. As unresolved matters are analyzed/reviewed, changes to this table may occur.

Figure 1: Total Specified Penalties for Contraventions of ISO Rules by Company⁶ (Number of Penalties in Parentheses)



*Notices of specified penalty assessed for Morgan Stanley Capital Group Inc. and EnerNOC Ltd. were related to repeated contraventions of ISO Rules Sections 203.6 and 303.1, respectively. As per AUC Rule 019, repeated contraventions are subject to larger penalty amounts.

⁶ Only issued and paid penalties totaling \$2,000 or higher are reported in this figure.

Alberta Reliability Standards: Operations and Planning Enforcement (January 1, 2019 to November 30, 2019)

Activity Levels

Alberta Reliability Standards ensure that various entities involved in grid operations (e.g. generators, transmission operators and the AESO) are doing their part by way of procedures, communication, coordination, training, and maintenance, among other practices, to support the reliability of the interconnected electric system. For Operations and Planning Alberta Reliability Standards, the MSA closed 12 matters since the start of 2019, while 61 remain unresolved. Six of the matters closed during this year were addressed with a notice of specified penalty, totaling \$50,000 in financial penalties. Of the 12 closed matters, only one standard, COM-001, resulted in five or more forbearance and penalty decisions. Of these five COM-001 decisions, three (60%) resulted in a forbearance outcome, and two (40%) resulted in a notice of specified penalty. In addition, four of the 12 closed files resulted in a notice of specified penalty (regarding standards FAC-003, PRC-001 and VAR-002).⁷

Table 2: Total Specified Penalties for Operations and Planning Alberta Reliability Standards Addressed (Number of Penalties in Parentheses)⁸

Registered Entity	COM-001	FAC-003	PRC-001	VAR-002	Total
ATCO Electric Ltd.		\$37,500			\$37,500 (2)*
ENMAX Energy Corporation				\$5,000	\$5,000 (1)
Imperial Oil Resources Limited	\$1,500				\$1,500 (1)
Pembina NGL Corporation			\$3,750		\$3,750 (1)
Western Sustainable Power Inc.	\$2,250				\$2,250 (1)
Total	\$3,750	\$37,500	\$3,750	\$5,000	\$50,000 (6)

*AUC Rule 027 specifies a larger penalty amount for contraventions of FAC-003.

The Alberta Reliability Standards listed in Table 2 fall into the following categories:

COM	Communications
FAC	Facilities Design, Connections, and Maintenance
PRC	Protection and Control
VAR	Voltage and Reactive

⁷ An additional three of the 12 matters were expired or withdrawn (EOP-001 and VAR-501). Unresolved matters include standards BAL-005, COM001, COM-002, EOP-001, EOP-005, FAC-003, INT-009, PRC-001, PRC-018, PRC-023, VAR-002 and VAR-501.

⁸ This table only includes matters that were closed between January 1, 2019 and November 30, 2019. A published specified penalty will not appear in this table until the file is closed (mitigation must be completed to be considered closed).

Data Supplement: Detailed Specified Penalties Table for ISO Rules

Table 3: Specified Penalties Issued and Paid between January 1, 2019 and November 30, 2019 for Contraventions of ISO Rules

Market Participant	Summed Specified Penalty Amounts by Section of ISO Rules (\$)															Total (\$)
	201.3	201.7	203.1	203.3	203.4	203.6	205.3	205.5	205.6	205.8	303.1	306.4	306.5	502.1	502.4	
Air Liquide Canada Inc.					1,500		500	750								2,750
Alberta Newsprint Company				1,500	2,500											4,000
Alberta Pacific Forest Industries Inc.				2,000	750											2,750
AltaGas Ltd.							1,000									1,000
ATCO Electric Ltd.												250				250
ATCO Power Canada Ltd.							500									500
Balancing Pool				1,500	3,000			1,250								5,750
Bitfury Technology Inc.									1,250							1,250
BowArk Energy Ltd.										1,000						1,000
Calgary Energy Centre No. 2 Inc.					1,500											1,500
Capital Power L.P.															500	500
Cenovus Energy Inc.													250			250
City of Medicine Hat				1,500	2,500								1,250			5,250
CP Energy Marketing L.P.						2,000										2,000
Daishowa-Marubeni International Ltd.								1,500								1,500
Enel X Canada Ltd.									1,750							1,750
EnerNOC Ltd.											48,500					48,500
ENMAX Cavalier LP				750												750
ENMAX Energy Corporation														250		250
ENMAX Generation Portfolio Inc.				1,500												1,500
ENMAX Power Corporation												250				250
Enmax Shepard Services Inc.				750												750
Genalta GP II Ltd.					1,500											1,500
Grande Prairie Generation Inc.		250					1,250									1,500
International Paper Canada Pulp Holdings ULC		500		1,500												2,000

