

Alberta Reliability Standards Stakeholder Information Session

Jason Murray, Director Operational Effectiveness

May 3, 2011

- AESO roles and responsibilities
- Key contacts
- Development process
- Role of AESO Reliability Committee
- Role of Alberta Reliability Standards discussion group
- Project charter
- Project schedule
- Outstanding issues
- Project status update
- Critical Infrastructure Protection update
- Questions & answers

AESO Roles and Responsibilities

- Standard owner
- Requirement owners
- Subject matter experts
- Compliance staff
- Standards development
- Standards approval

Key Contacts

- Alberta Reliability Standards – Jason Murray, Director Operational Effectiveness jason.murray@aeso.ca
- Standards Compliance – rscompliance@aeso.ca

Alberta Reliability Standards Current Development Process

- Preliminary drafting (AESO Reliability Committee workgroups)
 - workgroup initial assessment
 - workgroup organization and WECC review
 - workgroup recommendation to AESO Reliability Committee
- AESO Reliability Committee endorsement meeting (stakeholder involvement)
- Formal drafting
- Formal stakeholder consultation
 - Stakeholder consultation period
- AESO review of stakeholder comments
- Decision to file with Alberta Utilities Commission or re-consult

Terms of Reference

AESO Reliability Committee (ARC)

- Purpose
 - Advice from key industry executives on the maintenance, security, and reliability of Alberta's interconnected electric system for the development of standards, criteria, procedures, rules and processes.
- Scope
 - Short-term focus on reliability standards implementation
- Membership
 - Senior leadership
- Term
 - 2 year commitment

Terms of Reference

AESO Reliability Committee Discussion Group



- Purpose
 - AESO and a small group of industry stakeholders to discuss issues related to the implementation of reliability standards in Alberta (compliance related issues are referred to compliance).
- Membership
 - Invitation only
- Member duties include:
 - Provide advice for development and implementation of standards
 - Recommend solutions to resolve non-technical issues across multiple standards to AESO leadership

Alberta Reliability Standards Project Charter

- Purpose
- History
- Scope
- Objectives
- Policy
- Guiding principles
- Roles and responsibilities
- Process
- Deliverables
- Constraints
- Risks
- Issues management
- Timeline

- Broader applicability in the ISO rules
- Detailed requirements in the ISO rules
- Double jeopardy
- Clear applicability
- GO/TO issue
- Effective dates and scheduling
- Adopting the most recent NERC/WECC version of the standards
- Revisions required to effective Alberta Reliability Standards (process and schedule)

Alberta Reliability Standards Schedule

- Current schedule published to the AESO website
- Schedule will be revised upon resolution of issues
- Material changes to standards may require formal re-consultation
- Alignment with other authoritative documents (ISO rules, Operating Policies and Procedures) may affect development timelines

Alberta Reliability Standards Project Status Update 2011

| No. of Standards | Status | Next Step |
|---------------------------------|---|---|
| 6 (5 applicable to ISO only) | Preparing for formal stakeholder consultation | |
| 1 | Out for formal consultation | |
| 27 | AESO review of stakeholder comments | 6 – re-consult 21 – decision to file or re-consult |

Alberta Reliability Standards Project Status Update 2011

| Preparing for Consultation (6) | Preparing for Reconsultation (6) | Consultation Complete (21) Consultation Underway (1)* (decision to reconsult or file) | |
|---|---|--|---|
| BAL-STD-002-0 (WECC) BAL-004-1 BAL-004-WECC-1 BAL-005-0.1b EOP-005-2 MOD-001-1 | BAL-002-1 (NERC) EOP-001-2 VAR-001-1a VAR-002-1.1b VAR-002-WECC-1 VAR-501-WECC-1 | COM-001-1.1 COM-002-2 EOP-008-0 FAC-010-2.1 * FAC-011-2 (N/A in Alberta) FAC-014-2 IRO-001-1 IRO-005-3 MOD-010-0 & MOD-012-0 MOD-024-1 & MOD-025-1 MOD-029-1 | PER-003-0 PER-005-1 PRC-005-1 PRC-007-0 PRC-008-0 PRC-011-0 PRC-015-0 PRC-016-0 PRC-017-0 PRC-018-1 PRC-023-1 |

