

# Compliance Quarterly Report

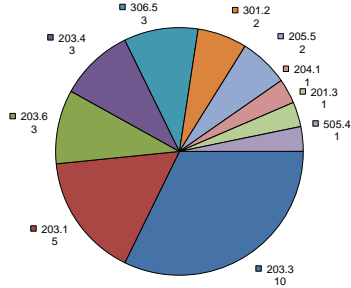
## Q4 2016

|                                    |   |
|------------------------------------|---|
| ISO Rules.....                     | 1 |
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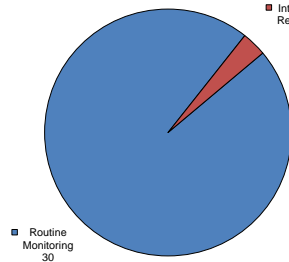
## Compliance Quarterly Report - ISO Rules - Q4 2016

The following charts summarize the activities of the ISO Rules External Compliance Monitoring group in Q4 of 2016 and the distribution of events over the past 4 quarters. Please refer to the attached help documentation for details on interpreting the charts below. For any questions regarding this report, please send an email to [marketcompliance@aeso.ca](mailto:marketcompliance@aeso.ca).

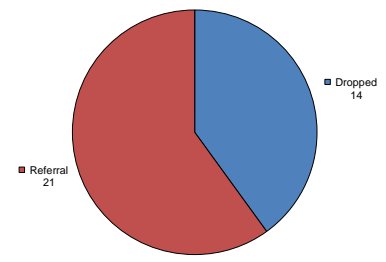
Files Opened in Period - Count by Category



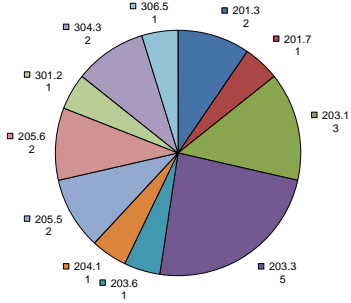
Files Opened in Period - Count by Origin



Files Closed in Period - Count by Status



Referrals to MSA in Period - Count by Category



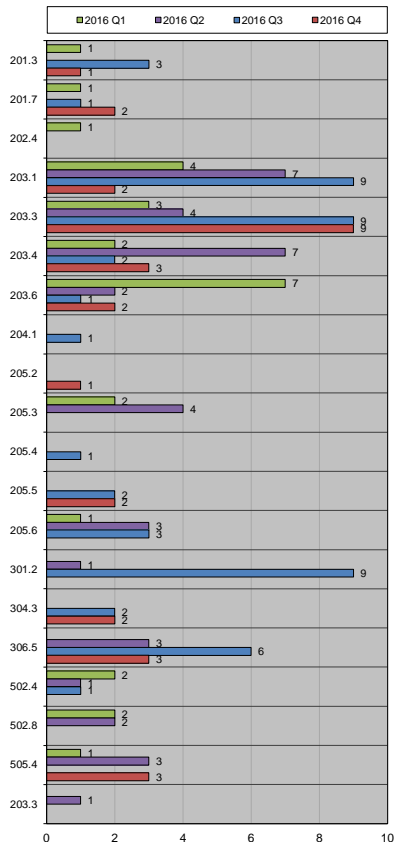
### Commentary

There were 31 files opened during Q4 2016 and 35 files closed. Of the 35 files closed in the quarter, there were 21 referrals to the MSA of suspected contraventions. These referrals are distributed across 11 ISO rules.

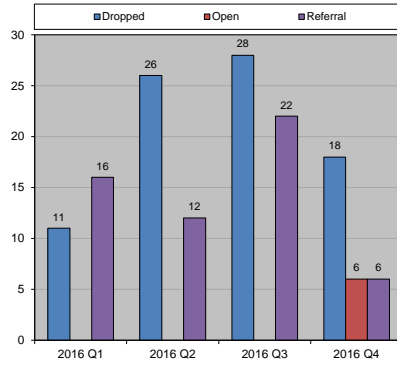
The 56 referrals to the MSA made over the past 4 quarters are distributed across 33 pool participants and 15 ISO rules. Processing times are slightly down from the last quarterly report with a median of 80 days between the occurrence of the event and closure of the handling of the event.