Table 3: Specified Penalties Issued and Paid between January 1, 2019 and November 30, 2019 for Contraventions of ISO Rules (Continued)

Market Participant	Summed Specified Penalty Amounts by Section of ISO Rules (\$)															Total (\$)
	201.3	201.7	203.1	203.3	203.4	203.6	205.3	205.5	205.6	205.8	303.1	306.4	306.5	502.1	502.4	
Irrigation Canal Power Co-op Ltd.				750	2,750											3,500
MAG Energy Solutions Inc.	500			1,500		1,500										3,500
Mercer Peace River Pulp Ltd.				1,500			500	1,500								3,500
Milner Power Limited Partnership by its General Partner Milner Power Inc.				7,250	3,000										250	10,500
Morgan Stanley Capital Group Inc.						60,000										60,000
NAT-1 Limited Partnership					2,250											2,250
Northstone Power Corp.		2,000			7,500				250							9,750
NRGreen Power Limited Partnership					4,000											4,000
Oldman 2 Wind Farm Limited		1,250		1,500	1,500											4,250
Repsol Canada Energy Partnership		500														500
Shell Energy North America (Canada) Inc.						750										750
Suncor Energy Inc.		250														250
Syncrude Canada Ltd.												250	250			500
TransAlta Corporation		2,000														2,000
TransAlta Generation Partnership				1,500	3,500			4,500	7,500							17,000
TransCanada Energy Ltd.				750						1,000						1,750
TransCanada Energy Sales Ltd.						4,500										4,500
Voltus Energy Canada Ltd.	1,250	1,000					500		500							3,250
West Fraser Mills Ltd.		1,500	500	1,500	750											4,250
Whitecourt Power Ltd.					1,500											1,500
Total	1,750	9,250	500	27,250	40,000	68,750	4,250	9,500	12,250	1,000	48,500	750	1,750	250	750	226,500

Appendix: Compliance Review 2018⁹

Overview

The MSA reports summary compliance metrics as part of its regular reporting. For 2018, we summarize compliance matters received by referral or by self-report, and how those matters were distributed amongst various rules and standards. We summarize enforcement activities in terms of the MSA's issuance of specified penalties by rule and standard.

The overall number of ISO rules compliance matters addressed decreased from 2017 to 2018. While the number of addressed ISO rules referrals from the AESO increased slightly, self-reports submitted by market participants continued to represent a large majority of the events we assessed, indicating that market participants continue to actively monitor for, and self-disclose, events of non-compliance. The distribution of contraventions across ISO rules was broadly similar to previous years as rules governing the most frequent day-to-day market activities accounted for the majority of compliance events. Most notices of specified penalty issued in 2018 were for first contraventions within a 12-month period, which is indicative of the fact there were few persistent problems found in compliance with ISO rules.

The number of Operations and Planning Alberta Reliability Standards matters addressed decreased from 2017 to 2018. Some variation in the number of Alberta Reliability Standards contravened is expected as a result of changes in entities subject to a compliance audit from year-to-year given the three-year audit cycle for Alberta Reliability Standards.

Numbers at a Glance

- 467 ISO rules compliance matters addressed in 2018, down from 517 matters addressed in 2017.
- Self-reporting accounted for 83% of ISO rules compliance matters addressed by the MSA, slightly down from 86% in 2017.
- 57 notices of specified penalty issued for contraventions of ISO rules for a total of \$132,000 in financial penalties. No specified penalties were disputed or remained unpaid.
- 68% of the notices of specified penalty issued for ISO rules in 2018 were for first contraventions over a 12-month period.
- 36 operations and planning Alberta Reliability Standards compliance matters addressed in 2018, down from 59 matters addressed in 2017.
- 7 matters relating to Alberta Reliability Standards were addressed in 2018 by notices of specified penalty, totaling \$22,750 in financial penalties. No specified penalties were disputed or remained unpaid.

⁹ This review is provided pursuant to section 23(2) of the *Transmission Regulation*.

