

Alberta Reliability Standards (ARS) Compliance Monitoring Program (CMP) Tutorial & Lessons Learned

Version 1.0 June 2013





The PLAN

At the end of this tutorial, you will be able to:

- Describe how all elements of the Compliance Monitoring Program (CMP) fit together.
- 2. Describe compliance monitoring audit procedures.
- 3. Describe the expectations of using the RSAW for evidence submission.
- 4. Identify lessons learned over the past 2 years.

CMP Tutorial and Lessons Learned CMP Overview



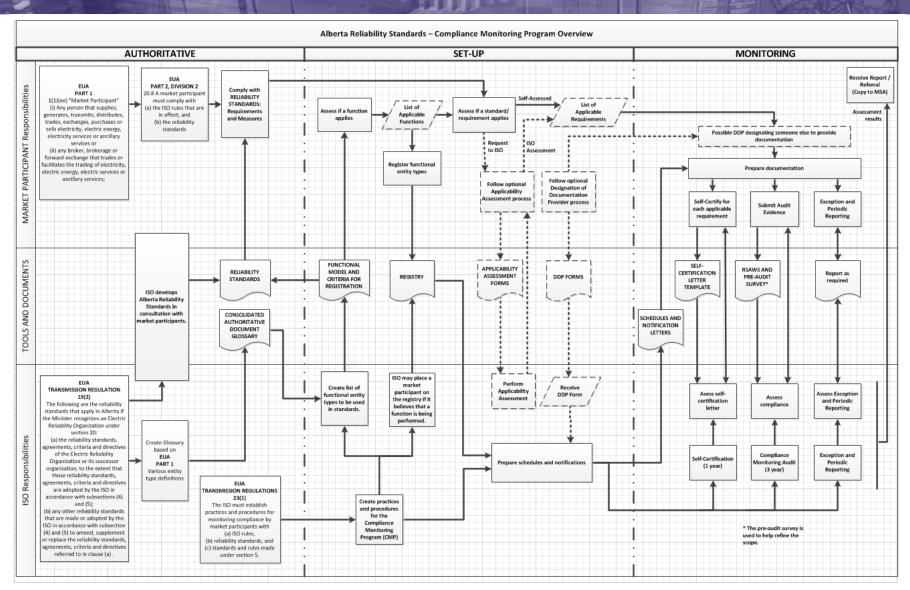
The purpose of this section is to briefly describe the various elements that make up the Alberta Reliability Standards (ARS) Compliance Monitoring Program (CMP). Details of each element can be accessed by using the links found on the page following this section.

If you have any further questions regarding the CMP, please email:

rscompliance@aeso.ca.

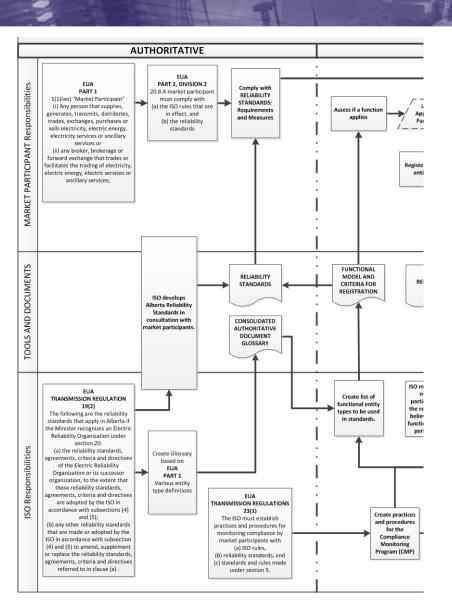
ARS Compliance Monitoring Program Overview Diagram – Elements of the CMP





ARS Compliance Monitoring Program Overview Reliability Standards, market participants and the CMP





AUTHORITATIVE

Reliability Standards

Alberta reliability standards are developed by the ISO in consultation with market participants under authority of the EUA Transmission Regulations 19 (2).

All market participants as defined in Part 1 of the EUA must comply with reliability standards (Part 2, Division 2, paragraph 20.8).

Consolidated Authoritative Document Glossary

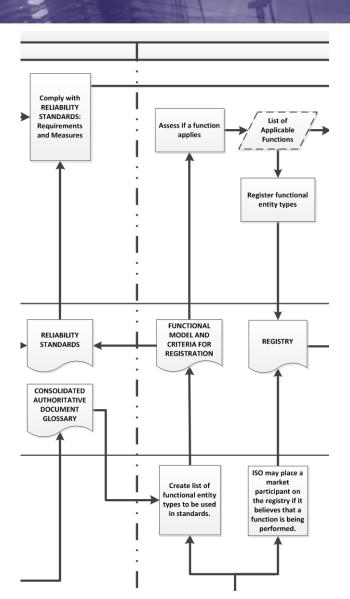
Under authority of the EUA Transmission Regulations 19 (2) and definitions found in Part 1, the ISO created a list of entity types that are used when assigning applicability of the reliability standards. The definitions used to create the list are found in the Consolidated Authoritative Document Glossary.

Compliance Monitoring

Under authority of the EUA Transmission Regulations 23 (1), the ISO established the practices and procedures for monitoring compliance. The practices and procedures are known as the Compliance Monitoring Program or CMP.

ARS Compliance Monitoring Program Overview Functional Model and the Registry





SET-UP

Functional Model and Criteria for Registration

The Functional Model and Criteria for Registration is a list of entity types used in the applicability sections of standards.

In order to help market participants identify their particular functional entity types, criteria questions are shown for each type in the model.

Alberta Reliability Standards Registry

The registry is used in the compliance program to prepare schedules and notifications for the CMP.

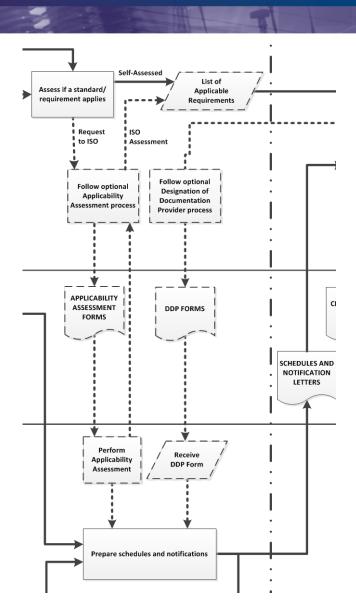
Market participants should review the Functional Model and Criteria for Registration to determine which functional entity types apply to them and register these functions.

The registry is meant to help market participants prepare in advance for compliance monitoring by identifying their entity types.

The ISO may place a market participant on the registry if it believes that the market participant is performing one or more of the functions.

ARS Compliance Monitoring Program Overview Applicability and Applicability Assessments





SET-UP (continued)

Applicability

Based on the registry, a market participant should selfassess whether or not a standard or requirement applies to them. If the market participant self-assesses that a standard or requirement is not applicable to them they should send in evidence of non-applicability during a compliance monitoring audit.

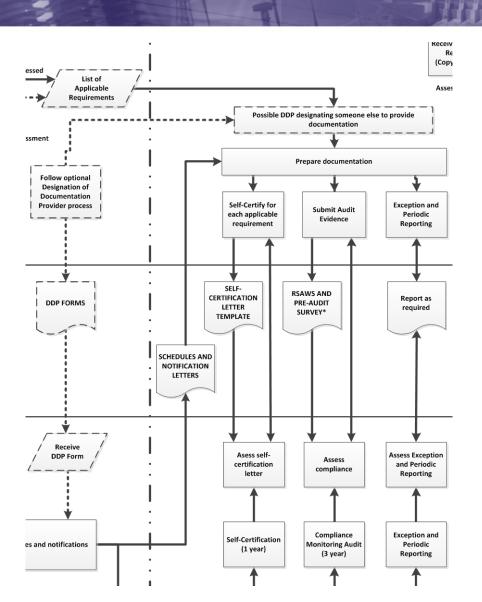
Applicability Assessment

The optional applicability assessment process is meant to help market participants assess whether or not a standard or requirement is applicable to them when the applicability section in a standard is not sufficiently clear to allow them to self-assess. The ISO's assessment may be used as evidence.

An applicability assessment does not alter the registry because the registry is based on functional entity types, not standards or requirements.

