



MARKET
SURVEILLANCE
ADMINISTRATOR

MSA Compliance Review 2024

March 26, 2025

Taking action to promote effective competition and a culture of compliance and accountability in Alberta's electricity and retail natural gas markets

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EXECUTIVE SUMMARY

The Market Surveillance Administrator (MSA) is a public agency established under the *Alberta Utilities Commission Act (AUCA)* whose mandate includes the surveillance, investigation, and enforcement of the Alberta electricity markets.

This Compliance Review 2024 is provided pursuant to section 23(2) of the *Transmission Regulation* for the calendar year 2024. The MSA will continue to provide public updates regarding its compliance activities in its routine public reporting.

Promotion of compliance and accountability

The MSA's activities benefit Albertans by ensuring Alberta's electricity markets are competitive and that there is a well-functioning and dependable electricity sector. Through these activities, the MSA contributes to the reliability, affordability, efficiency, and competitiveness of the Alberta electricity sector and promotes a culture of compliance and accountability.

ISO rules and Alberta Reliability Standards

Rules are established in Alberta by the Independent System Operator (ISO), operating as the Alberta Electric System Operator (AESO), in consultation with market participants and submitted to the Alberta Utilities Commission (AUC) for approval (ISO rules). The purpose of ISO rules is to promote orderly and predictable actions and to facilitate the operation of the Alberta interconnected electric system (AIES) and associated markets.

As set out in the *Transmission Regulation*, the AESO, in consultation with the electricity industry, reviews North American Electric Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC) standards to assess and recommend to the AUC whether those standards are applicable to Alberta. If approved, these standards become Alberta Reliability Standards (ARS), and the AESO and market participants must comply with ARS, as applicable. ARS are comprised of Operations and Planning (O&P) and Critical Infrastructure Protection (CIP) standards.

The purpose of ARS is to ensure that the AESO and those market participants involved in grid operations in Alberta (e.g., owners and operators of generating units, aggregated generating facilities, distribution systems and transmission facilities) are appropriately implementing procedures, communication, coordination, training, and maintenance, among other practices, to support the reliability of the AIES. Given the scope of the AESO's responsibilities, the majority of ARS apply to the AESO, a smaller fraction of ARS apply to both market participants and the AESO, and some apply to only market participants.

Enforcement framework

The AESO has a mandate to conduct compliance monitoring of market participants. The AESO identifies suspected contraventions of ISO rules and ARS by market participants and refers these to the MSA. The AESO also self-reports its own suspected contraventions of ISO rules and ARS

to the MSA. Further, the MSA identifies potential contraventions through its own surveillance activities.

The MSA Compliance Process encourages the self-reporting of non-compliance with ISO rules and ARS with the prospect of favourable treatment, including forbearance or reduced penalties, to promote self-monitoring and robust compliance programs.

After reviewing self-reported and referred matters, the MSA determines the appropriate disposition in accordance with the MSA Compliance Process. The MSA may impose a specified penalty where appropriate, in accordance with AUC Rule 019 for contraventions of ISO rules and AUC Rule 027 for contraventions of ARS. If a person disputes a notice of specified penalty, the matter is adjudicated following a hearing before the AUC. The MSA may also forbear if the circumstances warrant. The MSA may enter into a settlement agreement concerning a contravention, which is subject to AUC approval. Alternatively, the MSA may request a hearing before the AUC, in which case the AUC determines whether a contravention has occurred and, if a contravention is found, the appropriate penalty.

2024 Outcomes

In 2024, the overall number of ISO rules matters received decreased compared to 2023.¹ Self-reported matters from market participants continued to represent a large majority of the matters assessed, indicating that market participants continue to actively monitor for and self-disclose non-compliance. The distribution of contraventions across ISO rules was broadly similar to previous years, with ISO rules that govern the most frequent day-to-day market activities accounting for the majority of matters. More than half of the matters addressed with notices of specified penalty were for first contraventions within a 12-month period, which suggests that there were few persistent compliance problems with ISO rules.

The number of ARS matters received and addressed by the MSA in 2024 was similar to 2023. CIP ARS matters continue to represent most ARS matters. The MSA continues to monitor these matters closely and to promote appropriate mitigation activities.

¹ A matter is considered addressed once a disposition has been issued. Accordingly, a matter is not always addressed in the same year that it was received by the MSA or that the associated conduct occurred.

2024 NUMBERS AT A GLANCE

- 518 ISO rules matters were addressed in 2024, compared to 298 matters addressed in 2023.
- 119 ISO rules matters were addressed with notices of specified penalty, totalling \$33,614,000 in financial penalties. No specified penalties were disputed or unpaid.
- Self-reporting accounted for 86% of ISO rules matters addressed in 2024, up from 85% in 2023.
- 112 O&P ARS matters were addressed in 2024, compared to 56 matters addressed in 2023.
- 35 O&P ARS matters were addressed with notices of specified penalty, totalling \$148,500 in financial penalties. No specified penalties were disputed or unpaid.
- 108 CIP ARS matters were addressed in 2024, compared to 162 matters addressed in 2023.
- Two CIP ARS matters were addressed with notices of specified penalty, totalling \$7,500 in financial penalties. No specified penalties were disputed or unpaid.
- Self-reporting accounted for 77% of total ARS matters addressed in 2024, up from 57% in 2023.

1 INTRODUCTION

The MSA has a broad mandate of surveillance, investigation, and enforcement in respect of the Alberta electricity markets. Through enforcement of ISO rules and ARS, the MSA contributes to the reliability and competitiveness of the AIES and promotes a culture of compliance and accountability among the AESO and 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. The MSA may grant forbearance if the circumstances warrant.

The MSA works collaboratively with the AESO and WECC regarding compliance issues. These entities also provide the MSA with subject matter expertise and technical assessments for matters under consideration, upon MSA request. This collaboration continues to pay dividends, ensuring rigorous enforcement decisions are made by the MSA.

The MSA Compliance Process sets out how compliance enforcement of ISO rules and ARS is performed within the mandate of the MSA. The MSA continuously evaluates its processes considering industry and regulatory developments, with a view to identifying efficiencies and making improvements.

2 ALBERTA UTILITIES COMMISSION RULES DEVELOPMENTS

The AUC rules governing the MSA's application of specified penalties for contraventions of ISO rules and ARS are, respectively, Rule 019 and Rule 027. There were no revisions to Rule 019 in 2024, but Rule 027 was updated on December 9, 2024, to integrate new or updated standards into the Contravention Category Designation Table.

3 ISO RULES

3.1 Activity levels

The MSA has ISO rules enforcement responsibilities regarding the compliance of market participants and the AESO. In 2024, the MSA addressed 518 ISO rules matters and had 300 matters unresolved at the end of the year. Of the 518 matters, 119 (23%) resulted in a notice of specified penalty, 382 (74%) resulted in forbearance by the MSA, and 17 (3%) were issued a no contravention disposition. The MSA resolved two investigations related to ISO rule contraventions with notices of specified penalties in 2024, which are summarized in section 3.2. None of the notices of specified penalty issued by the MSA in 2024 were disputed or remained unpaid at the time of publication of this review.

Figure 1 indicates the number of ISO rules matters received in 2024 was lower than last year. Variation in self-reporting can be attributed to market participants entering the market, changes to ISO rules, or persistent compliance issues. The number of unresolved matters at the end of 2024 was 300, down 31 from last year, as demonstrated in Figure 2.