Statutory and Alberta Utilities Commission Rule Developments

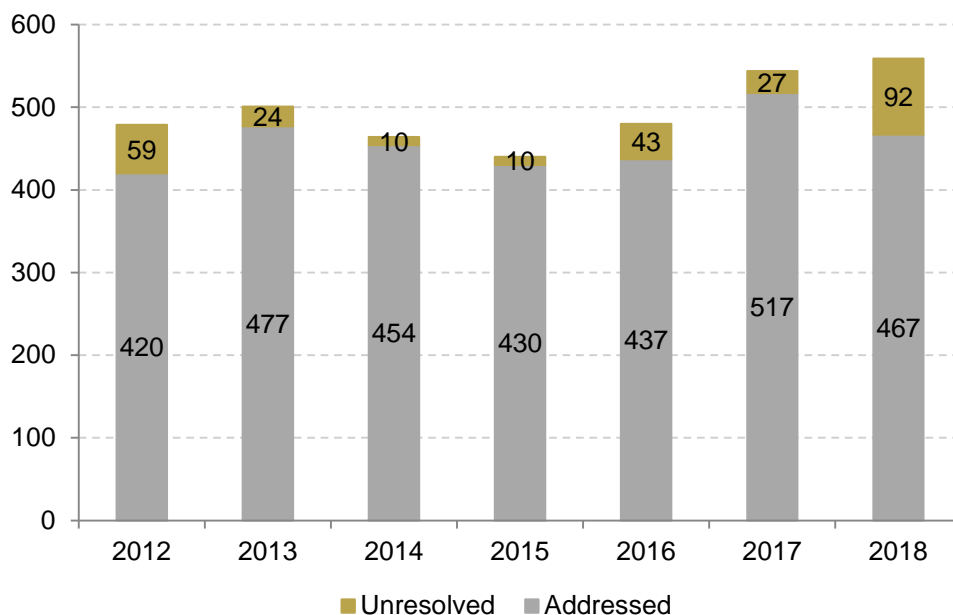
Statutory developments in 2018 featured changes to legislation and several regulations to expand the legislative framework for the proposed implementation of the capacity market. Alberta Utilities Commission Rule 017 was also amended significantly to consider proposed new ISO rules to implement the capacity market. No other changes to the statutory scheme occurred having a direct effect on compliance with existing ISO rules and reliability standards. No changes were made to AUC Rule 019 or Rule 027.

ISO Rules Enforcement

Activity Levels

In 2018, the MSA addressed 467 ISO rules compliance matters and had 92 matters unresolved at the end of the year. Of the 467 files, 57 (12%) resulted in a notice of specified penalty, 410 (88%) resulted in forbearance, and zero were rejected or withdrawn. No compliance matters were brought before the AUC for a hearing or other proceeding, and none of the notices of specified penalty were disputed or remained unpaid. In 2017, the MSA addressed 517 ISO rules compliance matters, with 72 matters addressed with notices of specified penalty, 437 matters resulting in forbearance, and eight matters being rejected or withdrawn. As Figure A1 indicates, the number of ISO rules compliance matters received and/or addressed in 2018 increased compared to most of the previous years.

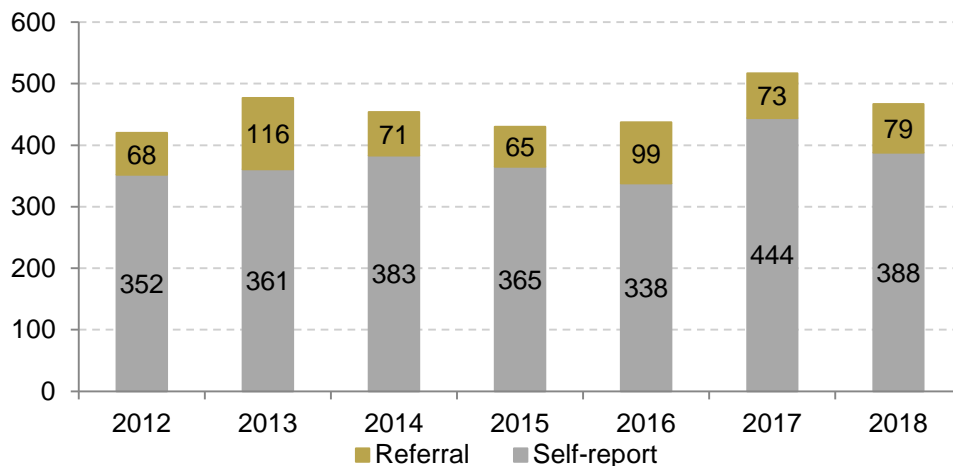
Figure A1: ISO Rules Compliance Matters Addressed or Unresolved at the End of 2018¹⁰



¹⁰ As unresolved matters are analyzed/reviewed, changes to this figure may occur.

The MSA addressed 388 ISO rules compliance matters that were received via self-report and 79 matters that were received through Alberta Electric System Operator (AESO) referrals (83% and 17% of total matters addressed in the year, respectively). While the number of referral matters addressed in 2018 was slightly larger than in 2017, the distribution of ISO rules matters referred remained similar with a few exceptions. The share of referral matters addressed relating to sections 201.7 and 205.6 decreased relative to 2017. Compared to 2017, there were small increases in the proportion of addressed self-reports for these sections. Conversely, the share of referred matters relating to sections 203.1, 203.4 and 203.6 increased. In comparison, the proportion of addressed self-reports for section 203.6 declined, but sections 203.1 and 203.4 saw a slight increase compared to 2017. Section 203.6 addressed referrals were attributed to two assets.