ARS Compliance Monitoring Program Overview Designation of Documentation Provider (DDP)





SET-UP (continued)

<u>Designation of Documentation Provider Process</u>

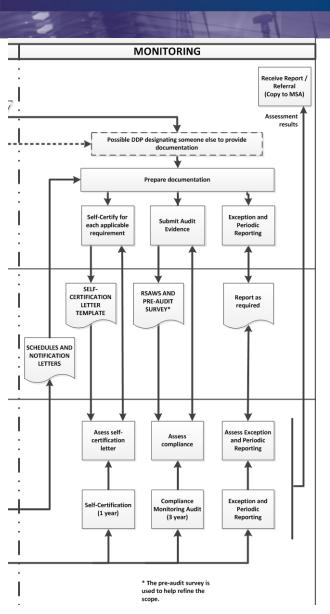
Through the optional Designation of Documentation Provider (DDP) process, a market participant may designate another entity to provide all or part of the CMP documentation on their behalf.

The market participant who designates the provision of documentation is still responsible for compliance because they still perform the function as defined under the EUA Part 2, Division 2.

The DDP does not remove a market participant from the registry because the registry is based on functional entity types and is not based on providers of documentation.

ARS Compliance Monitoring Program Overview Monitoring





MONITORING

Schedules and Notifications

To help market participants prepare for compliance monitoring, the CMP schedules are posted on the AESO website. Market participants are also notified by email of self-certification and audit deadlines.

Self-Certification

A market participant self-certifies on a yearly basis using the Self-Certification template.

The scope of the self-certification is based on the registry. If a market participant believes that a standard or requirement does not apply to them, they would indicate this in the self-certification template and provide a brief explanation (self-assessed or applicability assessment).

Compliance Monitoring Audit

A market participant sends in evidence of compliance during a compliance monitoring audit which is scheduled by the ISO every 3 years.

The scope of the audit is based on the registry and is refined by answers that the market participant provides in a pre-audit survey.

If a market participant believes that a standard or requirement does not apply to them, they would indicate this by providing evidence. Evidence can be actual documents to demonstrate that the standard or requirement does not apply or by providing the email received from the ISO as a result of an applicability assessment.

Exception and Periodic Reporting

Exception reporting is event driven.

Current periodic reporting is for FAC-003 only and is done on a quarterly basis.

Assessment Results

Referrals based on assessments are sent to the MSA with a copy to the market participant.

ARS Compliance Monitoring Program Overview Summary



- 1. The development of Alberta reliability standards, market participant requirement to comply and the obligation to set-up the Compliance Monitoring Program (CMP) are shown in the EUA.
- 2. The Functional Model and Registration Criteria document is a list of entity types that appear in standards and is meant to help market participants prepare in advance of compliance assessments by identifying which functional entity applies to them.
- 3. The Registry is a list of market participants and their applicable functional model entity types. The registry is used to schedule the Compliance Monitoring Program (CMP).
- 4. Market participants should use the Functional Model and Criteria for Registration document to identify their functional entity type(s) and send in a registration form. The ISO may place a market participant on the registry if it believes that the market participant performs a function(s).
- 5. Once a market participant has identified their functional entity type(s), they should assess which standards and requirements are applicable to them. There are two methods:
 - Self-assess applicability give reasons during self-certification and provide evidence during an audit.
 - If the applicability section in a standard is unclear to the market participant Request an applicability assessment, provide evidence during the assessment and provide AESO confirmation as evidence during an audit.
- 6. To help market participants prepare for an assessment, the ISO will identify schedules and send out notifications that includes the scope of the assessment which is based on the functional entity type(s) identified in the registry. The pre-audit survey is meant to help refine the scope.
- 7. A market participant may choose to have a third party send in the CMP documentation by using the Designation of Documentation Provider process.
- 8. Results of an assessment is sent to the market participant.

CMP Tutorial and Lessons Learned CMP Overview



To view details of the program elements, please click on one of the following links:

Compliance Monitoring Program

Alberta Reliability Standards Compliance Monitoring Program

Registration

Alberta Reliability Standards Registration Guide

Alberta Reliability Standards Applicability Assessment Request Process

Alberta Reliability Standards Designation of Documentation Provider Guide

Alberta Reliability Standards Registration Form

Alberta Reliability Standards Designation of Documentation Provider Form

Self-Certification

Alberta Reliability Standards Self-Certification Guide

Alberta Reliability Standards Self-Certification Letter Template Guide

Alberta Reliability Standards Self-Certification Template

Self-Certification Tutorial

Compliance Monitoring Audit

Alberta Reliability Standards Market Participant Audit Guide Compliance Monitoring Audit Tutorial

Reliability Standards Audit Worksheets (RSAWS)

Alberta Reliability Standards RSAW Guide

CMP Tutorial CMP Compliance Monitoring Audits



The purpose of this section is to go through the procedures section of the Market Participant Audit Guide and highlight areas of importance (roles, responsibilities and timelines). For details on the procedures and guidelines, please refer to the guide.

If you have any further questions regarding the CMP, please email:

rscompliance@aeso.ca.

ARS CMP Tutorial Market Participant Audit Guide

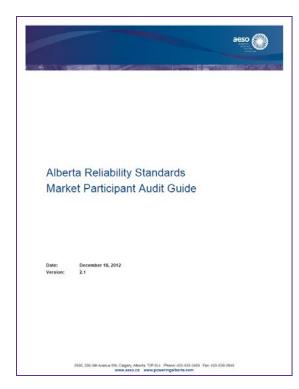


Compliance monitoring audit: means a systematic and objective examination and/or testing by the **ISO** to monitor whether a **market participant** is complying with one or more **applicable rules and standards**.

The ARS Market Participant Audit Guide

The purpose of this guide is to define the procedures and guidelines used for planning, executing, and reporting with respect to each compliance monitoring audit.

To get the most out of this tutorial, please click <u>here</u> download the latest version of the guide.



ARS CMP Tutorial Market Participant Audit Guide



The guide starts with:

Table of Contents

Can be used to navigate to sections in the document

Section 1: Introduction

Gives the background, purpose and applicability of the guide

Section 2: About this Guide

- A descriptions of the 5 guide sections:
 - 1. Introduction
 - 2. About this Guide
 - 3. Procedures
 - 4. Guidelines
 - 5. Referenced Documents and Revision History
- Navigational tips

ARS CMP Tutorial Changes to the guide



The guide is divided into two main sections:

Procedures (3) and Guidelines (4)

3 Procedures

The purpose of this section is to give registered **market participants** information on the procedures related to a **compliance monitoring audit**. Guidelines related to the procedures are given in section 4.

Starts on page 3

4 Guidelines

The purpose of this section is to give registered **market participants** information on the guidelines related to a **compliance monitoring audit**. Procedures related to the guidelines are given in section 3.

Starts on page 9

The subsections relate to each other

$$(3.1 = 4.1, 3.2 = 3.2 \dots etc.)$$

ARS CMP Tutorial Procedures – Page 3



Procedures

The purpose of this section is to give registered market participants information on the procedures related to a compliance monitoring audit. Guidelines related to the procedures are given in section 4.

3.0 COMPLIANCE MONITORING AUDIT OVERVIEW (see guidelines in section 4.0)

The compliance monitoring audit is part of the Alberta Reliability Standards Compliance Monitoring Program (CMP) which includes registration, selfcertification, reporting and the compliance monitoring audit.

Audit Types

There are two types of compliance monitoring audits:

- a. Scheduled audit (every three years)
- b. Spot audit (as required)

Scheduled audits are normally carried out at the compliance monitor's offices.

Confidentiality

Compliance monitoring audits conducted by the compliance monitor will be done on a confidential basis as prescribe in ISO rule 12.

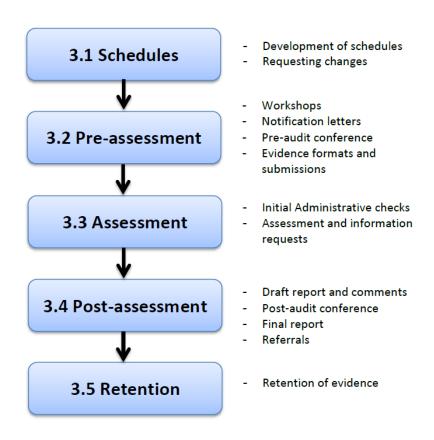
All compliance monitoring audits done so far have been scheduled

ARS CMP Tutorial Procedures – Page 4



Audit Phases

As shown in the diagram below, there are five phases to the compliance monitoring audit. The number in each box refers to the section in this guide. The side text shows the topics covered:



ARS CMP Tutorial Procedures – Pages 4 & 5



3.1 SCHEDULES (see guidelines under section 4.1)

All registered entities are scheduled for a compliance monitoring audit every 3 years. Changes to the audit schedule may occur due to changes in the registry or by request from market participants.