Figure 1: ISO rules compliance matters received ²

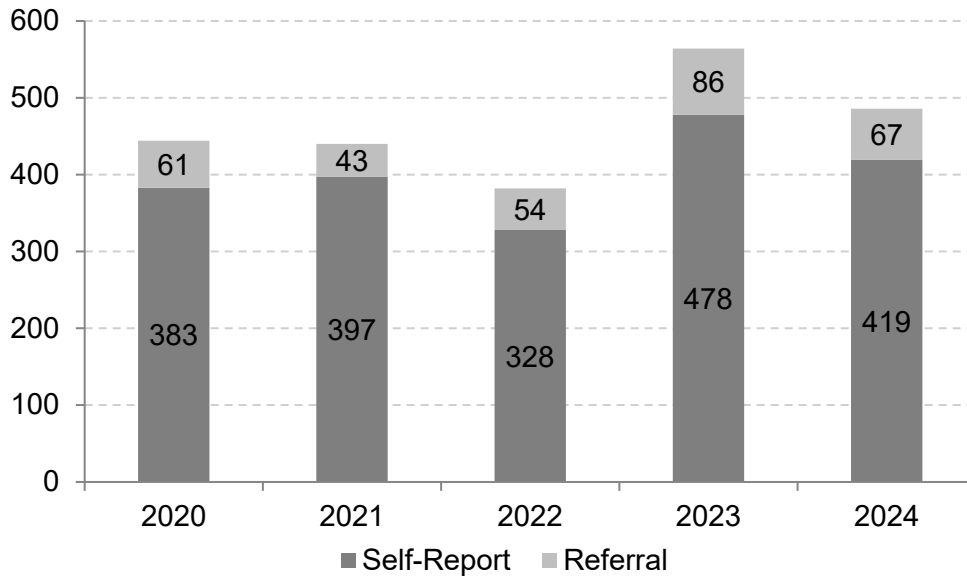
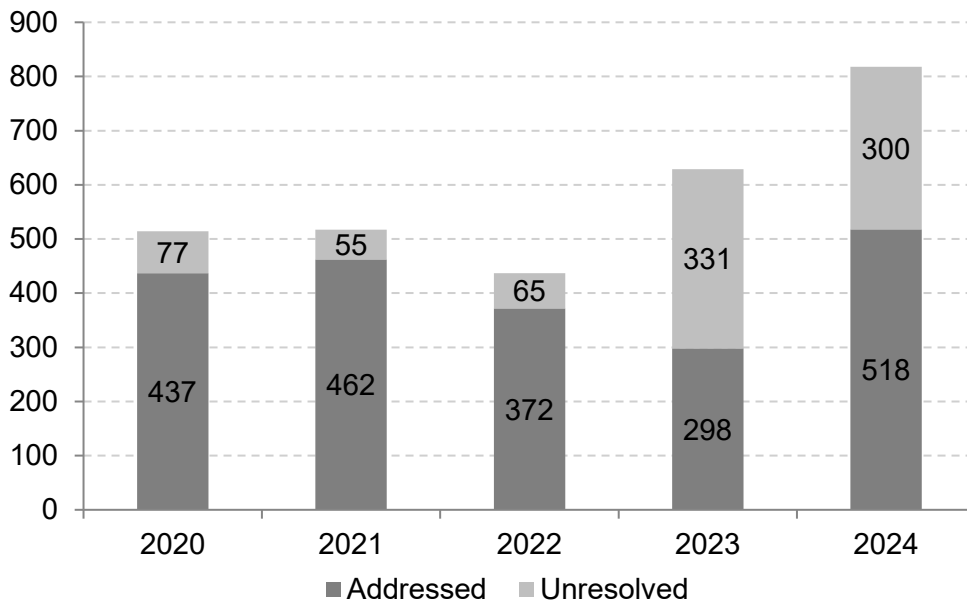


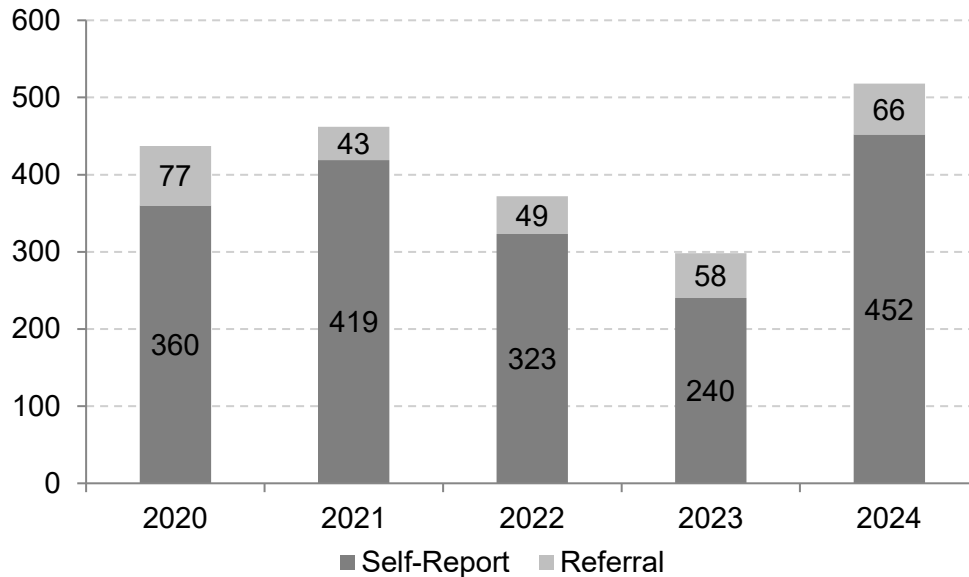
Figure 2: ISO rules matters addressed or unresolved at the end of the year



² Differences in Figure 1 and Figure 2 compared with previous years' Compliance Review can be attributed to changes in the number of MSA matters associated with a referral, or the recategorization of a matter to an investigation.

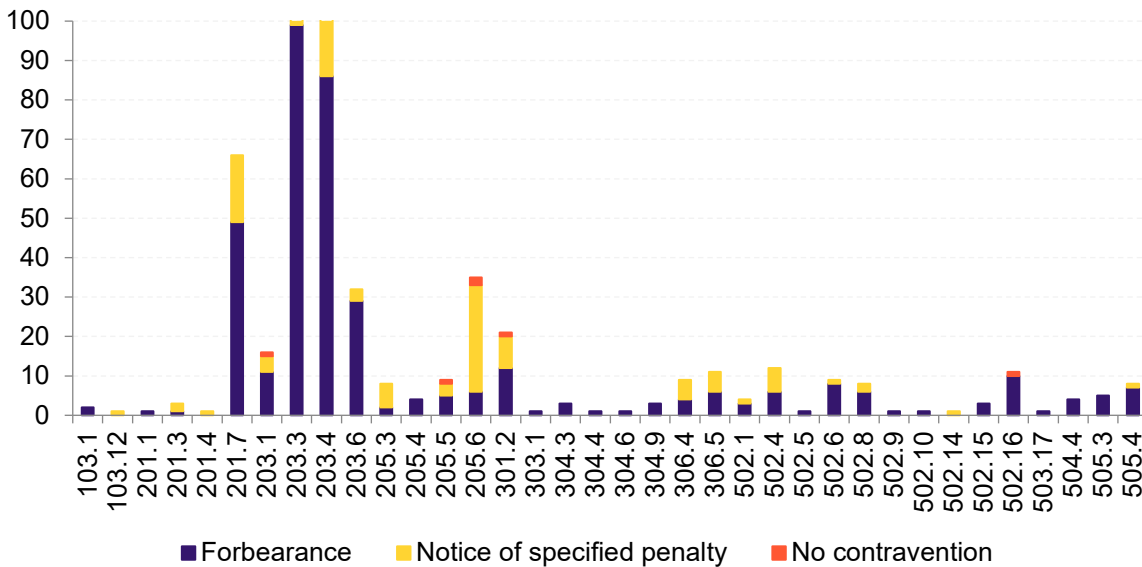
In 2024, the MSA addressed 452 ISO rules matters that were received via self-report and 66 matters that were received through AESO referrals (87% and 13% of total matters addressed, respectively). The number of referred matters addressed in 2024 was higher compared to 2023, as seen in Figure 3.

Figure 3: ISO rules matters addressed, self-reports versus AESO referrals



As observed in Figure 4 and Figure 5, most matters reviewed by the MSA relate to ISO rules governing the most common day-to-day market activities. These include the submission of energy restatements (section 203.3), delivery of energy in response to a dispatch (section 203.4) and acknowledging dispatches (section 201.7).

Figure 4: ISO rules compliance outcomes in 2024³

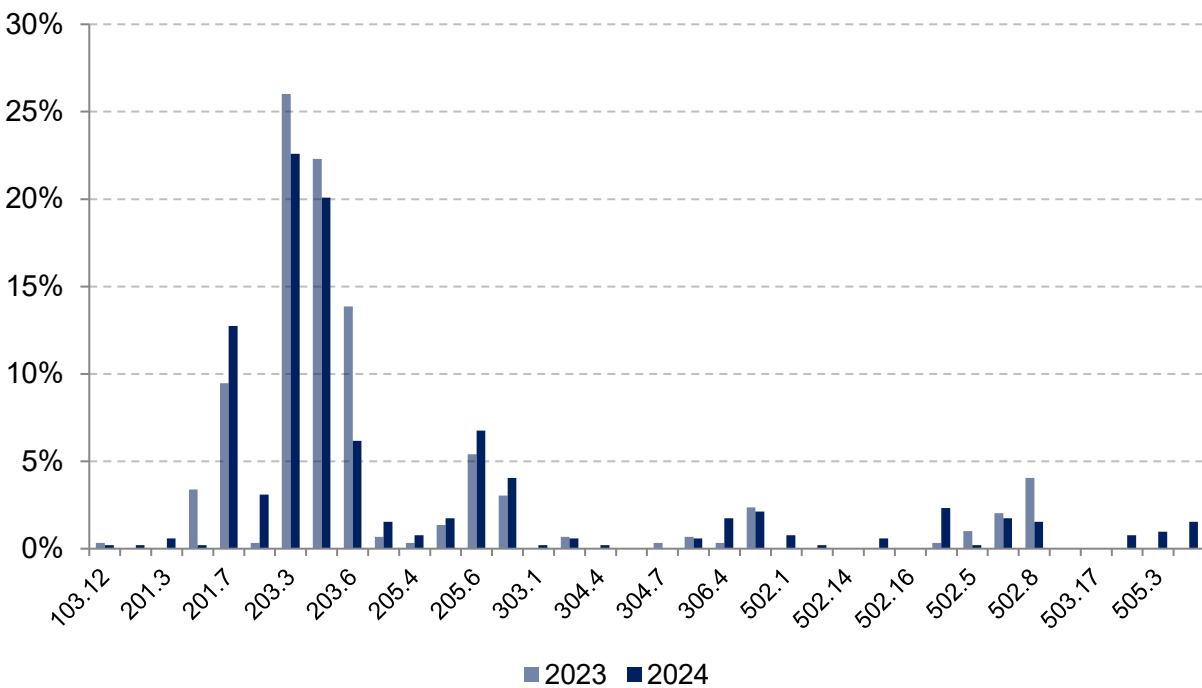


The sections of ISO rules listed in Figure 4 and Figure 5 fall into the following categories:

- 103 Administration
- 201 General (Markets)
- 203 Energy Market
- 205 Ancillary Services Market
- 301 General (System Reliability and Operations)
- 304 Routine Operations
- 306 Outages and Disturbances
- 502 Technical Requirements
- 503 Technical and Operating Requirements
- 504 Legal Owners of Transmission Facilities and Load Facilities
- 505 Legal Owners of Generating Facilities

³ Outcomes for all ISO rules matters are presented in Table A1. The MSA may issue a no contravention disposition when the specific conduct at issue has not contravened the requirements of the ISO rules or meets a specific compliance exception outlined in the ISO rules. None of the no contravention outcomes in 2024 were the result of a difference in interpretation with AESO referral findings.

Figure 5: Percentage of total addressed ISO rules matters in 2023 and 2024⁴



Thirty-six different sections of the ISO rules were addressed in self-reports and referrals in 2024,⁵ compared to 25 sections in 2023. There were increases in the share of section 205.6 (+1%) and 201.7 (+3%) matters and decreases in the share of section 203.3 (-3%) and 203.6 matters (-8%).

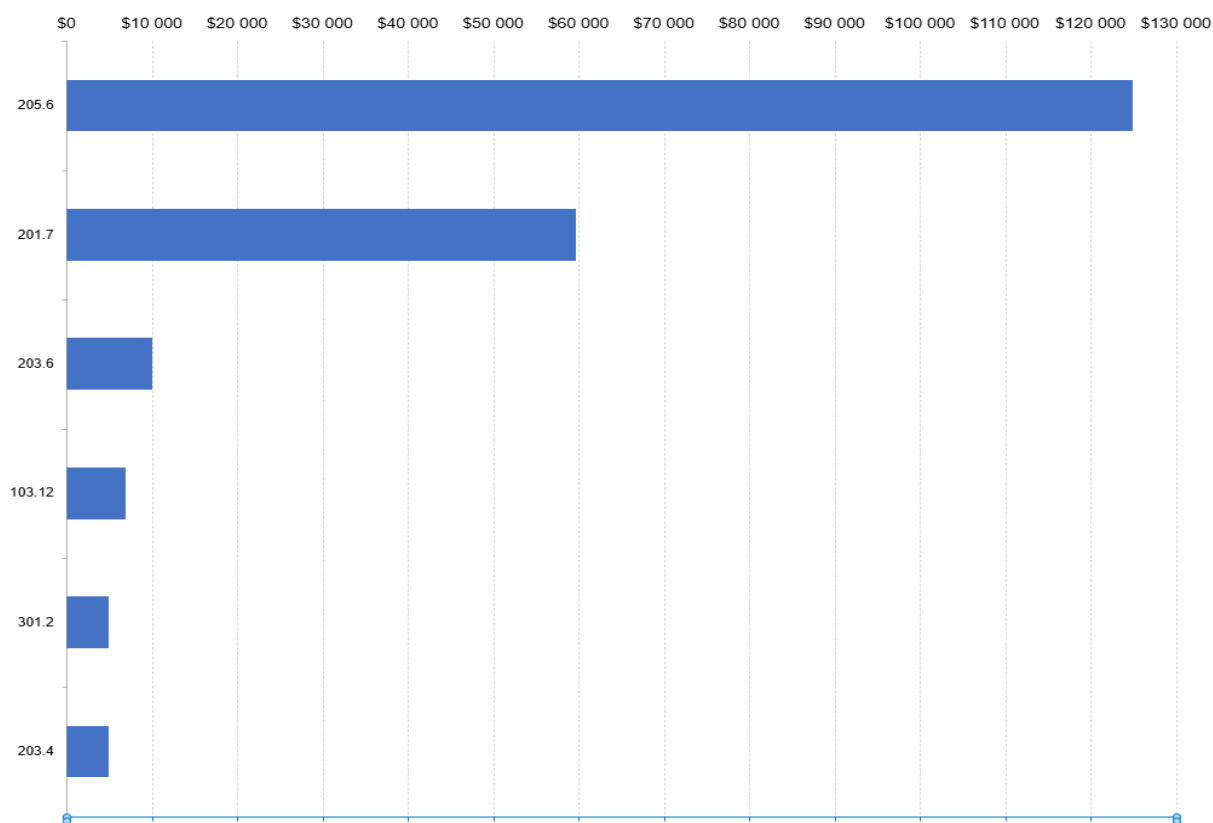
In 2024, the MSA addressed 119 ISO rules matters with notices of specified penalty issued to 55 market participants, resulting in financial penalties totalling \$33,614,000. Of this amount, sets of penalties totalling \$32,683,500 and \$678,500 were issued in relation to the investigations resolved with notices of specified penalties that are described in sections 3.2.1 and 3.2.2, respectively. For all other matters, the total specified penalties issued for contraventions of the ISO rules, grouped by ISO rule, are illustrated in Figure 6. Penalty amount totals are directly related to the number of penalties issued, as well as the penalty escalation and self-reporting discount set out in AUC Rule 019.

Of the 452 self-reported ISO rules matters addressed in 2024, 79 (17%) were addressed with notices of specified penalty, while 40 of the 66 (61%) addressed matters referred by the AESO were issued a notice of specified penalty.

⁴ Only sections of the ISO rules with at least five addressed matters in one year are displayed.

⁵ See Table A1 for more detail.

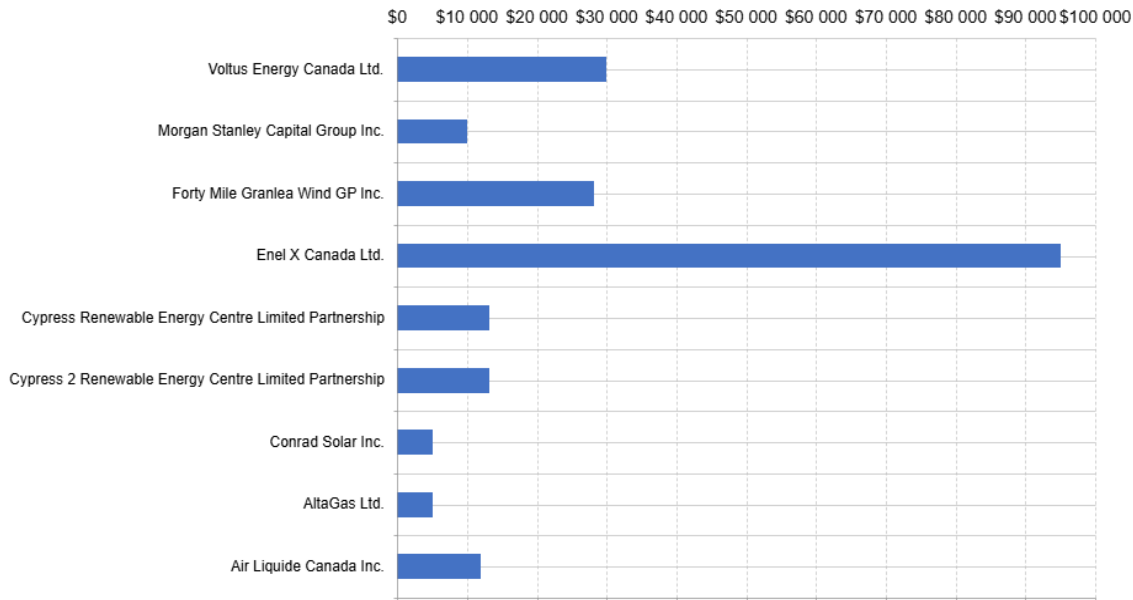
Figure 6: Total specified penalties for contraventions of ISO rules in 2024 unrelated to MSA investigations⁶



As indicated in Figure 7 and Table A2, nine market participants were issued \$5,000 or more in total penalties over this period. The proportion of matters with notices of specified penalties issued for a first penalized contravention within the past 12 months rose to 62.18% in 2024, up from 58% in 2023. The high proportion of first contraventions remains a positive indicator that there were few persistent compliance problems with ISO rules in 2024. Among the remaining matters addressed with specified penalties issued in 2024, 11.76% were second contraventions, 5.88% were third contraventions, and 20.17% were fourth or subsequent contraventions within the previous 12 months. Four market participants received penalties escalated to the fourth contravention or higher. Higher frequency contraventions receive greater specified penalties as per AUC Rule 019.