Figure A2: ISO Rules Matters Addressed, Self-reports versus AESO Referrals



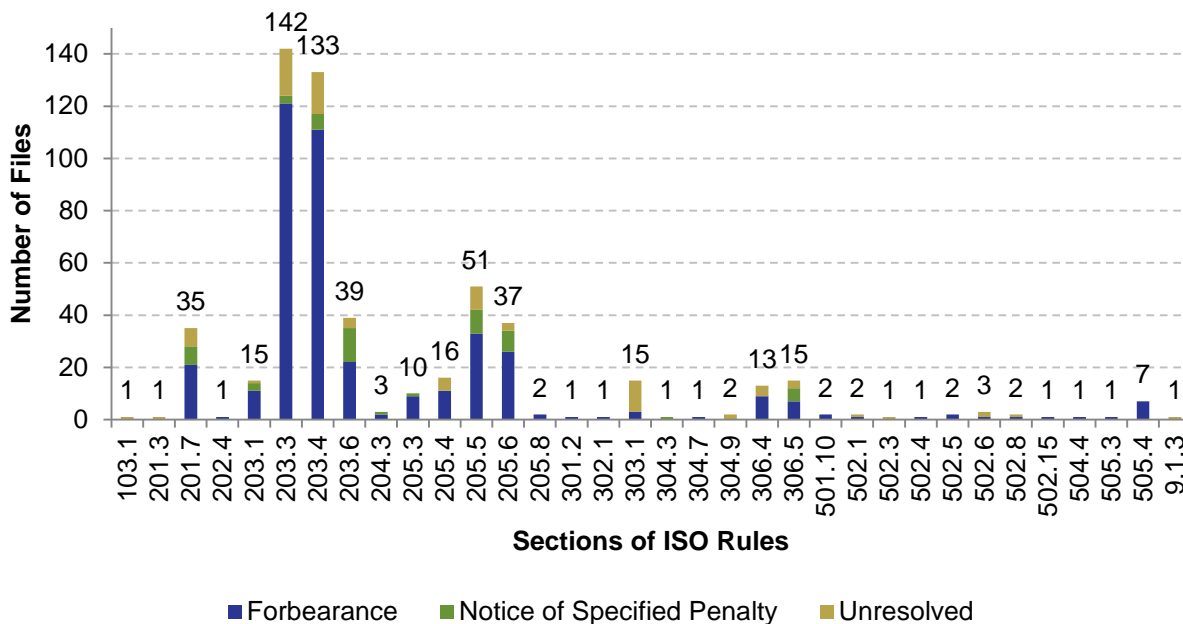
Of the 388 ISO rules related self-reports addressed in 2018, 19 were issued a notice of specified penalty; while 38 of the 79 matters referred by the AESO received a notice of specified penalty.¹¹ Penalty amounts issued for self-reports are reduced by 50% as set out in AUC Rule 019.

In 2018, 34 different sections of ISO rules were identified in self-reports and referrals, as compared to 27 sections in 2017. The distribution of ISO rules compliance files addressed by the MSA in 2018 is broadly similar to that observed in 2017. As seen in Figure A3, the majority of matters reviewed by the MSA relate to ISO rules governing the most common day-to-day energy market activities, such as: the submission of energy restatements (ISO Rules section 203.3); delivery of energy or operating reserves in response to a dispatch or directive (sections 203.4 for energy and 205.4 through 205.6 for operating reserves); import and export information

¹¹ The MSA may open multiple files to process a single referral in certain cases depending on the details of the matter being referred. Accordingly, the total number of matters originating by referral addressed in a particular year may not reflect the total referrals received from the AESO.

submission requirements (section 203.6); and acknowledging dispatches (section 201.7). Table A1 shows a subset of the changes in the percentage of addressed matters between 2017 and 2018.

Figure A3: 2018 ISO Rules Compliance Matters Addressed and Unresolved¹²



The sections of ISO Rules listed in Figure A3 and Table A1 fall into the following categories:

- 103 Administration
- 201 General (Markets)
- 202 Dispatching the Markets
- 203 Energy Market
- 204 Dispatch Down Service Market
- 205 Ancillary Services Market
- 301 General (ISO Directives)
- 302 Transmission Constraint Management
- 303 Interties
- 304 Routine Operations
- 306 Outages and Disturbances
- 501 General
- 502 Technical Requirements
- 504 Legal Owners of Transmission Facilities and Load Facilities
- 505 Legal Owners of Generating Facilities
- 9 Transmission

¹² As unresolved matters are analyzed/reviewed, changes to this figure may occur.