*Note: As the AESO may refer multiple events in a single referral to the MSA, the count of Referrals to the MSA will not necessarily line up with the count of penalties issued by the MSA in any given period.*

Files Opened by Quarter of File Date - Count By Category



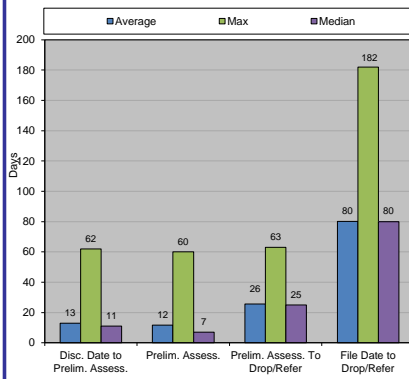
Files Opened by Quarter of File Date - Count By Status



Referrals to MSA by Quarter of File Date and Masked ID

| Participant | 2016 Q1 | 2016 Q2 | 2016 Q3 | 2016 Q4 |
|-------------|---------|---------|---------|---------|
| P1          |         | 1       |         |         |
| P2          |         |         | 1       |         |
| P3          |         |         | 1       |         |
| P4          |         | 1       |         |         |
| P5          | 1       | 2       | 1       |         |
| P6          |         |         | 1       |         |
| P7          |         |         | 1       |         |
| P8          | 1       |         |         |         |
| P9          |         |         |         | 1       |
| P10         |         | 1       |         |         |
| P11         | 1       |         |         |         |
| P12         | 2       |         | 2       |         |
| P13         |         |         | 1       | 1       |
| P14         |         |         | 1       |         |
| P15         | 1       | 1       |         |         |
| P16         | 1       |         |         |         |
| P17         |         | 2       | 1       |         |
| P18         |         |         | 1       |         |
| P19         | 4       |         |         |         |
| P20         |         |         | 4       |         |
| P21         | 2       |         |         |         |
| P22         | 1       |         |         |         |
| P23         |         |         |         | 1       |
| P24         |         |         | 2       | 1       |
| P25         |         | 1       |         |         |
| P26         | 1       |         |         |         |
| P27         |         | 1       | 1       |         |
| P28         |         |         | 1       |         |
| P29         | 1       |         |         |         |
| P30         |         | 2       |         |         |
| P31         |         |         | 1       |         |
| P32         |         |         | 2       |         |
| P33         |         |         |         | 1       |

Processing Time of Files Opened in Last Four Quarters



Referral to MSA by Quarter of File Date and Category

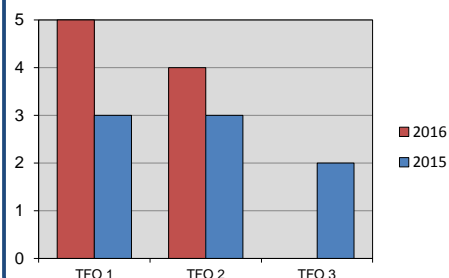
| Category | 2016 Q1 | 2016 Q2 | 2016 Q3 | 2016 Q4 |
|----------|---------|---------|---------|---------|
| 201.3    | 1       |         | 2       |         |
| 201.7    | 1       |         | 1       |         |
| 203.1    | 1       | 2       | 4       |         |
| 203.3    | 3       | 3       | 4       |         |
| 203.4    | 2       | 2       |         | 1       |
| 203.6    | 6       |         | 1       | 2       |
| 204.1    |         |         | 1       |         |
| 205.3    | 1       | 3       |         |         |
| 205.5    |         |         | 2       |         |
| 205.6    |         |         | 3       |         |
| 301.2    |         |         | 1       |         |
| 304.3    |         |         | 2       | 2       |
| 306.5    |         | 1       | 1       | 1       |
| 502.8    | 1       |         |         |         |
| 203.3    |         | 1       |         |         |