Procedures:

1. Identify when registered market participants are scheduled for an audit

The Alberta Reliability Standards compliance monitoring audit schedule can be found on the AESO's website under: Compliance > Alberta Reliability Standards > Compliance Monitoring Audit. To open the schedule, click here and then click on the schedule document.

A change to the audit schedule may occur when there is a change to the *Alberta Reliability Standards Registry* or by a registered market participant requesting a change. The compliance monitor will notify the registered market participant if there is a change to their schedule.

Page 4

Version 2.1

Issue date: December 18, 2012

Find when you are scheduled for an audit

aeso

2. If required, request a change to the compliance monitoring audit schedule

A registered market participant may request a change in their audit schedule at any time prior to or within 7 days of the receipt of the audit notification for the following reasons:

- a. The audit schedule for their entity may conflict with other business activities.
- b. A significant interdependency exists with other registered market participants and are required to be audited in the same audit year.

A registered market participant may request a change in their audit schedule for consideration by the compliance monitor by submitting their request to rscompliance@aeso.ca.

3. If required, request a delay of their compliance monitoring audit

A registered market participant may request a delay in their compliance monitoring audit at any time prior to or within 7 days of the receipt of the audit notification if there is a conflict with other business activities. A delay of more than 6 weeks will only be considered under exceptional circumstances.

A registered market participant may request a delay in their compliance monitoring audit for consideration by the compliance monitor by submitting their request to rscompliance@aeso.ca.

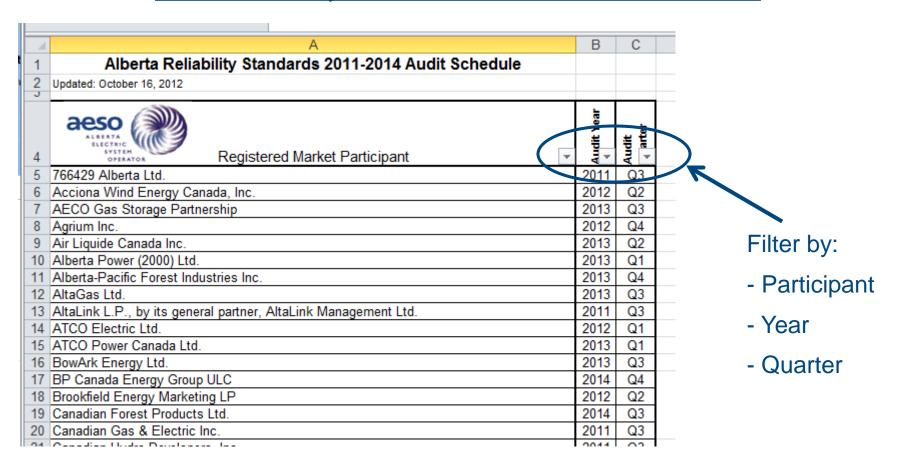
Change your audit schedule

Delay your scheduled audit

ARS CMP Tutorial Online Schedule



aeso.ca > Compliance > Alberta Reliability Standards > Compliance Monitoring Audit <u>Alberta Reliability Standards 2011 – 2014 Audit Schedule</u>



ARS CMP Tutorial Procedures – Pages 5 & 6



3.2 PRE-ASSESSMENT (see guidelines under section 4.2)

Prior to the assessment and in order to properly plan and prepare for an upcoming compliance monitoring audit, the compliance monitor encourages registered market participants to read through this guide. Any questions not covered in this guide, should be emailed to rscompliance@aeso.ca.

Procedures:

1. Attend the training session

Currently, a quarterly audit guideline workshop is offered to registered market participants that are scheduled for an upcoming audit. An invitation will be sent to the registered market participant's primary Compliance Monitoring Program (CMP) contact person approximately one month prior to the workshop.

2. Review the contents of the notification letter

A notification letter will be sent via email to the primary CMP contact person for the registered market participant at least 30 days prior to a scheduled audit and at least 20 days prior to a spot audit. Information related to the content of the notification can be found in section 4.2 of this guide under "Audit Notification".

3. Meet the auditor to discuss the audit process

In the notification letter, the compliance monitor will propose a date and time for a pre-audit conference call. Upon receipt of the notification letter, the registered market participants should either; accept the proposed date and time, propose an alternate date and time or decline the request by replying to rscompliance@aeso.ca.

Page 5

Version 2.1 Issue date: December 18, 2012

Workshop is scheduled approximately 2 months in advance of evidence deadline

Notification letter showing details of the audit is sent out after the workshop

(min. of 30 days prior to evidence deadline)

Pre-audit conference

Your choice - Discuss audit process

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4. Check that evidence in the preferred format

The preferred method for submitting evidence is electronically using PDF format.

Database information should be submitted in either: XLSX, XLS, TXT or CSV format.

Audio and video files should be in Windows media format (WMA, WMV).

Files should not contain viruses, macros or be encrypted. Files that do not meet these criteria will be rejected. If the registered market participant has a business process which requires encryption, they should contact the compliance monitor audit contact as shown on the notification letter.

PDF all evidence

Database: XLSX, XLS, TXT or CSV

Media: WMA, WMV

ARS CMP Tutorial Notification Letter (Example Only)





Click and type date Month 00, 20XX

Click and type Recipient Name

Click and type Title

Click and type Company

Click and type Address Line 1

Click and type Address Line 2

Click and type City, Province, Postal Code

Dear Click and type Recipient Name

RE: Notification of Scheduled Audit

As part of the AESO's mandate to carry out the compliance monitoring function for reliability standards under Section 23 of the Transmission Regulation, and in accordance with ISO Rule 12, the compliance monitoring audit has been established to evaluate compliance of registered market participants with the requirements identified in each Alberta reliability standards in effect during the audit period.

As per the processes established in the Alberta Reliability Standards Audit Guide, this letter provides a minimum of 30 days advance notification of the upcoming scheduled audit. This audit notification is being issued to the primary compliance contact provided to the AESO as part of the Alberta Reliability Standards Registration process. If you would like to identify a different individual for the purpose of this audit, please send an email to the AESO primary audit contact noted below.

The scope of the compliance monitoring audit will not extend beyond the bounds of compliance monitoring relative to Alberta reliability standards. The objective of the audit will be on the approved reliability standards, their requirements, relative measures and any assessments that are applicable to your registered functional entity types.

| Audit period | Start: The effective date of each Alberta reliability standard, or the specific requirements within a reliability standard | | | | | |
|------------------------|---|--|--|--|--|--|
| | End: Date (inclusive) | | | | | |
| | The attachment titled "Scope" provides the list of all requirements applicable to Click and type Company during the audit period. | | | | | |
| Evidence | Date (inclusive) | | | | | |
| submission due date | Section 4.2.3 of the <i>Alberta Reliability Standards Audit Guide</i> provides details on the submission methods and timing. | | | | | |

Evidence Request
The format of evidence submission is RSAW's. The completed RSAW's are to be returned with your submission.

Anticipated start date of the audit assessment

Audit location
Alberta Electric System Operator premises It is not currently anticipated for the AESO to visit your premises during this scheduled audit.

AESO primary audit contact
Click and type Auditor's Name Click and type Title
Click and type Title
Click and type Contact Information

Under section 4.2.2 of the Audit Guide, the AESO is extending an offer to hold a pre-audit conference call with your organization. The purpose of the discussion is to review the audit procedures; review the expectations of both entities during the audit process; and, to answer any general questions that you may have relating to the compliance monitoring audit.

Proposed pre-audit conference call:

To be determined. Please contact your AESO primary audit contact to arrange for a suitable time, or to indicate you are declining the offer of the pre-audit conference call.

Please contact either your AESO primary audit contact or myself if you have any questions or concerns related to this notification letter.

Regards.