⁶ Only sections of the ISO rules with penalties totaling \$5,000 or more are included in this figure. See Table A2 for more detail.

Figure 7: Total specified penalties for contraventions of ISO rules by market participant in 2024⁷



3.2 Investigations resolved with Notices of Specified Penalty

3.2.1 TA Alberta Hydro LP Brazeau Spinning Reserves⁸

On November 30, 2022, the MSA received a self-report from TA Alberta Hydro LP (TransAlta) regarding a contravention of ISO rule 205.5 (Spinning Reserve Technical Requirements and Performance Standards) at its Brazeau hydro-electric asset, for the period of August 13, 2021, to November 1, 2022. This self-report was submitted to the MSA during the course of a previous investigation of conduct under the same ISO rule related to a different asset (SUM1) that was also owned by TransAlta.⁹

The MSA investigated whether TransAlta was physically able to provide the frequency response that the AESO paid it to provide from the Brazeau hydro-electric asset. The AESO procures frequency response as part of spinning reserves because it is essential to the reliable operation of Alberta's power system.

⁷ NSP's totaling \$32,683,500 and \$678,500 have been removed from Figure 6. See Table 2 for more details. These penalties are addressed in detail in Section 3.2.

⁸ First published in [MSA Quarterly Report for Q4 2024](#), page 125.

⁹ See section 6.1 of the MSA's [Quarterly Report for Q3 2023](#). Also see section 6.1 of the MSA's [Quarterly Report for Q1 2024](#).

As a result of the investigation, the MSA found that TransAlta was not able to provide the required frequency response from the Brazeau hydro-electric asset for 7,412 hours¹⁰ between August 13, 2021, to November 1, 2022.

A penalty was assessed for every hour of contravention in this period, with a maximum of \$100,000 of penalty a day – a limitation that is set out in section 52(7)(b) of the *Alberta Utilities Commission Act*. Notices of Specified Penalties summing to \$32,683,500 were issued by the MSA to TransAlta on November 29, 2024, for payment on or before January 10, 2025. Payment was received on January 10, 2025. The Notices of Specified Penalties are available on the MSA website.

3.2.2 SUM1 Notices of Specified Penalties¹¹

On June 23, 2023, Canadian Hydro Developers, Inc. (Canadian Hydro) self-reported contraventions of section 205.5 of the ISO rules to the MSA. After assessing the self-report, on February 22, 2024, the MSA issued 138 Notices of Specified Penalty (NSP) totaling \$678,500 to Canadian Hydro for contraventions of section 205.5 of the ISO rules between August 20, 2022 and May 22, 2023. One NSP was issued for each day the Summerview1 battery storage asset (SUM1) was under dispatch to provide spinning reserve but did not provide frequency response when the system frequency dropped below the deadband set out in subsection 3(1)(b)(ii) of section 205.5 of the ISO rules.

Section 205.5 of the ISO rules states, in part:

(2) A pool participant must ensure that, while its pool asset is under dispatch to provide spinning reserve, the change in real power of each spinning reserve resource being used to provide spinning reserve is:

(a) continuously proportional to the measured frequency;

(b) in accordance with the droop setting set out in subsection 3(1)(b)(iii); and

(c) limited to the maximum real power capability of the spinning reserve resource that is available at the time of the frequency event

for any change in frequency where the frequency goes outside the deadband set out in subsection 3(1)(b)(ii)

¹⁰ This number varies from that published in the [MSA Quarterly Report for Q4 2024](#), which was incorrect.

¹¹ First published in [MSA Quarterly Report for Q1 2024](#), page 72

4 ALBERTA RELIABILITY STANDARDS

4.1 Monitoring and enforcement of the AESO's compliance

The MSA has ARS enforcement responsibilities regarding the compliance of market participants and the AESO. The majority of ARS are applicable to the AESO, given the scope of its responsibilities and its mandate to maintain system stability and reliability. WECC assists the MSA in its monitoring of the AESO's compliance with ARS, pursuant to a services agreement.¹²

As a guide to monitoring the AESO's compliance with ARS, the MSA and WECC use the Compliance Monitoring Program developed by the AESO to monitor market participants. Efforts are made to maintain consistency, where possible, with the program WECC applies to other entities. Each year the MSA works with WECC to develop a plan to monitor the AESO's compliance with ARS. The plan sets out the scope of compliance monitoring, including audits and self-certification. In 2025, the AESO will perform its annual self-certification of ARS compliance as well as an on-site compliance monitoring audit for O&P ARS.

4.2 Activity levels: Operations and Planning

The MSA addressed 112 O&P ARS matters in 2024. At the end of 2024, 56 O&P ARS matters remained under review. Of the 112 matters addressed in 2024, 71 (64%) resulted in forbearance, 35 (31%) resulted in a notice of specified penalty, and six (5%) resulted in no contravention.

As indicated in Figure 8, the MSA opened 124 O&P ARS matters in 2024, compared with 75 in 2023. In 2024, the number of O&P ARS matters addressed was higher compared to 2023, as seen in Figure 9 and Figure 10.

¹² WECC is the regional entity responsible for assuring the reliability of the bulk electric system in the Western Interconnection. See [MSA WECC Services Agreement](#) (April 30, 2010).