Table A1: Comparison of Selected Percentages of ISO Rules Matters Addressed in 2017 and 2018

Section(s) of ISO Rules	Percentage of Matters Addressed	
	2017	2018
203.3	32%	27%
203.4	23%	25%
205.4, 205.5, 205.6	10%	19%
203.6	7%	7%
201.7	6%	6%
505.4	7%	1%

The MSA issued 57 notices of specified penalty for ISO rules compliance matters involving 28 market participants, resulting in a total financial amount of \$132,000. In the previous year, the MSA issued 72 notices of specified penalty across 39 market participants, totaling \$98,250. The percentage of specified penalties issued for first contraventions declined to 68% in 2018 from 72% in 2017. Despite this decrease, the high proportion of first contraventions remains a positive indicator that ISO rules contraventions are not indicative of systemic problems. Among the balance of specified penalties issued in 2018, seven were second contraventions, two were third contraventions, and the fourth or more contraventions accounted for nine notices of specified penalty. Higher frequency contraventions attract greater specified penalties as per AUC Rule 019.

Table A2: Specified Penalties Issued in 2018 for Contraventions of ISO Rules

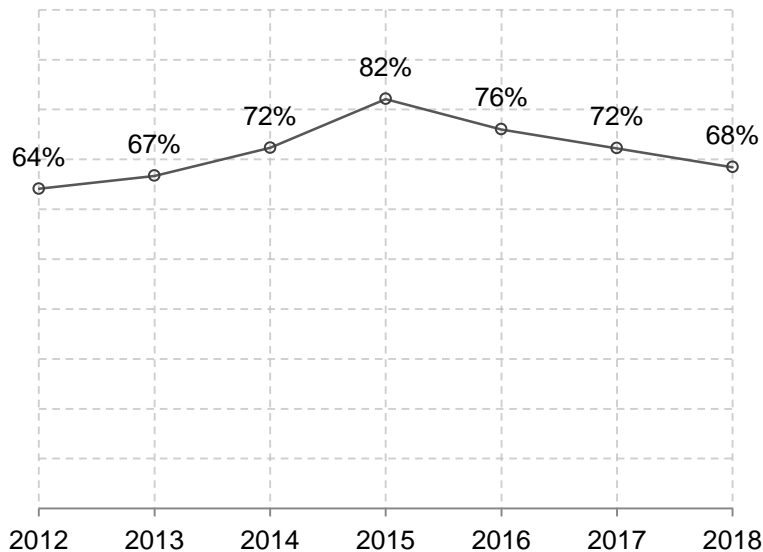
Market Participant	Summed Specified Penalty Amounts by Section of ISO Rules (\$)											Total
	201.7	203.1	203.3	203.4	203.6	204.3	205.3	205.5	205.6	304.3	306.5	
Air Liquide Canada Inc.						\$500						\$500
Alberta Newsprint Company				\$750								\$750
Alberta Pacific Forest Industries											\$250	\$250
AltaGas Ltd.											\$250	\$250
ATCO Power Canada Ltd.								\$250				\$250
ATCO Power Scotford Upgrader								\$500				\$500
Balancing Pool		\$500		\$750								\$1,250
Cancarb Ltd.			\$1,500									\$1,500
Capital Power (CBEC) L.P.								\$500	\$500			\$1,000
Cenovus Energy Inc.		\$250										\$250
Cenovus FCCL Ltd.		\$500										\$500
City of Medicine Hat	\$500											\$500
Daishowa-Marubeni International Ltd.							\$1,500					\$1,500
EnerNOC Ltd.									\$750			\$750
Genalta GP II Ltd.									\$250			\$250
Grande Prairie Generation Inc.								\$500				\$500
Imperial Oil Limited				\$1,500								\$1,500
MEG Energy Corp.	\$500			\$1,500								\$2,000
Morgan Stanley Capital Group Inc.					\$100,500							\$100,500
NAT-1 Limited Partnership									\$750			\$750
Northstone Power Corp.	\$1,500			\$1,500								\$3,000
Powerex Corp.											\$500	\$500
Suncor Energy Inc.											\$500	\$500
TransAlta Corporation										\$500		\$500
TransAlta Generation Partnership			\$1,500	\$1,500				\$2,000	\$3,750			\$8,750
TransCanada Energy Ltd.	\$1,000											\$1,000
West Fraser Mills Ltd.	\$500											\$500
Whitecourt Power Ltd.	\$500		\$1,500									\$2,000
Total	\$4,500	\$1,250	\$4,500	\$7,500	\$100,500	\$500	\$1,500	\$3,750	\$6,000	\$500	\$1,500	\$132,000

The time required to resolve a particular matter varies considerably depending on the particular circumstances of the matter, including the complexity of the contraventions and whether additional information was required. It took the MSA an average of 67 days to resolve ISO rules matters in 2018, up from 23 days in 2017.

Compliance Trends

As demonstrated in Figure A4, the proportion of notices of specified penalty which were first contraventions within a 12-month period decreased for a third consecutive year. Despite this trend, two of every three notices of specified penalty issued in 2018 pertained to a first contravention within a 12-month period. Furthermore, notices of specified penalty for more frequent contraventions in 2018 were largely isolated to one market participant's non-compliance with a single ISO rule.