Critical Infrastructure Protection Update: United States

- State of NERC CIPs (U.S. entities)
 - CIP 001 v1 in force (Sabotage Reporting)
 - Consideration of integration with EOP 004
 - CIP 002 – 009 v2 superseded
 - CIP 002 – 009 v3 in force
 - CIP 002 – 009 v4 soon to be in force
 - NERC ballot approved (Dec. 2010)
 - NERC BoT and FERC approval in 2011 seems likely
 - CIP 002 – 009 v5 being drafted
 - Circulated for initial comment in 2010
 - Planned for ballot in late 2011

Critical Infrastructure Protection

Update: Alberta 2010

- State of Alberta Reliability Standards: CIPs
 - CIP 001
 - Version 1 in force (2010)
 - CIP 002
 - Version 1 passed over in favour of version 2
 - ARC security workgroup completed review of version 2 in 2010
 - Currently in AESO internal review process
 - CIP 003 to 009 (version 2)
 - ARC security working group completed review in 2010
 - Currently in AESO internal review process

Critical Infrastructure Protection Options

- Current Approach (2011) – Focus on CIP 002 and Critical Asset lists
 - Description:
 - Tune current NERC v2 based CIP-002-AB standard
 - Accommodate key NERC v4 based concepts, such as:
 - Bright line criteria for Critical Assets identification
 - Fifteen minute criterion for Critical Cyber Assets
 - Defer proceeding with CIP 003 through CIP 009
 - Consideration:
 - Future decision regarding when to deploy remaining standards
 - Monitor what NERC / FERC do with v5 standards

Coffee Break

Alberta Reliability Standards Stakeholder Information Session

Peter Wong, Director Compliance

May 3, 2011

- Compliance Monitoring Program update
 - Registration, periodic reporting, self-certification
 - Audit Assessments
- Progress update
 - Scheduling
 - Applicability assessments
 - Audit worksheets
- Looking ahead
- Information and support

Compliance Monitoring Program

- Framework established in January 2009
 - Specific to monitoring compliance to reliability standards
 - Program consists of four components
 - Registration, reporting, self-certification, audit assessments
 - Implemented in stages
 - 3 of 4 components implemented and in operation to date
 - Audit assessments – starting in June 2011
- Ongoing refinements to the process
 - No major changes identified

Entity Registration Update

- Process identifies functions that are performed by an entity to determine standards and requirements for monitoring
- Key events:
 - Initial registration completed in June 2009
 - Functional model revisions – Dec 2010
 - Registry revised - March 2011
- Some registration stats:
 - Number of functions registered for reduced from 238 to 170
 - Number of registered entities changed from 139 to 74

- Some challenges/highlights:
 - Function definitions and applicability need to be more specific
 - Will always be some very specific situations which require special review
 - Committed to doing applicability assessments
- Meanwhile,
 - If you have a case where you do not believe a standard or requirement applies, submit a request to AESO for an applicability assessment
 - AESO will not monitor a standard or requirement until a determination is made by the standard owner

- In effect since March 2009 for a just a few standards (vegetation management, outage reporting)
 - Submitted to AESO operational staff who use this information as part of their normal business
- Entities have been good at reporting the right content in a timely manner
 - Had one party report before a period was completed
 - No referrals to date

Self-certification

- An attestation made to the AESO, stating the status of compliance over a period
- Rolled out in March 2010
- Process changes
 - Encourage early self-assessment of applicability
 - Reduce duplicate efforts for joint-venture arrangements
 - Revised template to improve clarity

| | Cycle 2 2010 | Cycle 3 2010 | Cycle 4 2010 | Cycle 1 2011 |
|---------------------------|-----------------|-----------------|-----------------|-----------------|
| # requested | 21 | 23 | 32 | 21 |
| # submitted | 16 | 22 | 28 | 11 |
| # resubmissions requested | 5 | 8 | 4 | 3 |
| # referrals to MSA | 0 | 0 | 0 | 0 |