Figure 8: O&P ARS matters received

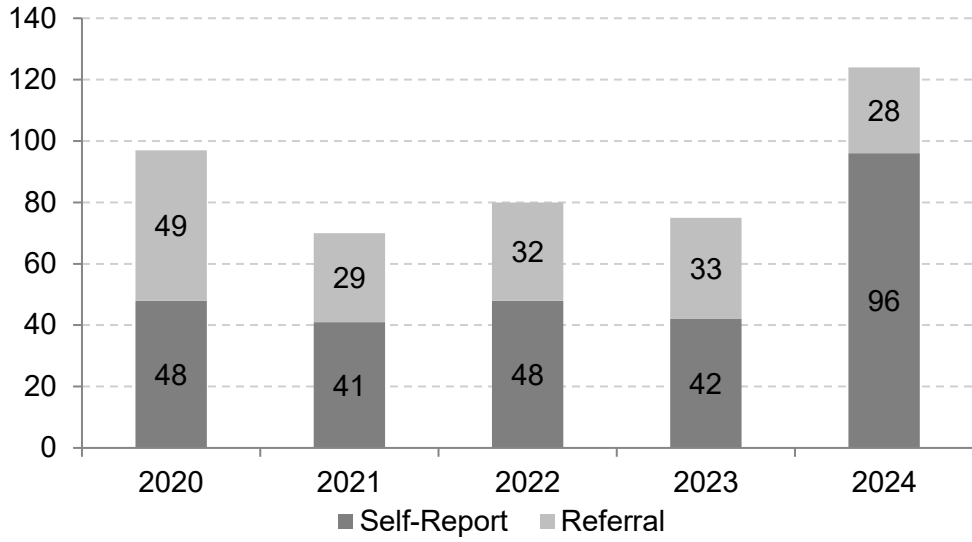


Figure 9: O&P ARS matters addressed or unresolved at the end of the year

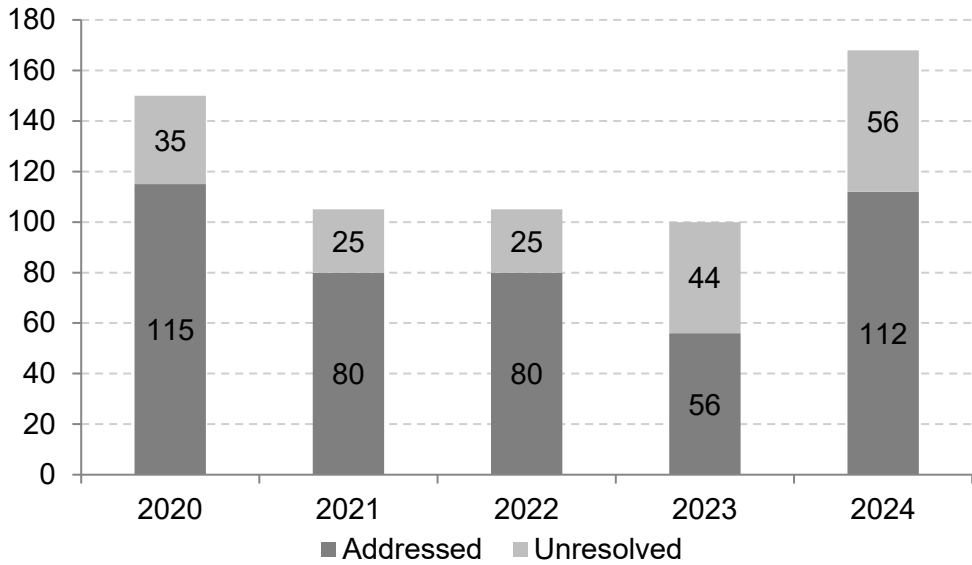
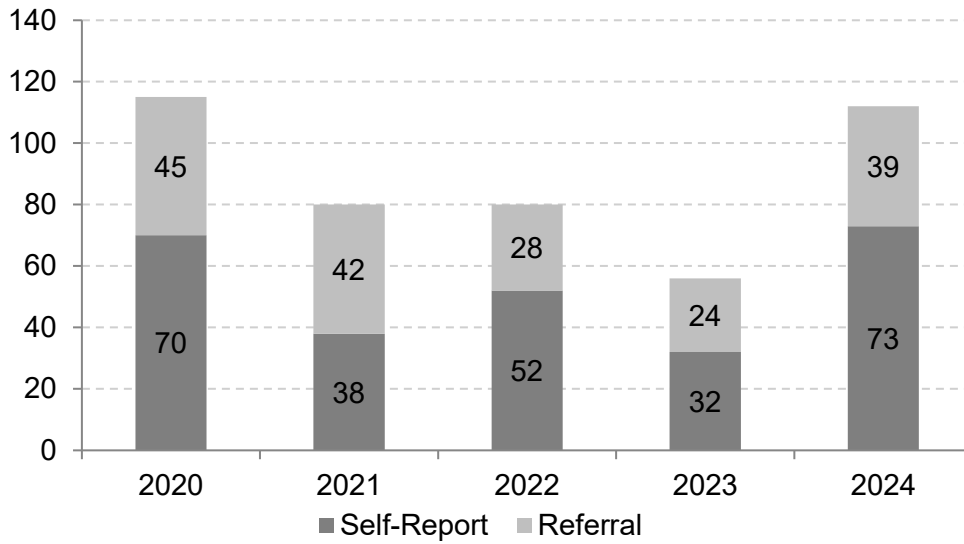
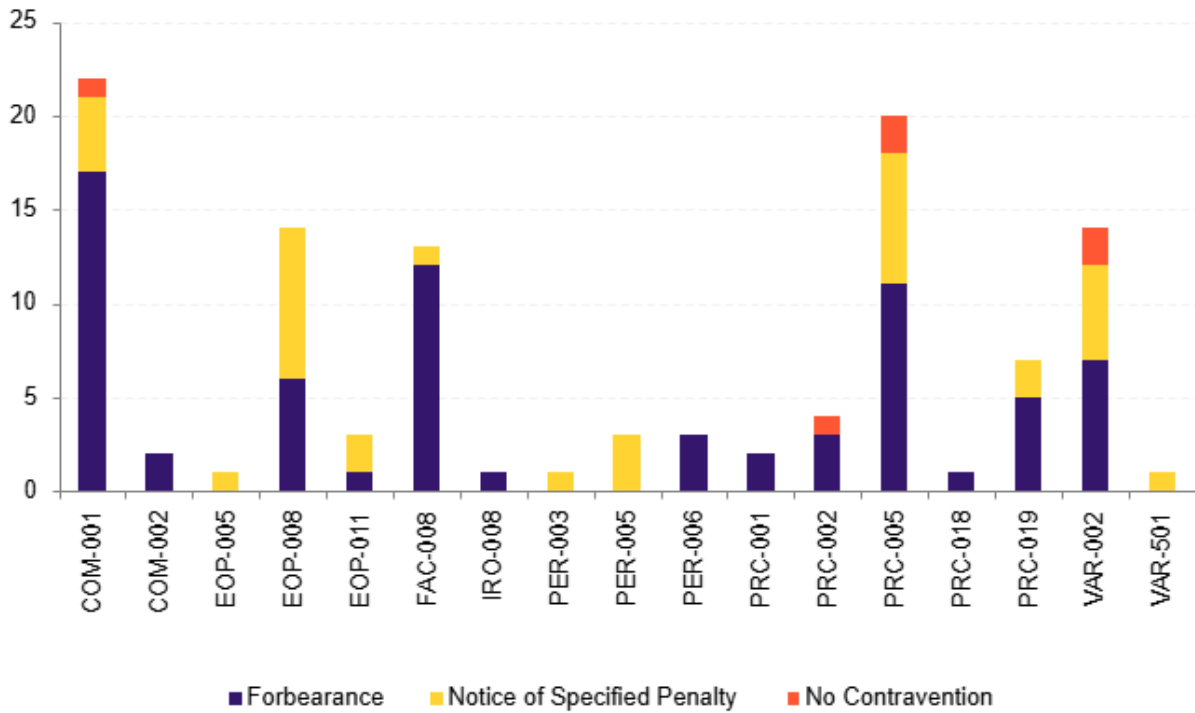


Figure 10: O&P ARS matters addressed, self-reports and AESO referrals



As demonstrated by Figure 11 and Figure 12, the most frequent O&P ARS contraventions addressed this year were related to COM-001 and PRC-005.

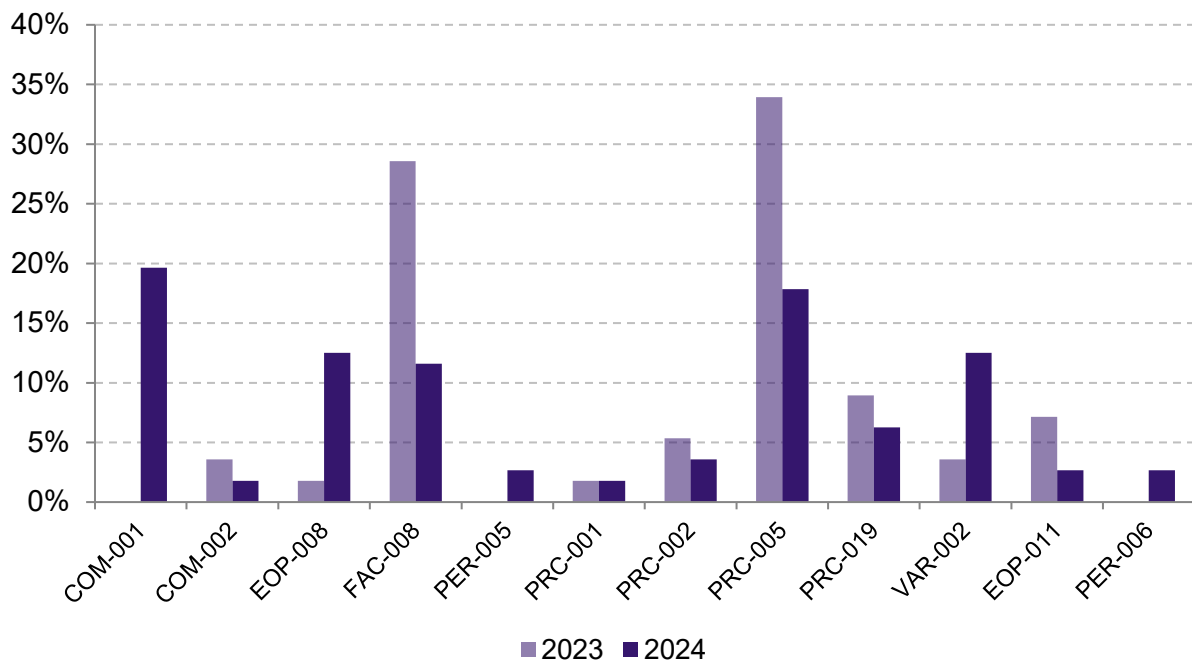
Figure 11: O&P ARS compliance outcomes in 2024



The ARS listed in Figure 11 and Figure 12 fall into the following categories:

- COM Communications
- EOP Emergency Preparedness and Operations
- FAC Facilities Design, Connections, and Maintenance
- IRO Interconnection Reliability Operations and Coordination
- PER Personnel Performance, Training, and Qualifications
- PRC Protection and Control
- VAR Voltage and Reactive

Figure 12: 2023 and 2024 addressed O&P ARS matters ¹³



In 2024, 35 matters involving O&P ARS were addressed with notices of specified penalty, resulting in financial penalties totalling \$148,500. In 2023, 16 matters involving O&P ARS were addressed with notices of specified penalty, resulting in total penalties of \$55,000. Figure 13 and Figure 14 show the total penalty amount in 2024 by O&P ARS and by market participant.

¹³ Only O&P ARS with at least five addressed matters in one year are displayed. See Table A4 for more detail.