Figure A4: Percentage of Notices of Specified Penalty which are First Contraventions



Alberta Reliability Standards Enforcement

Reliability standards are developed by the North American Electric Reliability Corporation (NERC) to promote the reliable operation of the bulk electric system. NERC standards are grouped into 14 topical areas, such as: Transmission Operations, Resource and Demand Balancing, Communications, Emergency Preparedness and Operations, and Critical Infrastructure Protection. The authority to approve NERC standards rests with the Federal Energy Regulatory Commission (FERC) in the United States.

Since 2008, the AESO has endeavoured to adopt NERC standards as Alberta Reliability Standards. Prior to applying to the AUC to adopt a NERC standard, the AESO may modify the standard for relevance in Alberta. If the standard is not relevant, the AESO may submit an application to the AUC recommending that the Commission reject the standard. As of the end of

2018, 72 Alberta Reliability Standards were approved by the AUC and in effect. Almost all the standards are applicable to the AESO, while less than half apply to registered entities other than the AESO. Over the course of the year, the AUC reviewed new standards and amendments to existing standards. Six new and amended standards became effective in 2018, four of which apply only to the AESO.

Monitoring and Enforcement for Registered Entities

The AESO is the compliance monitor with respect to registered entities in Alberta and carries out its compliance monitoring mandate in accordance with ISO Rules section 103.12 and its Compliance Monitoring Program (CMP) developed in consultation with stakeholders. The AESO's compliance monitoring activities, including scheduled reliability compliance audits, could result in a referral to the MSA, if non-compliance with an applicable standard is evident. Registered entities can self-report suspected non-compliance directly to the MSA.

Monitoring and Enforcement for the AESO

The MSA has oversight responsibilities for compliance of registered entities, as well as the AESO. In respect of the AESO, the MSA is assisted by the Western Electricity Coordinating Council (WECC)¹³ by way of a services agreement between the MSA and WECC. As noted above, the bulk of Alberta Reliability Standards in place in Alberta are applicable to the AESO given the scope of its responsibilities and, consequently, its mandate to maintain system stability and reliability.

Just as the AESO monitors registered entities in accordance with the Alberta CMP, the MSA and WECC use the Alberta CMP as a guide to monitor the AESO. WECC also tries to maintain consistency, where possible, with the program it applies to U.S. entities it monitors. Each year the MSA works with WECC to develop a plan to monitor the AESO. The plan confirms the scope of compliance monitoring including any intended deviations from the Alberta CMP. Like registered entities, the AESO is on a three-year audit cycle; thus for the 2019 implementation year and as per normal procedures, the AESO is not subject to a scheduled audit as the last audit was conducted in 2017/2018. As noted in the [Compliance Review 2017](#), the AESO was most recently subject to a two-part scheduled audit. The first part of the audit occurred in 2017 and focused on operations and planning standards, whereas the second part of the audit occurred in 2018, which focused on CIP standards. The audit period for the 2018 CIP audit covered October 1, 2017 to December 31, 2017, or the first three months that the CIP standards were in effect in Alberta.¹⁴ Although no audits of the AESO are scheduled to occur in 2019, the AESO is required to self-certify to all AESO-applicable Alberta Reliability Standards as per the normal program, consistent with the AESO's Self-Certification Guide.

Activity Levels

The MSA addressed 36 operations and planning Alberta Reliability Standards matters in 2018 including 10 matters carried over from 2017. Of the matters addressed, seven resulted in a

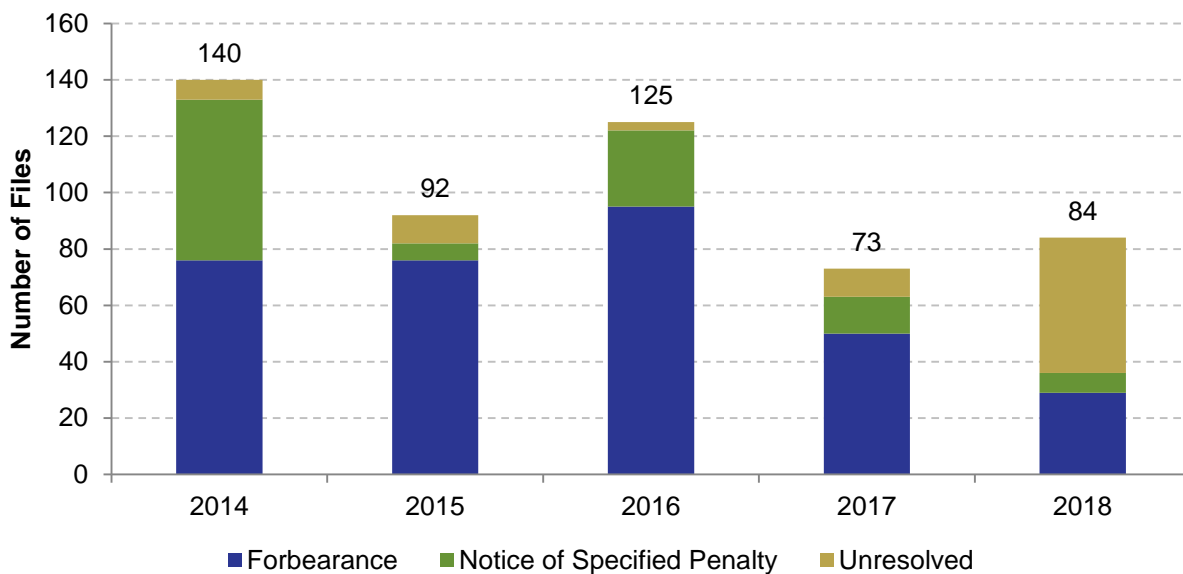
¹³ [WECC](#) is the regional entity responsible for assuring the reliability of the bulk electric system in the Western Interconnection.