- Validate a market participant's compliance with applicable standards, by inquiring and reviewing evidence, periodic reports, self-certification, and other information
 - Scheduled once every 3 years for each registered entity

- Validate a market participant's compliance with applicable standards, by inquiring and reviewing evidence, periodic reports, self-certification, and other information
 - Scheduled once every 3 years for each registered entity Q2 2011
- Last component of the program to be implemented
- Audit schedule summary

| | 2011 | 2012 | 2013 | Total |
|--------------|-------------|-------------|-------------|--------------|
| Q1 | 0 | 5 | 5 | 10 |
| Q2 | 6 | 8 | 5 | 19 |
| Q3 | 11 | 6 | 7 | 24 |
| Q4 | 7 | 6 | 6 | 19 |
| Total | 24 | 25 | 23 | 72 |

- Progress update
 - Input from compliance working group – March 2011
 - Guideline and schedule posted – April 2nd, 2011
 - First audit process training – April 27th, 2011 for Q2 entities
- Follow up
 - Check guidelines and schedule
 - Watch for audit notifications – Q3 notifications will come out end of Q2
 - Compliance working group review of audit experience in July/Aug
 - Watch for audit process training in June (for Q3 entities)
 - Questions – please contact us

- Specific functional/ownership relationships introduce complexities for scheduling of audits self-certifications
 - Current model – every entity is scheduled for all functions in a particular cycle, and where possible we would accommodate requests for changes
 - Situations such as joint ownerships, joint functional responsibilities, etc.
 - Doesn't work well where there are partnerships that are scheduled in different cycles, may lead to duplicate submissions and effort for everyone
- In the interim
 - Resolve on a one-on-one basis to avoid extra effort
- Collect and review alternatives – possible change to the model

- Recognized need to be more specific and clear in applicability of standards
 - Work is part of the standards development process
 - Includes resolving the owner/operator functions
- Outcomes of this work will give us the direction on what standards will be monitored for each entity
- Meanwhile, for approved standards
 - Submit request for assessments if you think the standard/requirement should not be monitored

- Intended to guide an auditor through an audit and record assessment information
 - Not an authoritative document, not approved by AUC
- Helpful for industry to have the worksheet
 - Some information as to evidence required and questions
- Some improvements
 - Improved layout and information
 - Development is integrated into standard development process
 - Consider input through the standards development process
- Information sessions will be held to introduce new worksheets

- Continue monitoring of approved standards
 - Keep your records and evidence up to date
 - Audit assessments start NOW – check your schedule
- Education and training
 - Watch for your scheduled audit workshop date
 - Assessment worksheets sessions – as standards are approved
 - Next self-certification workshop – May or June
- Specific issues
 - Discussions with specific parties on issues that apply to them
 - On broad issues, may involve working groups
- Guidelines and refinements
 - Watch for updates to guidelines

- AESO website>Compliance>Alberta Reliability Standards
 - All approved standards, compliance monitoring program, compliance guidelines, schedules, assessment worksheets, workshop presentations, FAQs, and more
- AESO Weekly Stakeholder Newsletter
 - Announcements are included in our stakeholder update newsletter issued every Tuesday and Thursday
- Don't know who to go to?
 - email: rscompliance@aeso.ca
 - Will help find the right person for you to talk to
 - Will refer non-compliance questions to the standard owner

- Compliance monitoring team for reliability standards
 - Nancy Cameron - Manager, Reliability Standards Monitoring
 - Processes, guidelines, training, issues
 - Peter Tam, Gerry Drysdale, Bruce Fauvelle - Senior Auditors
 - Monitoring activities/compliance files
 - Nancy Pryske - Compliance Coordinator
 - Registry, scheduling, compliance administration, website management
 - Peter Wong - Director, Compliance
 - Policy or direction, compliance working group, escalation of issues

Thank you