(Original signed by)

Click and type Manager's Name Click and type Title

cc: Click and type Auditors' Names Click and type Title

Attachments

Scope - Audit scope

Attachment 1 tab - List of Alberta Reliability Standards applicable to market participants

Attachment 2 tab - Related Links

2500, 330-5th Avenue SW, Calgary, Alberta T2P 0L4 Phone: 403-539-2450 Fax: 403-539-2949 www.aeso.ca www.poweringalberta.com

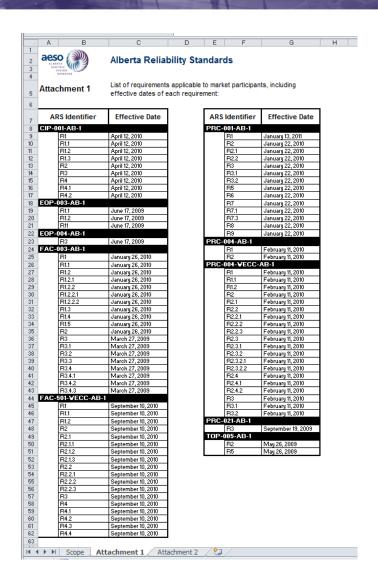
ARS CMP Tutorial Notification Letter – SCOPE (Example only)

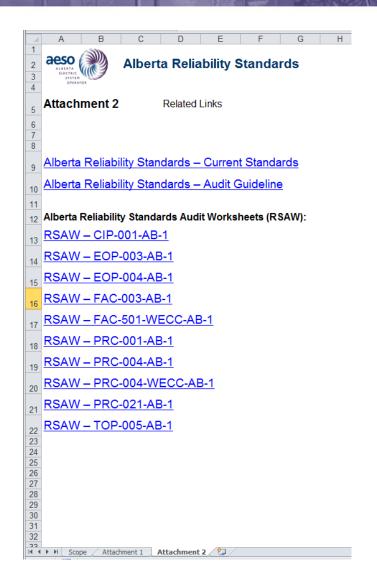


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| | Alle | | | | | + |
| l | aeso | Alberta Reliability Standards | | | | |
| 1 | ALBERTA | | | | | |
| | SYSTEM | | | | | |
| | OPERATOR | Compliance Monitoring Audit Scope | Quarter/Year | | | |
| | | Company Name | | | | Ť |
| | | | | | | |
| | Alberta Reliability Standard | Title | Requirement | Applicable Functional Entity Type | | |
| (| Critical Infrastructure Protection | | | | | |
|) | CIP-001-AB-1 | Sabatoge Reporting | R1 | GFO - Generation Facility Owner | | |
| 1 | CIP-001-AB-1 | Sabatoge Reporting | R1.1 | GFO - Generation Facility Owner | | |
| 2 | CIP-001-AB-1 | Sabatoge Reporting | R1.2 | GFO - Generation Facility Owner | | |
| 3 | CIP-001-AB-1 | Sabatoge Reporting | R1.3 | GFO - Generation Facility Owner | | |
| 4 | CIP-001-AB-1 | Sabatoge Reporting | R2 | GFO - Generation Facility Owner | | |
| 5 | CIP-001-AB-1 | Sabatoge Reporting | R3 | GFO - Generation Facility Owner | | |
| 6 | CIP-001-AB-1 | Sabatoge Reporting | R4 | GFO - Generation Facility Owner | | |
| 7 | CIP-001-AB-1 | Sabatoge Reporting | R4.1 | GFO - Generation Facility Owner | | |
| 8 | CIP-001-AB-1 | Sabatoge Reporting | R4.2 | GFO - Generation Facility Owner | | |
| 9 [| Emergency Preparedness and Ope | rations | | | | |
| 0 | EOP-003-AB-1 | Load Shedding Plans | R1.1 | DC - Demand Customer | | |
| 1 | EOP-003-AB-1 | Load Shedding Plans | R11 | DC - Demand Customer | | |
| 2 | EOP-004-AB-1 | Disturbance Reporting | R3 | GFO - Generation Facility Owner | | |
| 3 | Protection and Control | | | | | |
| 4 | PRC-001-AB-1 | Protection System Coordination | R1 | GOP - Operator of a generating unit | | |
| 5 | PRC-001-AB-1 | Protection System Coordination | R2 | GOP - Operator of a generating unit | | |
| 6 | PRC-001-AB-1 | Protection System Coordination | R2.1 | GOP - Operator of a generating unit | | |
| 7 | PRC-001-AB-1 | Protection System Coordination | R2.2 | GOP - Operator of a generating unit | | |
| 8 | PRC-001-AB-1 | Protection System Coordination | R5 | GFO - Generation Facility Owner | | |
| 9 | PRC-001-AB-1 | Protection System Coordination | R7 | GFO - Generation Facility Owner | | |
| 0 | PRC-001-AB-1 | Protection System Coordination | R7.1 | GFO - Generation Facility Owner | | |
| 1 | PRC-001-AB-1 | Protection System Coordination | R9 | GOP - Operator of a generating unit | | |
| 2 | PRC-004-AB-1 | Analysis and Mitigation of Transmission and | R1 | GFO - Generation Facility Owner | | |
| 4 | | Generation Protection System Misoperation | | - | - | + |
| 3 | PRC-004-AB-1 | Analysis and Mitigation of Transmission and Generation Protection System Misoperation | R2 | GFO - Generation Facility Owner | | |

ARS CMP Tutorial Notification Letter – Attachment 1 and 2 (Example only)

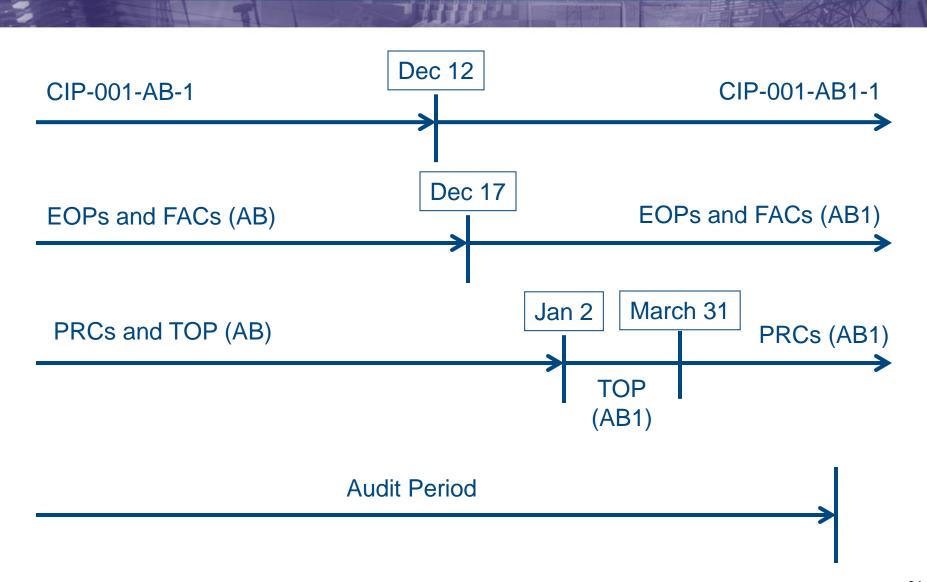






ARS CMP Tutorial Changes to the applicability section of the standards





ARS CMP Tutorial Change impact and submission options



Impact

- 1) No changes to requirements, only a change in applicability.
- 2) Only CIP-001, EOP-004 and TOP-005 have possible applicability additions.
- 3) EOP-003, the FACs, and the PRCs have either no change or a reduced applicability.
- 4) TFOs (split into operator/owner) have either no change or a reduced applicability in all current standards.
- 5) The change creates a 3-year transitional period.

<u>Submission Options</u> (Your choice – state your preference when submitting):

- 1) Each version of the standard is submitted separately with the old versions ending on the day before the effective date of the new versions (Default).
- 2) Since there is no change or reduced change in applicability to 7 standards, we propose an optional submission method:
 - The 7 standards that are not affected can be submitted using only the new version (with the understanding that it is for the entire audit period).
 - The 3 standards affected by change in applicability (CIP, EOP-004 and TOP) must be submitted as shown in item 1 above (both versions one for each applicable period).
 - If you are a TFO only or you are both a GFO and GOP for the entire audit period, you may submit all evidence using the new versions only.