Figure 13: Total specified penalties for O&P ARS addressed in 2024

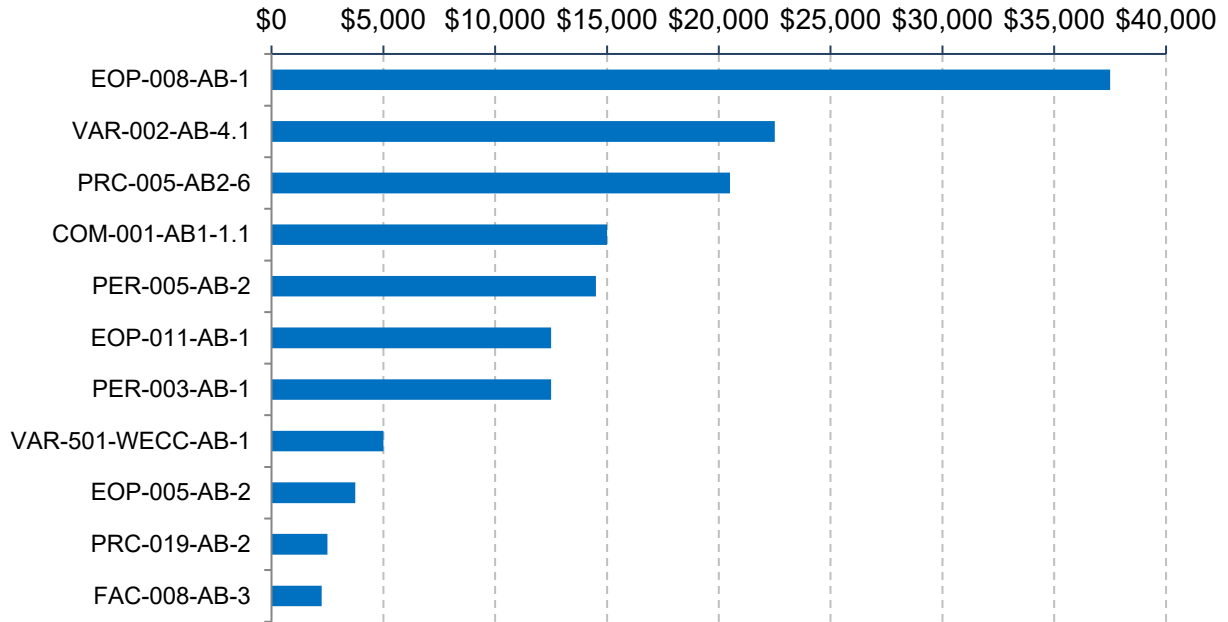
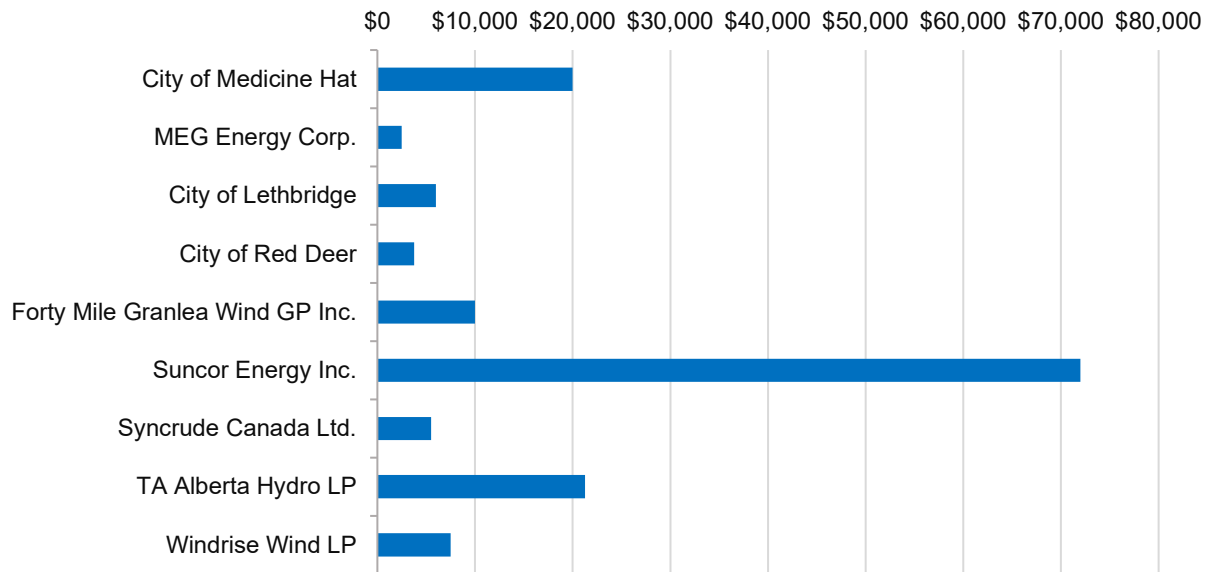


Figure 14: Total specified penalties for contraventions of O&P ARS by market participant in 2024¹⁴



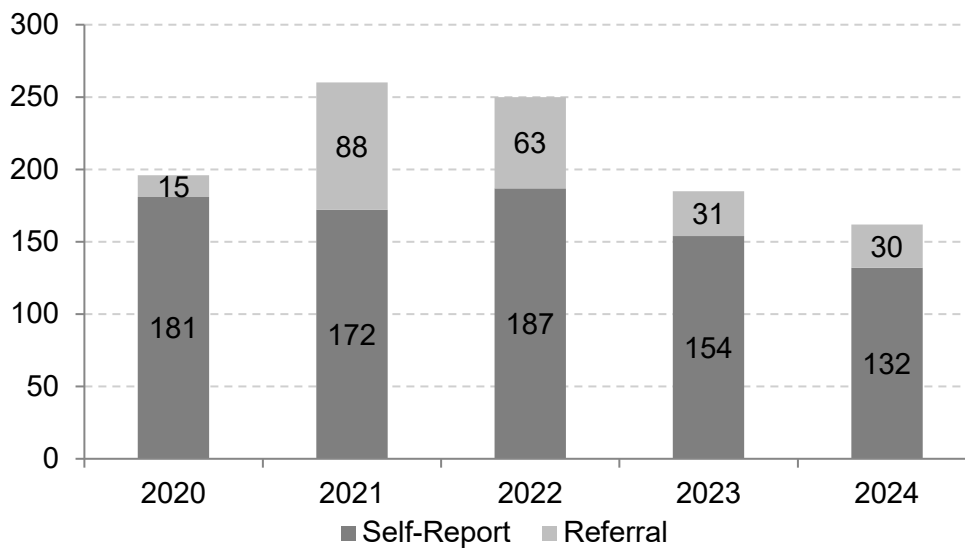
¹⁴ See Table A4 for more detail.

4.3 Activity levels: Critical Infrastructure Protection

The MSA addressed 108 CIP ARS matters in 2024. At the end of 2024, 161 CIP ARS matters remained under review. Of the 108 matters, two (2%) were addressed with notices of specified penalty and 106 (98%) resulted in forbearance.

As indicated in Figure 15, the MSA opened 162 CIP ARS matters in 2024, compared with 185 in 2023. In 2024, the number of addressed CIP ARS matters was lower than 2023, and of the matters addressed, the proportion of self-reports increased compared to 2023, as seen in Figure 16 and Figure 17.

Figure 15: CIP ARS matters received¹⁵



¹⁵ Differences in Figure 15 and Figure 16 compared with previous years' Compliance Review can be attributed to changes in the number of MSA matters associated with a referral.