¹⁴ Note, this statement ignores CIP-001.

notice of specified penalty. At the end of 2018, 48 operations and planning matters remained under review.

Considering only operations and planning standards, there was a decrease in the number of Alberta Reliability Standards matters addressed in 2018 compared to 2017. The number of Alberta Reliability Standards matters varies from year-to-year due to the three-year audit cycle, given that a different group of registered entities are subject to a compliance audit. However, all registered entities are subject to self-certification annually.

Figure A5: Operations and Planning Alberta Reliability Standards Outcomes from 2014 to 2018^{15,16}

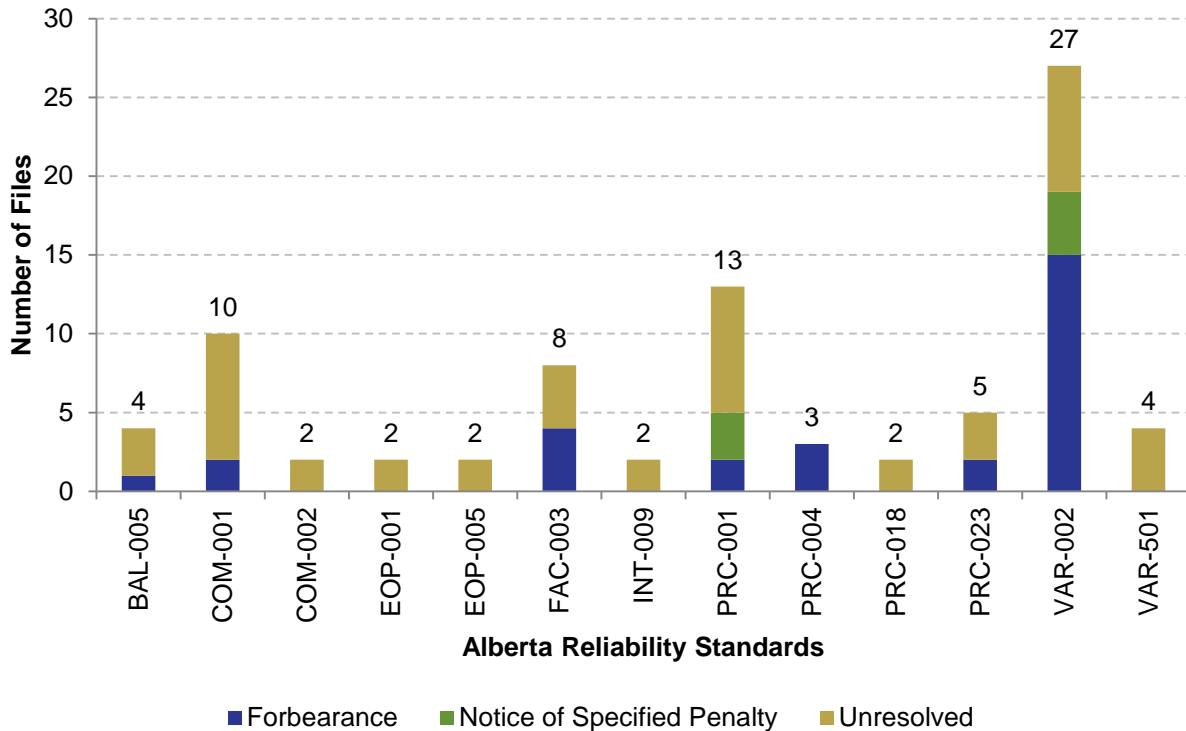


The MSA currently categorizes its files by standard requirement; accordingly, all individual requirements suspected of being contravened are reflected in these metrics.