ARS CMP Tutorial Change impact and submission options



| | TABLE 1 | TABLE 2 |
|---------|-------------------------------|---|
| Acronym | Name | Name |
| GFO | Concretion Equility Owner | Legal Owner of an Aggregated Generation Facility |
| GFO | Generation Facility Owner | Legal Owner of an Generating Unit |
| GOP | Operator of a Congreting Unit | Operator of an aggregated Generating Facility |
| GOP | Operator of a Generating Unit | Operator of a Generating Unit |
| TEO | Transmission Essility Owner | Legal Owner of a Transmission Facility |
| TFO | Transmission Facility Owner | Operator of a Transmission Facility |
|)A/O | M/ima Ourses | Legal Owner of an Electric Distribution System |
| WO | Wire Owner | Operator of an Electric Distribution System |
| WSP | Wire Service Provider | Operator of an Electric Distribution System |
| DC | Demand Customer | Market Participant receiving service under Rate DTS of the ISO tariff |
| PP | Pool Participant | Pool Participant |

You should:

- 1) Review the 10 new versions of the existing standards and identify any changes to applicability
- 2) Advise the AESO of any changes to the registry.

ARS CMP Tutorial TOP-005



TOP-005

- 1) Market participants that are <u>only</u> Pool Participants and therefore only have TOP-005 as an applicable standard have been contacted for a spot audit.
- 2) All other registered market participants that have TOP-005 as an applicable standard should provide documentation for TOP-005-AB-1 and TOP-005-AB1-1 for the period up to March 31, 2013.

ARS CMP Tutorial Procedures – Pages 6 & 7



5. Fill out the appropriate Reliability Standard Audit Worksheet(s) (RSAW)

The registered market participant should download the latest version of each applicable Reliability Standard Audit Worksheet(s) (RSAW). RSAWs can be found at www.aeso.ca under COMPLIANCE > Alberta Reliability Standards > Reliability Standards Audit Worksheets (RSAWs). Click here to access the RSAW page.

The RSAW must be filled out and submitted to the compliance monitor with the evidence files. For each applicable requirement request, the registered market participant must provide a hyperlink(s) to the individual evidence document(s). The hyperlink should be placed in the "Evidence column. Although a hyperlink is preferred, the document may also be embedded

The "Evidence Description" column may be used by the market participant to provide further detail on the evidence location (such as page or paragraph). The "Evidence Description" column should not be used to provide additional evidence. The RSAW is simply meant to point the auditor to evidence documents that are related to the particular requirement and associated request.

6. Fill out the pre-audit survey

The provided pre-audit survey must be filled out and submitted to the compliance monitor with the evidence files.

7. Understand the restrictions to email submissions

Files less than/equal to 10MB may be submitted via email. Multiple emails may be used to a maximum file submission of five times 10MB.

If evidence is larger than 50MB, it may submit an optical disc or USB data stick in person or via a postal service

8. Submit the pre-audit survey, applicable RSAW(s) and the evidence files

Email submission is made to rscompliance@aeso.ca. The deadline is 11:59 p.m. MPT (Mountain Prevailing Time) on the date as shown in the notification letter.

In person or postal service submission is made to the AESO's main office which is located at:

2500, 330 – 5th Avenue SW Calgary, AB T2P 0L4 Reception – 25th floor

Office hours are Monday through Friday 8 a.m. to 5 p.m.

The deadline for in person submission is 5 p.m. MPT (Mountain Prevailing Time) on the date as shown in the notification letter.

Page 6

Version 2.1 Issue date: December 18, 2012

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If using a postal service, the post marks must be on or before the due date

It is the registered market participant's responsibility to obtain delivery receipts.

Use <u>RSAW</u>s as an <u>index</u> to your evidence files

Fill-out pre-audit survey

IF by email then 10MB each up to 50MB max IF > 50MB then Optical Disc or USB data stick

Deadline

On evidence due date:

IF by email then 11:59 p.m. MPT

IF by post or in person then 5 p.m. MPT

ARS CMP Tutorial RSAWs used as a link to evidence files (1)





Reliability Standard Audit Worksheet RSAW_v2_CIP-001-AB-1

PART THREE - COMPLIANCE AUDITOR ASSESSMENT/CHECKLIST

| | Requirement 1 | <u>Mea</u> | asures 1 | | Assessment 1 | Evidence Description | <u>Evidence</u> Embedded file, Reference, Location | Assessment Notes | | |
|------|--|---|--|---|---|----------------------|--|------------------|--|--|
| | | These measures will be used by the ISO in carrying out its compliance monitoring duties in accordance with ISO rule 12. The ISO may consider other data and information, including any provided by a registered market participant. | | the ISO in carrying out its compliance monitoring duties in accordance with ISO rule 12. The ISO may consider other data and information, including any provided by a registered market | | | | | | |
| R1 | Each responsible entity must document and implement procedures for: | requi ident | isures for this irement are tified in the sections below | AR1 | Request the registered market participant to provide the written procedures that includes the contents as identified in R1.1, R1.2 and R1.3. Request the registered market participant to provide records of suspected and actual sabotage events that have occurred during the audit period to demonstrate implementation of the procedures. Records could include information such as date, location, reporting personnel, the type/nature of each event and actions taken. | | AESO document: ISO Consolidated Authoritative Document Glossary: definition of sabotage event. | | | |
| R1.1 | Recognizing sabotage events on its equipment. | exist, comp meel R1.1. exists proce spec requi were upon | ts that the sedures cified in irement R1.1 e implemented nan occurrence a sabotage | AR1.1 | Review the written procedures received in AR1- 1 to verify content includes information on how to recognize a sabotage event. Where a sabotage event has occurred during the audit period, based on information received in AR1-2 above, verify the written procedures were used to appropriately identify the event. | | | | | |
| R1.2 | Receiving information about sabotage events affecting the Interconnection from: the ISO the ISO the local municipal police service, if applicable the Royal Canadian Mounted Police the Alberta Security and Strategic Intelligence Support Team (ASSIST) | MR1.2 Writte exist complement of the complement | ten procedures t, content is plete and ets requirement E Evidence ts that the tedures cified in iriement R1.2 e implemented a sabotage | AR1.2 | Review the written procedures received in AR1-1 to verify the procedures include action steps in the event information is received from one of the entities listed in R1.2 Request information from the entity whether sabotage events affecting the interconnection were received from entities listed in R1.2 In the event information was received from one of the entities listed in R1.2 during the audit period, verify the written procedures were followed as documented. | | | | | |

ARS CMP Tutorial RSAWs used a link to evidence files (2)



Each applicable requirement have certain requests for documentation. You should ensure that all requested documents are provided.

| | Requirement 1 | | Measures 1 | | Assessment 1 | | Evidence Description | <u>Evidence</u> Embedded file, Reference, Location | Assessment Notes |
|------|---|---|--|-------|--|---|---------------------------------|---|------------------|
| | | the IS complia accord The ISC and inf | measures will be used by O in carrying out its ance monitoring duties in ance with ISO rule 12. O may consider other data ormation, including any dby a registered market bant. | | | | | | |
| R1 | Each responsible entity must document and implement procedures for: | MR1 | Measures for this requirement are identified in the subsections below | AR1 | Request the registered market participant to provide the written procedures that includes the contents as identified in R1.1, R1.2 and R1.3. | ٦ | | AESO document: <u>ISO Consolidated</u> <u>Authoritative Document Glossany</u> : definition of sabotage event. | |
| | | | | | Request the registered market participant to provide records of suspected and actual sabotage events that have occurred during the audit period to demonstrate implementation of the procedures. Records could include information such as date, location, reporting personnel, the type/mature of each event and actions taken. | | Two separate | requests for docu | ımentation |
| R1.1 | Recognizing sabotage events on its equipment. | MR1.1 | Written procedures exist, content is complete and | AR1.1 | Review the written procedures received in AR1- to verify content includes information on how to recognize a sabotage event. | | | | |
| | | | meets requirement R1.1. Evidence exists that the procedures specified in requirement R1.1 | | Where a sabotage event has occurred during the audit period, based on information received in AR1-2 above, verify the written procedures were used to appropriately identify the event. | | Not a request | for documentation | n |

AR1 has 2 requests for documentation: AR1-1 the written procedure and AR1-2 the records of suspected or actual sabotage events.

For AR1-1 provide a link for each procedure version. You can use the "Description column to provide the detail locations (page #, period covered by each document)

For AR1-2 provide a link(s) to document(s) that show record(s) of suspected or actual sabotage events. If there were no events, provide an attestation letter.