Figure 16: CIP ARS matters addressed or unresolved at the end of the year

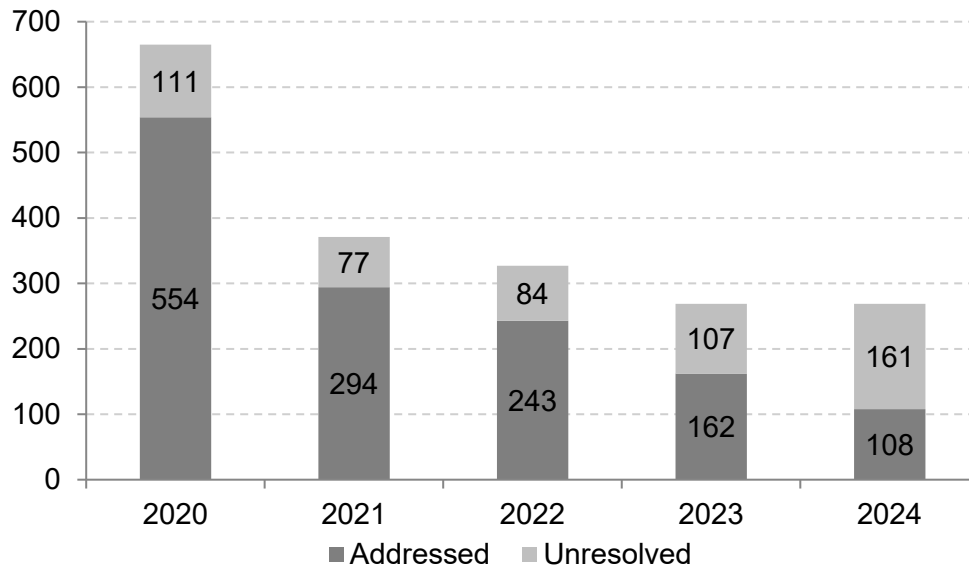
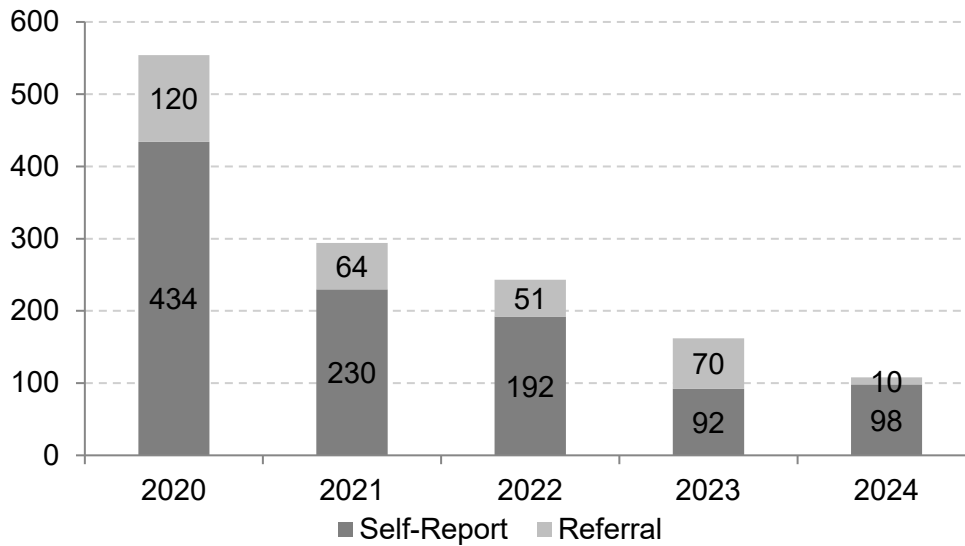
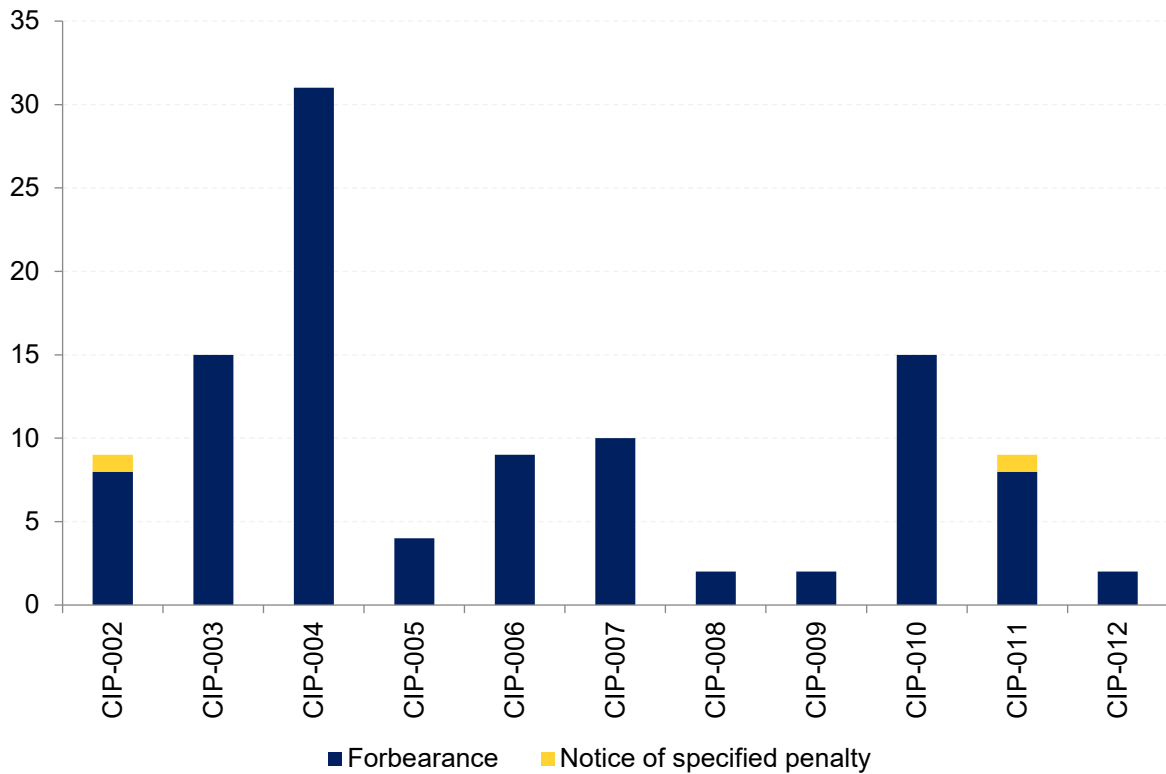


Figure 17: CIP ARS matters addressed, self-reports and AESO and WECC referrals



As demonstrated in Figure 18 the most frequent CIP ARS contraventions addressed in 2024 related to CIP-004, followed by CIP-010 and CIP-003. These three ARS made up 56% of the CIP ARS matters addressed in 2024.¹⁷ Figure 19 shows that the distribution of CIP ARS matters addressed in 2024 remained comparable to the distribution in 2023.

Figure 18: CIP ARS compliance outcomes in 2024¹⁶

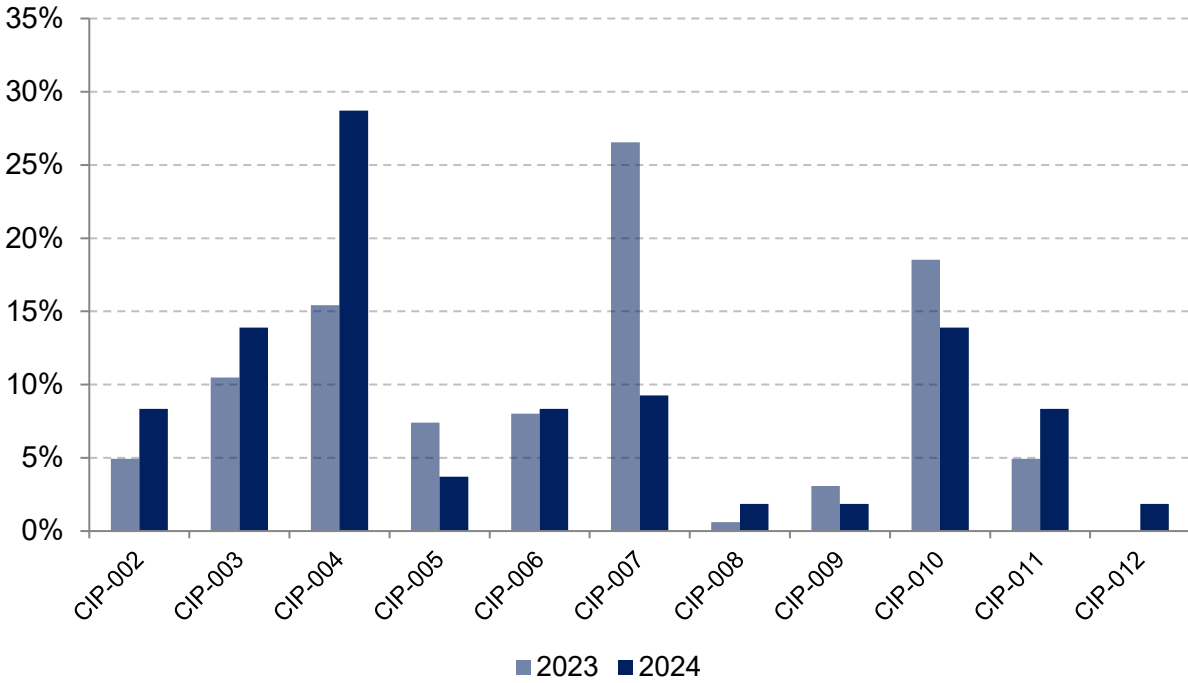


The ARS listed in Figure 18 and Figure 19 fall into the following categories:

- CIP-002 BES Cyber System Categorization
- CIP-003 Security Measurement Controls
- CIP-004 Personnel & Training
- CIP-005 Electronic Security Perimeter(s)
- CIP-006 Physical Security of BES Cyber Systems
- CIP-007 System Security Management
- CIP-008 Incident Reporting and Response
- CIP-009 Recovery Plans for BES Cyber Systems
- CIP-010 Configuration Change Management and Vulnerability Assessments
- CIP-011 Information Protection
- CIP-012 Communication Between Control Centers

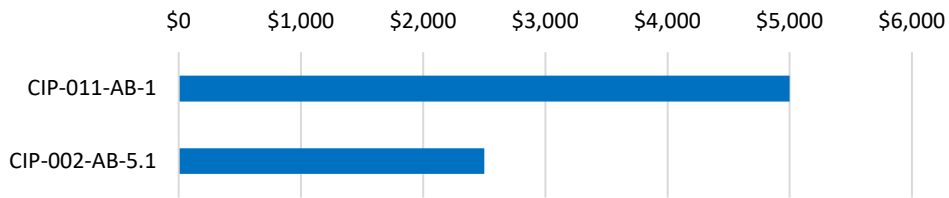
¹⁶ See Table A5 for more detail.

Figure 19: 2023 and 2024 addressed matters by percentage



In 2024, two matters involving CIP ARS were addressed with notices of specified penalty, resulting in a total financial amount of \$7,500. In 2023, 57 matters involving nine CIP ARS were addressed with notices of specified penalty, resulting in a total financial amount of \$162,000. Figure 20 presents the total penalty amounts by ARS in 2024.