## Compliance Quarterly Report - Sections 9.1 and 501.2 of the ISO Rules - Q4 2016

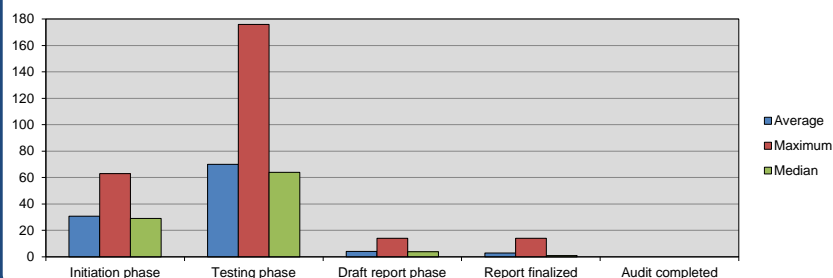
The following charts summarize the status of the 2016 and 2015 activities of ISO Rules External Compliance Monitoring group in relation to Sections 9.1 and 501.2 of the ISO Rules as of Q4 2016. For any questions regarding this report, please send an email to [tpcompliance@aeso.ca](mailto:tpcompliance@aeso.ca) (for Section 9.1) or [securityrulecompliance@aeso.ca](mailto:securityrulecompliance@aeso.ca) (for Section 501.2).

### Section 9.1 of the ISO Rules

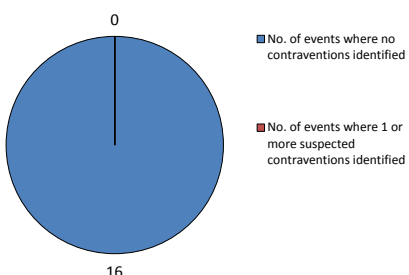
1. Distribution of 2016/2015 Audits - Count by Masked TFO



3. 2016/2015 ISO Rule 9.1 Completed Compliance Audits – Duration in days of each phase



2. 2016/2015 ISO Rule 9.1 Event Outcomes - Count by Category



### Commentary

In 2016, there are 8 full audits planned for the year and as of the end of Q4 2016, 7 audits have been completed, and 1 audit is in the testing phase. In addition, 1 focused audit was completed in July 2016. In 2015, 7 full audits and 1 focused audit were completed. The distribution of full and focused audits across legal owners of transmission facilities ("TFO") is presented in Graph No. 1.

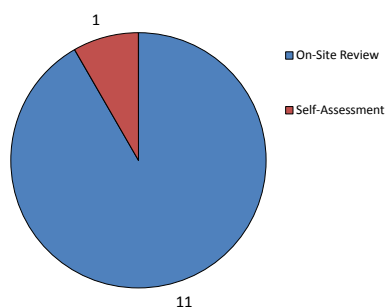
There are no other (non-audit) 9.1 events that needed investigation by the Compliance group in 2015 or 2016.

No referrals have been sent to the MSA resulting from the completed compliance monitoring audits of Section 9.1 thus far for 2016.

Graph No. 3 serves as an indication of the time it has taken to complete the various phases of each completed audit. In 2015, it took the AESO an average of 137 days to complete an audit. As of Q4 2016, it is taking the AESO an average of 82 days to complete the audits. This significant reduction in time is a result of internal efficiencies and smaller size projects being audited in 2016.

### Section 501.2 of the ISO Rules

ISO Rule 501.2 - 2016 Planned Compliance Monitoring by Type



### Commentary

In 2016, there were 11 planned On-Site Reviews of selected sites designated as Critical Facilities by the Alberta Security and Strategic Intelligence Support Team ("ASSIST"). During Q4 2016, it was determined that the On-Site Review for 2 of these sites would be more appropriately performed in 2017. As of Q4 2016, the AESO has completed its monitoring on 8 of these sites, as carried out by the Energy Security Unit ("ESU") of the Justice and Solicitor General Branch of the Alberta Government. The one remaining On-Site Review, that was initiated in July 2016, was still being assessed as of Q4, 2016.

Additionally, one Critical Facility was required to complete and submit the Section 501.2 Self-Assessment Template in 2016. Compliance initiated the Self-Assessment requirement during Q1 2016 and it was completed and submitted by the legal owner of the Critical Facility in May 2016.