ARS CMP Tutorial Newer Standard RSAWs



| | Requirement 1 | | Measures 1 | Assessment 1 | |
|----|--|-----|---|--|-------------------------|
| R1 | The operator of a generating unit, subject to requirement R3 and the ISO's consent to operate otherwise must only operate such generating unit with the automatic voltage regulator in service, in voltage control mode and controlling voltage. | MR1 | Evidence of operating as required in requirement R1 exists. Evidence may include operator logs or data files. | Part 1: Evidence Submission Pursuant to compliance monitoring audit the audited entity, to whom this requirement applies to, is requested to provide the following documentation for audit assessment: i. Documentation of measures/methods the audited entity deploys to meet R1 (note 1); and ii. Evidence deemed appropriate to demonstrate R1 compliance, e.g., operator logs, data files. Assessment on the evidence submitted with respect to this Part (ii) will be conducted on a sampling basis. The audit team will notify the audited entity of the sampling plan upon reviewing the information as identified in Part 1 (j). Note 1: Examples of methods/measures are status check every four hours or at the start/end of every shift, automatic alarm system to report changes in status, regular status report based on pidata, exceptions reports, automatic status logging system, or the alike. | Part 1 Request |
| | | | | Part 2: Audit Assessment 1) Review the submitted evidence based on the sampling plan, cross-examine the submitted evidence pertaining to R3 and assess: a. Does the submitted evidence demonstrate that the audited entity operated each generating unit with the automatic voltage regulator in service, in voltage control mode and controlling voltage? | Part 2 Auditor Steps |

ARS CMP Tutorial Procedures – Page 7



3.3 ASSESSMENT (see guidelines under section 4.3)

Once the pre-audit survey, RSAW(s) and evidence files are received, the compliance monitor will proceed with the audit assessment.

Procedures:

1. Prepare for the initial compliance monitor administrative review

The compliance monitor will perform an initial administrative review to verify that the submitted files include the completed pre-audit survey, that the completed RSAWs provide hyperlinks to appropriate evidence documents for each applicable requirement request, that the evidence is in the proper format(s), and that the evidence documents are related to the requirement request.

If there are missing components to the submission, the registered market participant will be contacted via email and be requested to submit, within five business days, the necessary documents to bring the submission to its requirements.

2. If required, inform the compliance monitor of any possible scheduling constraints

Once the administrative checks are complete, the auditor will review the documents and send via email a tentative schedule of when possible further information requests may occur. The tentative schedule will be based on standard areas (CIP, PRCs, etc.). There are no quarantees and the schedule may change as required by the auditor.

If the registered market participant has any scheduling constraints, they should inform the auditor at this time. The compliance monitor will do its best to accommodate any reasonable requests.

3. Respond to any additional information requests

As the auditor reviews evidence there may be a need to request additional information. Additional information requests will be sent via email using a template. The registered market participant will be given two business days to respond to the request by completing the template.

If the registered market participant has any questions regarding the information request, they should contact the compliance monitor audit contact as soon as possible after receiving the request.

Administrative review

RSAW index works, formats correct and sample requests

5 day response time

Tentative request schedule:

Based on standard area (CIP, PRC...etc.)

You should review and identify restrictions

Assessment Information requests

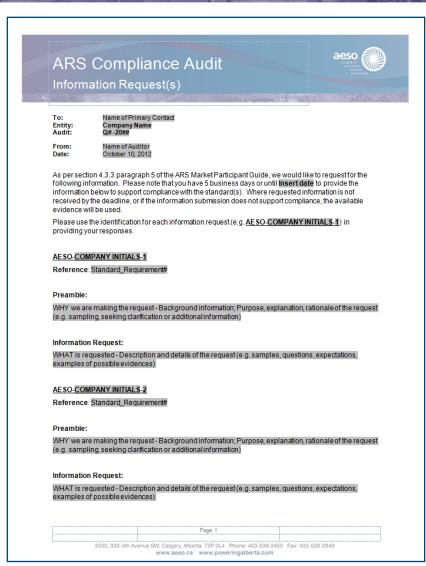
2 day response time

ARS CMP Tutorial Information Request Template





Request #2



ARS CMP Tutorial Procedures – Pages 7 & 8



3.4 POST ASSESSMENT (see guidelines under section 4.4)

Once the audit assessment is complete, a draft report will be issued for the registered market participant's comment. Upon receipt of the registered market participant comments on the draft report, a final report will be issued and the compliance monitoring audit is considered closed.

Procedures:

1. Receive and review the draft audit report

The draft report is consistent with ISO rule 12.4 b) and includes the following:

Page 7

Version 2.1

Issue date: December 18, 2012

aeso

- a. description of objective, scope and methodology of compliance monitoring audit
- b. any suspected contraventions
- any mitigation or remedial action measures as submitted by the registered market participant to the MSA
- d. the nature of confidential information

2. Meet with the auditor to discuss the draft audit report

When the draft audit report is sent, the compliance monitor will propose a date and time for a post-audit conference call. Upon receipt of the proposed date and time, the registered market participant should either accept the proposed date and time, propose an alternate date and time or decline the request by replying to rscompliance@aeso.ca.

3. Comment on the draft report

The registered market participant will be given 10 business days to comment on the draft report. Comments are entered directly on the draft audit report in the space provided. Their comments will be brought forward and will appear verbatim in the final report.

4. Prepare for possible commenting on changes to the draft report

The compliance monitor will review the registered market participant comments and determine whether further review is required. The registered market participant will be notified if it is determined that previously submitted evidence will be reviewed. Should the review result in revised audit findings or a significant change in the draft report, a new draft report will be issued. The registered market participant will be given an additional 10 business days to review and comment on the changes.

5. Receive the final report

The compliance monitor will issue a final report and send it to the officer of the registered market participant as indicated on their registration form.

Once the final report has been issued, the audit process as described in this guide is considered closed.

Draft Report

Suspected contraventions, mitigation or remedial action measures

Post-audit conference

Your choice – discuss findings

Draft report comments

10 day response

Major revision

10 day response to changes

Final Report

Sent to company officer

ARS CMP Tutorial Procedures – Page 8



6. Receive a copy of the MSA referral

Once the final audit report has been issued to the market participant, the compliance monitor will refer any suspected contraventions to the MSA. The officer of the registered market participant as shown on their registration form will receive a copy of the referral.



Consistent with ISO rule 12.4.b, only reports containing suspected contraventions will be referred to the MSA. The compliance monitor does not publish the report.

Procedure:

1. Keep a copy of the evidence files

The compliance monitor will keep a copy of the evidence on file for a maximum of six years unless a different retention period is required by a reliability standard or by an applicable regulatory entity.

Page 8

Version 2.1 Issue date: December 18, 2012

Referral to MSA

Company officer is copied, report not published

Retention of files

6 years or as long as needed

ARS CMP Tutorial Report Format



3.0 Suspected contraventions & mitigation actions

Suspected Contravention

| | ARS ID | | CIP-0 | 01-AB-1, | R3 |
|---|--------|---|-------|----------|----|
| ı | | _ | | | |

R3 Each responsible entity must annually provide its operating personnel with sabotage event response procedures, including personnel to contact, for reporting sabotage events.

| Suspected contravention | Mitigation or remedial action(s) |
|-------------------------|---|
| | A self-report dated January 15, 2011 acknowle that the procedure was not provided until after |
| Generating Station 1 | standard effective date. |

For the purpose of this requirement, Company A

submitted the following document: Ops-Personnel CIP provision.pdf

Generating Station 2

1) "Ops-Personnel CIP provision.pdf" indicated that the procedure was not provided until December 11, 2010 and in conclusion the AESO suspects that R3 of CIP-001-AB-1 was contravened at Generation Station 1 and Generating Station 2 for the period of April 12, 2010 to December 10,

anuary 15, 2011 acknowledges as not provided until after the

Self-Report #1.pdf

Prior MSA Self-Report

MP Response

10 days to send in

AESO Response

Appears on final report

Market Participant Comments

AESO Response



Section 4

- Provides details on the guidelines used to create the procedures in section 3.
- 2. Each subsection relates directly to the procedure sub-section

$$4.1 = 3.1 = Schedules$$

$$4.2 = 3.2 = Pre$$
-assessment

$$4.3 = 3.3 = Assessment$$

$$4.4 = 3.4 = Post-assessment$$

$$4.5 = 3.5 = Retention$$

In the event that the procedure differs from the guideline, the guideline will always take precedent.