¹⁵ As unresolved matters are analyzed/reviewed, changes to this figure may occur.

¹⁶ 2014–2017 includes CIP-001 files.

Figure A6: 2018 Operations and Planning Alberta Reliability Standards Matters Addressed and Unresolved¹⁷



The Alberta Reliability Standards listed in Figure A6 fall into the following categories:

- BAL Resource and Demand Balancing
- COM Communications
- EOP Emergency Preparedness and Operations
- FAC Facilities Design, Connections, and Maintenance
- INT Interchange Scheduling and Coordination
- PRC Protection and Control
- VAR Voltage and Reactive

In 2018, the highest number of contraventions not related to CIP included VAR-002 and PRC-001 matters. Compared to 2017, VAR-002 contraventions in 2018 increased in total, while the number of PRC-001 contraventions decreased slightly from 2017 to 2018.

In 2018, seven matters involving two standards were addressed with a notice of specified penalty, resulting in a total financial amount of \$22,750.¹⁸ In 2017, 13 matters involving six

¹⁷ As unresolved matters are analyzed/reviewed, changes to this figure may occur.

¹⁸ The MSA tracks Alberta Reliability Standard contraventions by individual standard requirements. However, some notices of specified penalty may include more than one standard requirement.

standards were addressed with a notice of specified penalty, resulting in a total financial amount of \$56,500.

Table A3: Specified Penalties for Contraventions of Alberta Reliability Standards Addressed in 2018*

Registered Entity	PRC-001	VAR-002	Total
AltaLink L.P., by its general partner, AltaLink Management Ltd.**	\$3,750		\$3,750
Castle Rock Wind Project, LLC		\$3,000	\$3,000
TransAlta Corporation		\$6,000	\$6,000
TransAlta Generation Partnership	\$10,000		\$10,000
Total	\$13,750	\$9,000	\$22,750

*One notice of specified penalty issued in 2018 is not included in this report, as the matter remained unaddressed as of December 31, 2018. This penalty will appear in the Compliance Review 2019.

**One notice of specified penalty was issued in 2017, however the matter was closed on January 31, 2018. Therefore it is included as part of the Compliance Review 2018.

Compliance Trends

When compared to 2017, COM-001 and VAR-002/VAR-002-WECC 2018 matters have increased by 100% and 59%, respectively. Matters addressed in 2018 relating to these standards were limited to a small number of registered entities.

Total COM-001 matters in 2018 increased to 10 from five in 2017. COM-001 contraventions include failing to provide a means to coordinate voice and message telecommunications with the ISO and adjacent interconnected transmission operators, not having instructions and procedures in place to enable continued operation of the interconnected electric system (IES) during the loss of voice and message telecommunication facilities, and testing alternate voice and message telecommunication facilities.

Typical contraventions of VAR-002/VAR-002-WECC standards pertain to automatic voltage regulator or voltage regulating system status change reporting or obtaining consent. The sum of VAR-002 and VAR-002-WECC matters in 2018 increased to 27 from 17 in 2017.

The increase in both COM-001 and VAR-002/VAR-002-WECC matters is driven by both an increase in AESO referrals and registered entity self-reports. The increase in referrals is driven by the three-year compliance audit cycle, as a different group of registered entities were subject to a compliance audit compared to 2017. An increase in self-reports is a positive indication of market participants improving their compliance programs and self-reporting suspected contraventions soon after they occur.

References

AESO

Alberta Reliability Standards

<https://www.aeso.ca/rules-standards-and-tariff/alberta-reliability-standards/>

Compliance Monitoring Program

<https://www.aeso.ca/assets/Uploads/ARS-CMP-Final-v1.1.pdf>

ISO Rules

<https://www.aeso.ca/rules-standards-and-tariff/iso-rules/>

Self-Certification Guide

<https://www.aeso.ca/assets/Uploads/ARS-Self-Certification-Guide3.pdf>

Alberta Utilities Commission

AUC Rules

<http://www.auc.ab.ca/Pages/Rules/rules-home.aspx>

Legislation

Alberta Utilities Commission Act

http://www.qp.alberta.ca/1266.cfm?page=A37P2.cfm&leg_type=Acts&isbncln=9780779785322

Transmission Regulation

http://www.qp.alberta.ca/1266.cfm?page=2007_086.cfm&leg_type=Regs&isbncln=9780779782314

MSA

MSA Compliance Process

<https://static1.squarespace.com/static/5d88e3016c6a183b1bcc861f/t/5d925a2f2c819d1bf2e09163/1569872432306/2016-10-19+Compliance+Process.pdf>

MSA WECC Services Agreement

<https://resources.albertamsa.ca/index.php?page=notice-re-msa-wecc-services-agreement---monitoring---reliability-standards-compliance>

MSA Quarterly Reports

<https://resources.albertamsa.ca/index.php?page=quarterly-reports>