Figure 20: Total specified penalties for CIP ARS addressed in 2024



APPENDIX A: DATA SUPPLEMENT

Table A1: ISO rules compliance outcomes in 2024

ISO rule	Forbearance	Notice of specified penalty	No contravention	Total
103.1	2	-	-	2
103.12	-	1	-	1
201.1	1	-	-	1
201.3	1	2	-	3
201.4	-	1	-	1
201.7	49	17	-	66
203.1	11	4	1	16
203.3	99	10	8	117
203.4	86	15	3	104
203.6	29	3	-	32
205.3	2	6	-	8
205.4	4	-	-	4
205.5	5	3	1	9
205.6	6	27	2	35
301.2	12	8	1	21
303.1	1	-	-	1
304.3	3	-	-	3
304.4	1	-	-	1
304.6	1	-	-	1
304.9	3	-	-	3
306.4	4	5	-	9
306.5	6	5	-	11
502.1	3	1	-	4
502.4	6	6	-	12
502.5	1	-	-	1
502.6	8	1	-	9
502.8	6	2	-	8
502.9	1	-	-	1
502.10	1	-	-	1
502.14	-	1	-	1
502.15	3	-	-	3
502.16	10	-	1	11
503.17	1	-	-	1
504.4	4	-	-	4
505.3	5	-	-	5
505.4	7	1	-	8
Total	382	119	17	518

The sections of ISO rules listed in Table A1 and Table A2 fall into the following categories:

- 103 Administration
- 201 General (Markets)
- 203 Energy Market
- 205 Ancillary Services Market
- 301 General (System Reliability and Operations)
- 304 Routine Operations
- 306 Outages and Disturbances
- 502 Technical Requirements
- 503 Technical and Operating Requirements
- 504 Legal Owners of Generating Facilities
- 505 Legal Owners of Generating Facilities

Table A2: Specified penalties issued between January 1, 2024 and December 31, 2024 for contraventions of ISO rules

Market participant	Total specified penalty amounts by ISO rule (\$)																				Total (\$)	Matters
	103.12	201.3	201.4	201.7	203.1	203.3	203.4	203.6	205.3	205.5	205.6	301.2	306.4	306.5	502.1	502.4	502.6	502.8	502.14	505.4		
Achernar GP Ltd.							1,000														1,000	2
Air Liquide Canada Inc.	7,000			7,000					2,000												16,000	6
AltaGas Ltd.				500			6,500														7,000	3
ATCO DB Solar GP Services Ltd.				250	500																750	3
ATCO Electric Ltd.												500									500	2
BFL3 Buffalo Atlee 3							250														250	1
BHE Canada Rattlesnake L.P.																	500				500	1
Bull Creek Wind Power Limited Partnership							250														250	1
Calgary Energy Centre No. 2 Inc.							250														250	1
Canadian Hydro Developers, Inc.			250		250				500	678,500									250		679,750	5
Capital Power (CBEC) L.P.									500												500	1
Castle Rock Ridge LP							500														500	1
Concord Monarch Partnership							500														500	1
Concord Stavely Partnership												500									500	1
Concord Vulcan Partnership												500						500			1,000	2
Conrad Solar Inc.												5,000									5,000	1
CP Energy Marketing L.P.								500													500	2
Cypress 2 Renewable Energy Centre Limited Partnership				13,750													1,250				15,000	4
Cypress Renewable Energy Centre Limited Partnership		250		13,750										500		1,250					15,750	6
Dow Chemical Canada ULC				250																	250	1
Enel X Canada Ltd.											97,500										97,500	20
Enfinite Corporation									250												250	1
Enfinite Generation Corporation							250														250	1
ENMAX Generation Portfolio Inc.							250														250	1
Forty Mile Granlea Wind GP Inc.				28,750			1,000						250								30,000	6
Ghost Pine Windfarm, LP							500														500	1
Grande Prairie Generation Inc.														500							500	1

Table A2: Specified penalties issued between January 1, 2024 and December 31, 2024 for contraventions of ISO rules (continued)

Market participant	Total specified penalty amounts by ISO rule (\$)																				Total (\$)	Matters
	103.12	201.3	201.4	201.7	203.1	203.3	203.4	203.6	205.3	205.5	205.6	301.2	306.4	306.5	502.1	502.4	502.6	502.8	502.14	505.4		
Halkirk I Wind Project LP							250					3,500					250				4,000	5
Hays Solar LP						500															500	1
Heartland Generation Ltd.										250											250	1
Jenner 3 Limited Partnership						500															500	1
Kneehill Solar LP														500		500					1,000	2
Lanfine Wind 1 LP														500							500	1
MEG Energy Corp.							250														250	1
Mercer Peace River Pulp Ltd.					250																250	1
Michichi Solar LP														500		500					1,000	2
Morgan Stanley Capital Group Inc.									10,000												10,000	1
NAT-1 Limited Partnership							250														250	1
Northstone Power Corp.				500																	500	2
Oldman 2 Wind Farm Limited												500									500	1
Paintearth Wind Project Limited Partnership											250										250	1
Pincher Creek Limited Partnership						500															500	1
Signalta Resources Limited		250																			250	1
Suncor Energy Inc.													1,000								1,000	2
Syncrude Canada Ltd.																			250		250	1
TA Alberta Hydro LP									250	32,683,500											32,683,750	2
Taber Solar 1 Inc.						500															500	1
Taber Solar 2 Inc.						250															250	1
Tourmaline Oil Corp.				500																	500	1
TransAlta Generation Partnership							750			250											1,000	2
Voltus Energy Canada Ltd.											30,000										30,000	6
Wheatland Wind Project LP							500														500	1
Whitecourt Power Ltd.				500																	500	1
Windrise Wind LP															250						250	1
Total	7,000	500	250	65,750	1,000	4,000	11,500	10,500	3500	33,362,250	127,750	10,250	1,750	2,500	250	3,500	250	1,000	250	250	33,614,000	118

Table A3: O&P ARS compliance outcomes in 2024

Reliability standard	Forbearance	Notice of specified penalty	No Contravention	Total
COM-001	17	4	1	22
COM-002	2	-	-	2
EOP-005	-	1	-	1
EOP-008	6	8	-	14
EOP-011	1	2	-	3
FAC-008	12	1	-	13
IRO-008	1	-	-	1
PER-003	-	1	-	1
PER-005	-	3	-	3
PER-006	3	-	-	3
PRC-001	2	-	-	2
PRC-002	3	-	1	4
PRC-005	11	7	2	20
PRC-018	1	-	-	1
PRC-019	5	2	-	7
VAR-002	7	5	2	14
VAR-501	-	1	-	1
Total	71	35	6	112

The ARS listed in Table A3 and Table A4 fall into the following categories:

- COM Communications
- EOP Emergency Preparedness and Operations
- FAC Facilities Design, Connections, and Maintenance
- IRO Interconnection Reliability Operations and Coordination
- PER Personnel Performance, Training, and Qualifications (PER)
- PRC Protection and Control
- VAR Voltage and Reactive

Table A4: Specified penalties issued between January 1, 2024 and December 31, 2024 for contraventions of O&P ARS

Market participant	Total specified penalty amounts by ARS (\$)											Total (\$)	Matters
	COM-001	EOP-005	EOP-008	EOP-011	FAC-008	PER-003	PER-005	PRC-005	PRC-019	VAR-002	VAR-501		
City of Lethbridge					2,250			3,750				6,000	22
City of Medicine Hat	15,000		5,000									20,000	2
City of Red Deer								3,750				3,750	1
Forty Mile Granlea Wind GP Inc.										10,000		10,000	14
MEG Energy Corp.								2,500				2,500	3
Suncor Energy Inc.			32,500	12,500		12,500	14,500					72,000	13
Synchrude Canada Ltd.								5,500				5,500	1
TA Alberta Hydro LP		3,750						5,000	2,500	5,000	5,000	21,250	1
Windrise Wind LP										7,500		7,500	3
Total	15,000	3,750	37,500	12,500	2,250	12,500	14,500	20,500	2,500	22,500	5,000	148,500	112

Table A5: CIP ARS compliance outcomes in 2024

Reliability standard	Forbearance	Notice of specified penalty	No contravention
CIP-002	8	1	-
CIP-003	15	-	-
CIP-004	31	-	-
CIP-005	4	-	-
CIP-006	9	-	-
CIP-007	10	-	-
CIP-008	2	-	-
CIP-009	2	-	-
CIP-010	15	-	-
CIP-011	8	1	-
CIP-012	2	-	-
Total	106	2	-

The ARS listed in Table A5 fall into the following categories:

- CIP-002 BES Cyber System Categorization
- CIP-003 Security Measurement Controls
- CIP-004 Personnel & Training
- CIP-005 Electronic Security Perimeter(s)
- CIP-006 Physical Security of BES Cyber Systems
- CIP-007 System Security Management
- CIP-008 Incident Reporting and Response
- CIP-009 Recovery Plans for BES Cyber Systems
- CIP-010 Configuration Change Management and Vulnerability Assessments
- CIP-011 Information Protection