CMP Tutorial CMP Lessons Learned



The purpose of this section is to go through the lessons learned during compliance monitoring audits of the past 2 years.

If you have any further questions regarding the CMP, please email:

rscompliance@aeso.ca.

ARS CMP Lessons Learned Topic Areas



1. General observations

- Providing evidence
- Evidence quality and the use of "Attestation Letters"
- Audit Statistics
- 2. CIP-001
- 3. PRC-001
- 4. FAC-003

ARS CMP Lessons Learned General: Providing evidence



One of difficulties for auditors over the last 2 years has been not being able to find compliance evidence related to the requirement.

Most issues can be summed up as:

- Bad index of submitted files
- Not pointing the auditor directly to the evidence that shows compliance with the requirement
- Submission of unrelated evidence files

Too avoid using an index and as mentioned earlier, market participants are now requested to submit audit evidence by filing out the appropriate RSAWs.

ARS CMP Lessons Learned General: Submitting files



- Fill out the "Evidence" column in the RSAW by providing a link that opens the related evidence document.
- Provide a separate link for each period covered by the evidence document.
 - Example: If there are three documents, one each for 2010, 2011 and 2012, provide three separate links
- Use the "Evidence Description" column to provide detail on the <u>location</u> of evidence.
 - Examples:
 - For the three documents above, state that: Document #1 is for 2010,
 Document #2 is for 2011... etc.
 - For large documents, provide a page or paragraph location
 - DO NOT provide additional evidence in the description column
- If possible give a unique ID number for each document. Long document titles that show a particular period are not that helpful.
- Remember that the purpose is to provide the auditor with a link to the document(s) that clearly show your compliance with the applicable requirement.

ARS CMP Lessons Learned General: Evidence quality and unrelated files



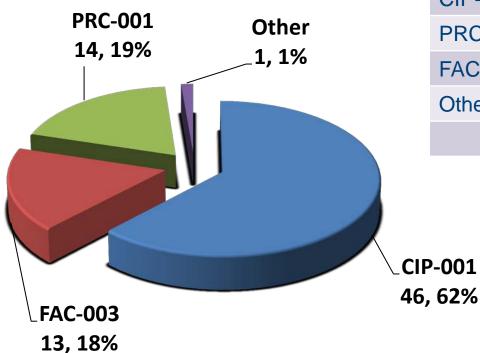
- As stated earlier, provide a link that opens the evidence document that shows your <u>compliance</u> with the applicable requirement.
- Evidence should be related directly to the request.
 - Example: If the request is for a list of relay failures, than send only the list of failures. Do not send a list of all relay operations (unless you identify all the failures)
- Attestations letters should only be used for "non-events".
- Attestation letters should not be used to state compliance with the requirement.
 - Example of a where attestation letters can be used:
 - I attest that for the period of April 12, 2010 to December 31, 2012, there
 were no suspected or actual sabotage events at our facilities.
 - Example of where attestations letters should <u>not</u> be used:
 - I attest that on January 5, 2011, all operating personnel were trained on PRC-001-AB-1, R1.

ARS Compliance Audit Statistics

Suspected Contraventions – 2011/2012



#, % of Suspected Contraventions by Standard



| Standard | # of Susp Contrave | |
|----------|-----------------------|------|
| CIP-001 | 46 | 62% |
| PRC-001 | 14 | 19% |
| FAC-003 | 13 | 18% |
| Other | 1 | 1% |
| Total | 74 | 100% |

74 suspected contraventions represents 2.5% of the total 2926 monitored requirements.

51% of the suspected contraventions were self-reported

ARS CMP Lessons Learned CIP-001, R1 (17 = 37% of CIP001 (46) representing 23% of all (74)) Suspected contraventions in red



| | Requirement 1 | | Measures 1 | | | | Assessment 1 | | |
|------|---|-----------------------------------|--|-------|--|----|---|----|---|
| | | out its c with ISO and info | assures will be used by the ISO in carrying ompliance monitoring duties in accordance rule 12. The ISO may consider other data mation, including any provided by a market participant. | | | | | | |
| R1 | Each responsible entity must document and implement procedures for: | MR1 | Measures for this requirement are ibentified in the subsections below | | AR1 | 1. | Request the registered market participant provide a copy of Sabotage Event Reporting, Communication, and Response Procedure documents. | | |
| | | | | | | 2. | Request the registered market participant provide records of suspected and actual sabotage events that have occurred during the audit period to demonstrate implementation of the procedures. Records could include information such as date, location, reporting personnel, the type/nature of each event and actions taken. | | |
| R1.1 | Recognizing sabotage events on its equipment. | MR1.1 | 1.1.1 Written procedures exist, content is complete and meets requirement R1.1. Evidence exists that the procedures specified in requirement R1.1 were implemented upon an occurrence of a sabotage event. | | AR1.1 | 1. | Review the written procedures received in AR1-1 to verify content includes information on how to recognize a sabotage event. | | |
| | | | | | | 2. | Where a sabotage event has occurred during the audit period, based on information received in AR1-2 above, verify the written procedures were used to appropriately identify the event. | | |
| R1.2 | Receiving information about sabotage events affecting the Interconnection from: • the ISO | MR1.2 | MR1.2 | MR1.2 | Written procedures exist, content is complete and meets requirement R1.2. Evidence exists that the procedures specified in requirement | | AR1.2 | 1. | Review the written procedures received in AR1-1 to verify the procedures include action steps in the event information is received from one of the entities listed in R1.2 |
| | the local municipal police service, if applicable | | R1.2 were implemented upon an occurrence of a sabotage event. | | | 2. | Request information from the entity whethe sabotage events affecting the interconnection were received from entities listed in R1.2 | | |
| | the Royal Canadian Mounted Police the Alberta Security and Strategic Intelligence Support Team (ASSIST) | | | | | 3. | In the event information was received from one of the entities listed in R1.2 during the audit period, verify the written procedures were followed as documented. | | |
| R1.3 | Making its operating personnel aware of sabotage events on its equipment and sabotage events affecting the | MR1.3 | Written procedures exist, content is complete and meets requirement R1.3. Evidence exists that the procedures specified in requirement R1.3 were implemented upon an | | AR1.3 | 1. | Review the written procedures received in AR1-1 to verify procedures include steps to make its operating personnel aware of sabotage events on its equipment and sabotage events affecting the interconnection. | | |
| | Interconnection. | | occurrence of a sabotage event. | | | 2. | In the event information was received from an entity listed in R1.2, verify the written procedures were followed as documented. | | |

Document:

R1: Procedure

R1.1 Procedure includes: "Recognizing sabotage events"

R1.2 Procedure includes: "receiving information from":

- ISO
- Local police
- RCMP
- ASSIST

R1.2 Procedure includes "Making operating personnel aware of sabotage events"

Implement: If there was an event, you need to show that the procedure was followed

ARS CMP Lessons Learned CIP-001, R2 (8 = 17% of CIP001 (46) representing 11% of all (74)) Suspected contraventions in red



| | Requirement 2 | | Measures 2 | | | Assessment 2 |
|----|--|---|---|--|-----|--|
| | | out its co with ISO and infor | asures will be used by the ISO in carrying ompliance monitoring duties in accordance rule 12. The ISO may consider other data mation, including any provided by a market participant. | | | |
| R2 | Each responsible entity must document and implement procedures for communicating information concerning sabotage events to the SC. | complete and meets the requirements of R2. Evidence exists that the procedures specified in requirement R2 were implemented upon an occurrence of a sabotage event. | complete and meets the requirements of R2. Evidence exists | | AR2 | Review the written procedures received in AR1-1 to verify the procedures include steps to communicate information concerningsabotage events to the SC. |
| | | | | Verify the procedures include current contact information on how to communicate with the SC. I.e. ensure communication methods are listed and current such as email address; telephone number; and/or other tools for communication are current and operational. | | |
| | | | Where a sabotage event has occurred during the audit period based on information received in AR1-2, verify the written procedures were followed. | | | |
| | | | | | | Note to registered market participants: The AESO has issued an information document (2010-001RS) to provide registered market participants with guidance about the reporting of sabotage events under CIP-001-AB-1 |