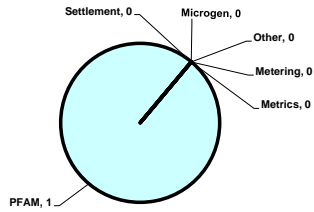
In 2015, the AESO completed 8 On-Site Reviews and 5 Self-Assessments.

No referrals have been sent to the MSA resulting from the completed compliance monitoring of Section 501.2 thus far for 2016.

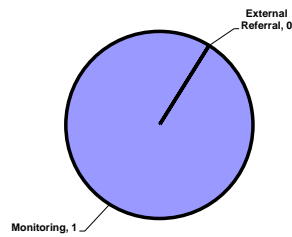
## Compliance Quarterly Report - Load Settlement - Q4 2016

The following charts summarize the activities of the Load Settlement External Compliance Monitoring group over the four quarters ending December 2016. Please refer to the attached help documentation for details on interpreting the charts below. For any questions regarding this report, please send an email to [compliance@aeso.ca](mailto:compliance@aeso.ca).

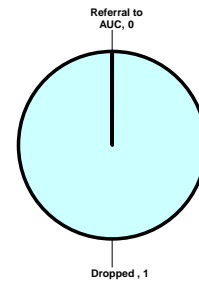
Files Opened in Period - Count by Category



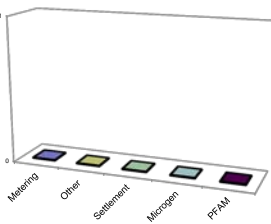
Files Opened in Period - Count by Origin



Files Closed in Period - Count by Status



Referrals to AUC in Period - Count by Category



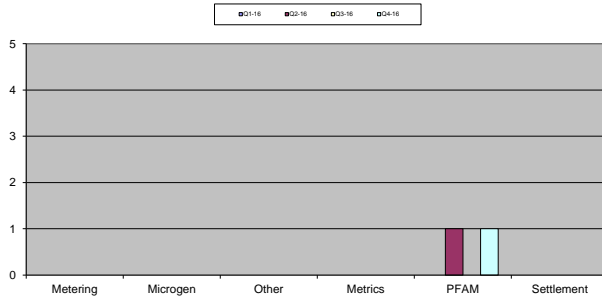
### Commentary

For the fourth quarter of 2016 we opened one new report on a market participant.

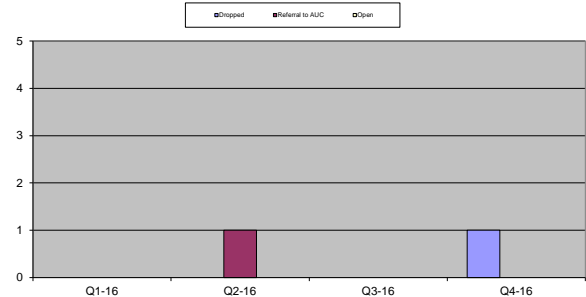
As a part of our monitoring under section 2.17 of Alberta Utilities Commission ("AUC") Rule 021, the AESO receives copies of all AUC Rule 021 market transactions (consumption, settlement, site registry, site action & financial) and we report on any discrepancies in format, completeness, timeliness, process rules, and calculations. In the fourth quarter of 2016 we ran 57 reports to verify the information from approximately 660 million market transactions.

In addition, we work with industry and the AUC to identify opportunities to simplify and streamline AUC Rule 021 to make it more effective for all involved.

Files Opened by Quarter - Count By Category



Files Opened by Quarter - Count by Status



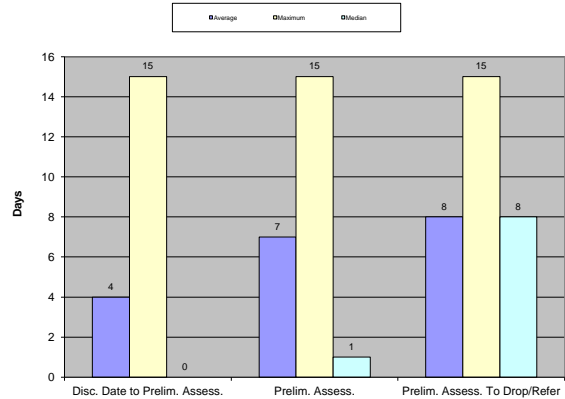
Referrals to AUC by Quarter of Referral Date and Masked Market Participant ID