Document:

R2: Procedure includes: "procedure for communicating with the SC":

Implement: If there was an event, you need to show that the procedure was followed

ARS CMP Lessons Learned CIP-001, R3 (9 = 20% of CIP001 (46) representing 12% of all (74)) Suspected contraventions in red



| Requirement 3 | | | Measures 3 | | <u>Assessment 3</u> | | | |
|---------------|---|--|---|--|---------------------|--|--|--|
| | | out its with IS and in | neasures will be used by the ISO in carrying compliance monitoring duties in accordance of the ISO may consider other data formation, including any provided by a did market participant. | | | | | |
| R3 | Each responsible entity must annually provide its operating personnel with sabotage event response procedures, including personnel to contact, for reporting sabotage events. | ust annually provide its perating personnel with botage event response rocedures, including ersonnel to contact, for complete and meets the requirements of R3. Records indicate that operating personnel were provided with the sabotage event response procedures and | Written procedures exist content is complete and meets the requirements of R3. Records | | AR3 | 1. | Verify the written procedures received in AR1- indicate which operating personnel must be provided with the annual information. | |
| | | | | | 2. | Request record evidence to verify the identified operating personnel were provided the sabotage event response procedures and related contact information | | |
| | | | previous 12 months. | | | 3. | For each year included within the audit period, reviethe evidence provided to verify the procedures an related contact information was provided within the previous 12 months. | |

Provision:

R3: Annually provide procedure to operating personnel

Intent:

- 1. Provided before the effective date (April 12, 2010)
- 2. Provided on or before the anniversary date thereafter ("previous 12 months")
- 3. Training not necessary (only need proof of provision)
- 4. Operating personnel is defined by the participant (AR3-2: "Identified operating personnel")

ARS CMP Lessons Learned CIP-001, R4 (12 = 26% of CIP001 (46) representing 16% of all (74)) Suspected contraventions in red



| | Requirement 4 | Requirement 4 Measures 4 | | Assessment 4 | | |
|------|---|---|---|--------------|-------|--|
| | | out it with I and | measures will be used by the ISO in carrying compliance monitoring duties in accordance SO rule 12. The ISO may consider other data nformation, including any provided by a red market participant. | | | |
| R4 | Each responsible entity must: | MR4 | Measures for this requirement are identified in the subsections below. | | AR4 | Intentionally blank |
| R4.1 | Document sabotage event reporting procedures that identify current communications contacts | orting procedures that complete and meets ntify current requirements of R4.1. Recommunications contacts indicate that the contact information | complete and meets the | e | AR4.1 | Review the written procedures received in AR1-1 to verify the entities listed in R4.1 are included. |
| | | | requirements of R4.1. Records indicate that the contact information | | | Verify the communications contact information for each entity is current. |
| | with the following: the local municipal police service, if applicable; | | was verified within the previous 12 months. | | | Review the evidence provided to verify the contactinformation was verified within the previous 12 months. |
| | the Royal Canadian Mounted Police; | | | | | |
| | the Alberta Security and Strategic Intelligence Support Team (ASSIST); | | | | | |
| R4.2 | Implement the procedures as identified in requirement R4.1 upon the occurrence of a sabotage event. | MR4 | Evidence exists that indicates procedures as specified in requirement R4.1 were implemented upon an occurrence of a sabotage event | | AR4.2 | Where a sabotage event has occurred during the aud period, based on information received in AR1-2, verify th written reporting procedures were followed. |

Document:

R4.1 Procedure includes: "current communication contacts for":

- Local police
- RCMP
- ASSIST

MR4.1That the contact information was verified within the last 12 months.

Implement: 4.2: If there was an event, you need to show that the procedure was followed

ARS CMP Lessons Learned PRC-001, R1 (7 = 50% of PRC001 (14) representing 9% of all (74))



Suspected contraventions in red

| | Measures 1 | Assessment 1 | |
|--|---|--|-----------------------------|
| | These measures will be used by the ISO in carrying out its compliance monitoring duties in accordance with ISO rule 12. The ISO may consider other data and information, including any provided by a registered market participant. | | You define operating |
| The operating personnel of the ISO, TFO's and operators of generating units must each be familiar with the purpose and limitations of protection system | MR1 Training records are available that indicate training of staff who operate the system in protection system schemes and any RASs applicable within their system. | AR1 1. Request the list of operating personnel who operate the system in protection system schemes and any RASs applicable within their system. | personnel and provide list. |
| schemes applied in its area. | | | 1 |
| | | Request a list of protection system schemes and any RASs applicable within their system for all | List of |
| | applicable years within the audit period. | | protection |
| | | | schemes |
| | | Request training records that relate to those protection system schemes and RAS as identified in AR1-2 for all applicable years within the audit period. | ^ |
| | | | OF |
| Purpos | e and Limitation — | | |
| L ARFA | not generic plant, bro | ader area could | |
| ` | rnal RAS that affects | • | |
| | | , | FOR |
| • | <mark>of training</mark> : Should be anuary 13, 2011) | prior to effective | |

ARS CMP Lessons Learned PRC-001, R2.1 (Gen operator) and R3.1 (TFO)



(4 = 28% of PRC001 (14) representing 5% of all (74)) - Suspected contraventions in red

| | Requirement 2 | out its co with ISO and info | Measures 2 easures will be used by the ISO in carrying mpliance monitoring duties in accordance rule 12. The ISO may consider other data ormation, including any provided by a d market participant. | |
|------|---|------------------------------------|---|--|
| R2 | Each operator of a generating unit must do the following if a protective relay or any equipment of a protection system of a generating unit that measures voltage, current or frequency from the generating unit to the AIES, but excluding the prime mover and associated control systems fails, and such failure reduces transmission system reliability: | MR2 | Measures for this requirement are identified in the subsections below. | 24 hour reporting of failurent: For both A & B protection (see ID) |
| R2.1 | Notify the TFO in its area and the ISO as soon as possible, but no longer than 24 hours after receiving knowledge of such failure. | MR2.1 | Notifications exist for each failure as specified in requirement R2.1. | |

ARS CMP Lessons Learned

FAC-003, R1.1 (9 = 69% of FAC003 (13) representing 12% of all (74))





| - | | | | | The second secon | THE RESIDENCE OF THE PARTY OF T |
|---|------|--|------|---|--|--|
| | | | | | | |
| | R1 | Each TFO must prepare a TVMP. This program is to be updated at least annually. The TVMP must include the TFO's objectives, practices, approved procedures, and work specifications.1 | MR1 | A revision history of the <i>TVMP</i> is provided annually to the <i>ISO</i> . A <i>TVMP</i> exists and is provided in the format specified in the <i>ISO TVMP</i> template. The <i>TVMP</i> is provided within 30 <i>days</i> of request. The <i>TVMP</i> is complete and includes the required component sections specified in the template | | Define Schedule - Missing inspection in a schedule for a particular period |
| | | | | | | Portion of a line missing in a schedule for a particular period |
| | R1.1 | The TVMP must define a schedule for and the type (aerial or ground) of ROW | MR1. | A vegetation inspection schedule exists in the <i>TVMP</i> . The schedule is completed in accordance with | | Changes to line identification not captured in a schedule |
| | | vegetation inspections. This schedule must be flexible enough to adjust for changing conditions. The inspection | | the ISO TVMP template. The schedule includes all applicable transmission lines. Documentation exists to show that the vegetation | | Missing line in a schedule |
| | | schedule must be based on the anticipated growth of vegetation and any other environmental or operational factors that could impact the | | inspections have been performed. | | Type of ROW vegetation inspections not defined |
| \ | | relationship of vegetation to the transmission facilities of the TFO. The TFO must perform vegetation inspections as identified in the schedule. | | | | - Late implementation of the TVMP |

ARS CMP Lessons Learned Other Requirements



The remaining 10% of the total suspected contraventions are spread out over the 2 standards:

FAC-003, R2: (4 = 31% of FAC003 (13) representing 5% of all (73))

- No annual vegetation management plan

PRC-001, R6: (2 = 14% of PRC001 (14) representing 3% of all (73))

- Missing coordination
- No notification of protection system changes

PRC-001, R8: (1 = 7% of PRC001 (14) representing 1% of all (73))

- Unreported RAS status changes



If you have any questions, please email

rscompliance@aeso.ca