| Participant | Q1-16 | Q2-16 | Q3-16 | Q4-16 |
|-------------|-------|-------|-------|-------|
| LS1         |       |       |       |       |
| LS2         |       |       |       |       |
| LS3         |       |       |       |       |
| LS4         |       |       |       |       |
| LS5         |       | 1     |       |       |
| LS6         |       |       |       |       |
| LS7         |       |       |       |       |
| LS8         |       |       |       |       |
| LS9         |       |       |       |       |
| LS10        |       |       |       |       |
| LS11        |       |       |       |       |
| LS12        |       |       |       |       |
| LS13        |       |       |       |       |

Referrals to AUC by Quarter of Referral Date and Category

| Category   | Q1-16 | Q2-16 | Q3-16 | Q4-16 |
|------------|-------|-------|-------|-------|
| Metering   |       |       |       |       |
| Microgen   |       |       |       |       |
| Other      |       |       |       |       |
| Metrics    |       |       |       |       |
| PFAM       |       |       |       |       |
| Settlement |       |       |       |       |

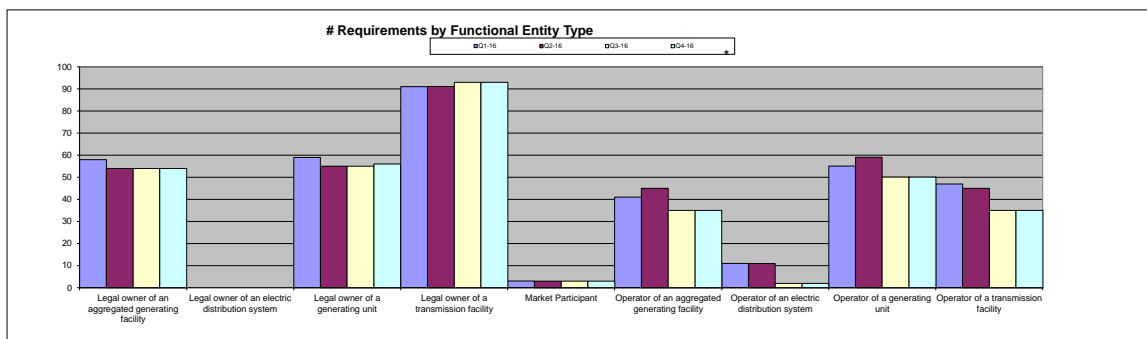
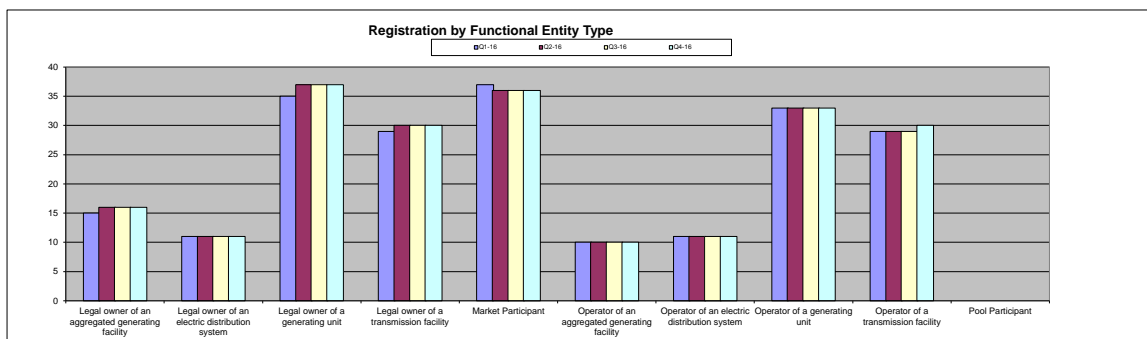
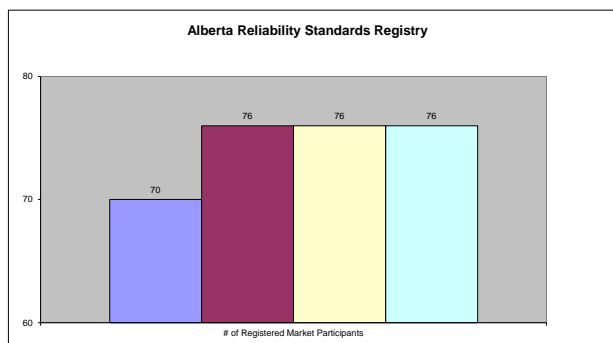
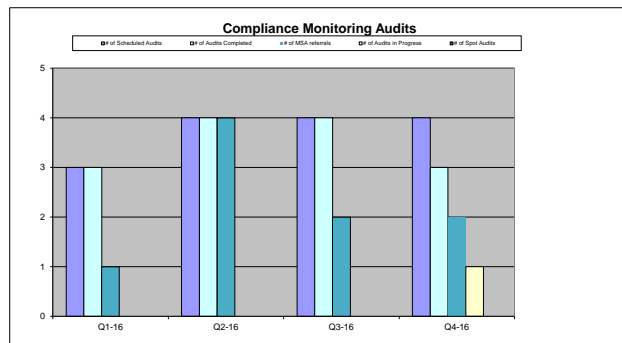
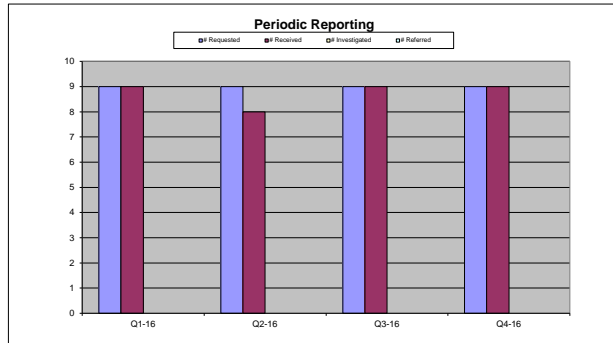
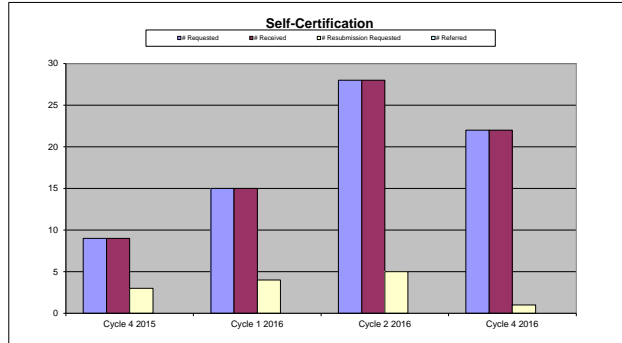
Processing Time of Files Opened in Last Four Quarters



## Compliance Quarterly Report - Alberta Reliability Standards Monitoring - Q4 2016

Updated: March 8, 2017

The following charts summarize the activities of the Alberta Reliability Standards Compliance Monitoring group for Q4 2016 and the distribution of events over the past four quarters. Please refer to the attached help documentation for details on interpreting the charts below. For any questions in regards this report, please send an email to



| Common Terminology                              |  |
|---|--|
| <b>Category</b>                                 | Each <b>Compliance File</b> has an associated Category which refers to the ISO rule, AUC Rule 021 topic or Reliability Standard which may have been contravened. In the case of multiple categories, a principle category is assigned to the File.   |
| <b>Clarification Request</b>                    | An email request sent in the ISO Rules Compliance process seeking additional detail on the information submitted with an offer restatement. This is part of the ISO Rules <b>Monitoring</b> process.   |
| <b>Compliance File</b>                          | A compliance file refers to one or more Flagged Events that have been logged for Preliminary Assessment, or where a suspected contravention has been identified through a Compliance Monitoring Audit in accordance with ISO Rule 103.12. Every Compliance File has a status of Open, Dropped or Referred. Each Compliance File is applicable to a single market participant and has an associated File Date and Category.   |
| <b>Compliance Monitoring Audit</b>              | As described in ISO Rule 103.12. The process of monitoring or review of a TFO's compliance with ISO Rule 9.1.5.  |
| <b>Compliance Monitoring Audit Report</b>       | A report described in ISO Rule 103.12.9 (4) which communicates the results of the Compliance Monitoring Audit to the TFO and provides support for any referral to the MSA.   |
| <b>Date of Discovery</b>                        | For an <b>internal</b> or <b>external referral</b> , the date that the referral was received. For an event identified by <b>Monitoring</b> , the date on which the AESO discovers the event and logs it for <b>Preliminary Assessment</b> .  |
| <b>Date of Notification</b>                     | The date that a TFO is notified of a Compliance Monitoring Audit of its transmission facility project and a request for information that facilitate commencement of the Compliance Monitoring Audit.   |
| <b>File</b>                                     | Synonym for <b>Compliance File</b> .   |
| <b>File Date</b>                                | A unique date associated with a <b>Compliance File</b> . In the case of ISO rules compliance, this is the date of the <b>event</b> itself. In the case of AUC 021 monitoring, this is the <b>Date of Discovery</b> .   |
| <b>Files Closed in Period</b>                   | Compliance Files whose <b>status</b> changed to either <b>Dropped File</b> or <b>Referred File</b> within the reporting period. Note that these may have file dates from earlier quarters.   |
| <b>Files Opened in Period</b>                   | Compliance Files with a <b>Date of Discovery</b> falling within the reporting period.  |
| <b>Flagged Event</b>                            | A collection of one or more submissions or actions carried out by a market participant that may form the basis of a compliance file. Flagged events can come from <b>Monitoring</b> , an <b>Internal Referral</b> or an <b>External Referral</b> or from <b>Clarification Requests</b> .   |
| <b>Information Request</b>                      | As described in ISO Rule 103.12, an Information Request is a letter submitted to a market participant describing the particulars of a potential ISO rule, AUC 021 topic or Reliability Standard contravention and seeking the market participant's input on the event.   |
| <b>Masked Participant ID</b>                    | A unique identifier associated with each market participant for tracking <b>Referred Files</b> for that participant but without revealing the particular participant. The Masked Participant ID will NOT be consistent from report to report.  |
| <b>Masked Transmission Facility Owner (TFO)</b> | A unique identifier associated with each <b>TFO</b> for tracking Compliance Monitoring Audits for that participant but without revealing the <b>TFO</b> name. The Masked <b>TFO</b> ID will NOT be consistent from report to report.   |
| <b>Monitoring</b>                               | Queries, reports and other tools run by Compliance on a regular basis to identify <b>Flagged Events</b> .  |
| <b>Other</b>                                    | A <b>Category</b> of Other applies to events which Compliance examined but did not prove to be associated with any potential rule contravention.   |
| <b>Other Events</b>                             | Compliance monitoring activities, other than Compliance Monitoring Audit, in relation to ISO Rule 9.1.1 <i>Monthly Reporting</i> , ISO Rule 9.1.3.4 <i>Project Change Proposal</i> , and ISO Rule 9.1.3.6 <i>Final Cost Report</i> .   |
| <b>Preliminary Assessment</b>                   | As described in ISO Rule 103.12. The process of carrying out a detailed examination of a potential ISO rule, AUC 021 topic or Reliability Standard contravention (which is separate from a Compliance Monitoring Audit). This starts with the opening of a Compliance File and culminates in a decision to: send an Information Request regarding the event to the relevant market participant; to conclude that the data does not support an assessment of non-compliance and to drop the event; or, potentially, to make a referral to the AUC or MSA. |
| <b>Referrals in Period</b>                      | Compliance Files which have been referred to the MSA/AUC (as appropriate) in the period. Note that these may have file dates from previous quarters.   |
| <b>TFO Records</b>                              | Documents, correspondences and other records of information that support compliance with ISO Rule 9.1.5  |
| <b>Warning Letter</b>                           | In certain cases where a Preliminary Assessment has not been carried out or does not support an assessment of non-compliance, a letter may be sent to one or more participants which clarifies the obligations of a particular rule.   |

| Table Specific Terminology                                       |  |
|--|--|
| <b>Origin</b>  | A <b>Compliance File</b> has an origin which is an indication of how the <b>Flagged Event</b> was identified eg. <b>Monitoring</b> , <b>SC Referral</b> , <b>OC Referral</b> , etc.  |
| <b>CR</b>  | A <b>File Origin</b> of CR indicates that the event resulted from a <b>Clarification Request</b> .   |
| <b>External Referral</b>   | A <b>File Origin</b> of External Referral is a possible ISO rule, AUC 021 topic or Reliability Standard contravention identified by individuals outside the AESO and referred to compliance for a more detailed examination.   |
| <b>Internal Referral</b>   | A <b>File Origin</b> of Internal Referral is a possible ISO rule, AUC 021 topic or Reliability Standard contravention identified by other (non-compliance) personnel in the AESO in the course of their own work and referred to compliance for a more detailed examination.   |
| <b>Other</b>   | A File Origin of type Other refers to events which Compliance examined but which were brought to our attention through untypical means such as a question from a market participant or an AESO IT problem report.  |
| <b>Status</b>  | The current state of a <b>Compliance File</b> . Either <b>Open File</b> , <b>Dropped File</b> or <b>Referred File</b> .  |
| <b>Dropped File</b>  | The status of a Compliance File which is closed but is not a Referred File. A File may be closed for a variety of different reasons including: unreliable data, AESO IT system problems, Mitigating Factors as defined in ISO Rule 103.12 or an assessment that no rule has been contravened. A dropped file may have resulted in a Warning Letter being sent. |
| <b>Open File</b>   | The <b>status</b> of a <b>Compliance File</b> which has been opened but which has not yet been <b>Dropped</b> or <b>Referred</b> to the MSA/AUC.   |
| <b>Referred File</b>   | The status of a Compliance File for which a referral regarding the file has been made to the AUC/MSA in accordance with ISO Rule 103.12.   |
| <b>Processing Time of Files Opened in the Last Four Quarters</b> | An indication of the number of days taken to move a <b>Compliance File</b> through the various stages of the Compliance Process.   |
| <b>Disc. Date to Prelim. Assess</b>                              | The number of days between the <b>Date of Discovery</b> for a <b>Compliance File</b> and the commencement of the <b>Preliminary Assessment</b> .   |
| <b>Prelim. Assess.</b>   | The number of days between the commencement of the <b>Preliminary Assessment</b> and its completion.   |
| <b>Prelim. Assess. To Drop/Refer</b>                             | The number of days between the completion of a <b>Preliminary Assessment</b> and the decision to drop or refer the file to the MSA/AUC. This is only relevant for events where an <b>Information Request</b> was sent.   |
| <b>File Date to Drop/Refer</b>                                   | The number of days between the <b>File Date</b> and the change in status for the <b>Compliance File</b> to either <b>Dropped File</b> or <b>Referred File</b> .  |
| <b>Duration of ISO Rule 9.1 Compliance Audits</b>                | An indication of the number of weeks taken to move a Compliance Monitoring Audit through the various stages of the audit process.  |
| <b>Initiated</b>   | The number of weeks between the <b>Date of Notification</b> and the date that the AESO received the <b>TFO Records</b> .   |
| <b>Testing phase</b>   | The number of weeks between the receipt of the <b>TFO Records</b> and the date that the AESO provided a Draft <b>Compliance Monitoring Audit Report</b> to the TFO for review and comments.  |
| <b>Draft report phase</b>  | The number of weeks between the end of the Testing Phase and the receipt of TFO comments on the draft <b>Compliance Monitoring Audit Report</b> .  |
| <b>Report finalized</b>  | The number of weeks between the receipt of the Draft <b>Compliance Monitoring Audit Report</b> with TFO comments and the <b>Compliance Monitoring Audit Report</b> is finalized.   |
| <b>Audit completed</b>   | The number of weeks between the date of finalizing the <b>Compliance Monitoring Audit Report</b> and the date of referral to the MSA or closing the audit, in case of non-referral.  |