

ARC Meeting May 1, 2008

Reliable **Power**

Reliable **Markets**

Reliable **People**



Warren Frost
Vice President,
Operations and Reliability



Additions to the Standards Review Process - 1



- May 1 - ARC Meeting – Communicate additions to process
- Continue Reviewing Requirements and Compliance Measures (ARC Workgroups)
- Develop Compliance Measures for Alberta Participants using Guidelines Provided by AESO Compliance (ARC Workgroups)
- Identify Effective Rule Date and Implementation Plan including Field Test Plans as Required (ARC Workgroups)
- Develop Compliance Processes (ARC Compliance Workgroup)
- Write Reliability Standards as ISO Rules (AESO - a new rule format, similar to NERC standards is proposed)
- Identify AESO Rule Owner (AESO)
- Make Recommendations to ARC (ARC Workgroups)

Additions to the Standards Review Process - 2



- June ARC Meeting – Act on ARC Workgroup Recommendations
 - Provide advice to AESO on ‘n’ standards per workgroup recommendations (ARC)

- July AESO ERC Meeting - approve reliability standards (AESO)
 - Submit ‘n’ reliability standards to ISO Rules Process (AESO). These will include;
 - Level 1 rules
 - ‘n’ standards and measures that have been recommended by ARC workgroups to ARC / AESO
 - Level 2 rules
 - ‘n’ standards that apply only to AESO, (including measures)
 - ‘n’ standards that do not apply to an Alberta entity
 - Identify Consequential Rule Amendments (AESO)
 - These are OPPs, AESO standards, etc. that must be changed to align with the new AESO (reliability standard) rules

- Develop Compliance Plans as Required (Participants)

Additions to the Standards Review Process - 3



- September AESO ERC Meeting – Approve ISO Rules (reliability standards) and the submission of the ISO Rules to AUC

- Receipt of AUC approval (~Q4 2008?)
 - Implement Compliance Plans and Field Tests as required (Participants and AESO)
 - Begin Rule Implementation Plans including any field test period

- Rule Effective Date
 - Begin Compliance Monitoring (AESO)

Note – the process will be followed again with 'n' standards and new dates this fall as the ARC workgroups complete their recommendations.

AESO Reliability Committee (ARC)

ARC Compliance Workgroup Update
May 1, 2008

Reliable **Power**

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Committee Established



- Last meeting – introduced scope for workgroup, solicit members for the workgroup
- Confirmed Members CWG
 - Leo Britos Red Deer (Wire Owner)
 - Doug Smeal ATCO (TFO)
 - Sandy O'Connor TA (TFO)
 - <would like representation> (Gen)
 - Jamie Cameron for AUC (rules)
- Richard Stout to recommend generator representative

Proposed Meeting and Agenda



- Propose initial meeting for CWG – mid May (Draft Agenda Topics)
 - Purpose of meeting – establish the context for this workgroup, AB overview, WECC overview, and discuss administrative issues
 - Workgroup Terms of Reference review (handout and questions)
 - Alberta compliance and enforcement framework (overview and questions – as of today)
 - ISO Rule 12 (handout of draft), Compliance principles (review of)
 - WECC compliance program structure (overview level)
 - WECC Compliance Monitoring and Enforcement Program (document)
 - Issues and challenges in WECC program
 - Getting to an Alberta compliance program
 - Topic areas for discussion
 - Approach

Issues



- Have gotten lots of feedback from WECC meetings on where there are problems
- A number of entities have talked to us about their specific experiences
- Have a good handle on what the issues are, where things are going wrong, and what Alberta needs to avoid
- Topic areas organize and focus us on those areas

Some Topic Areas for the CWG

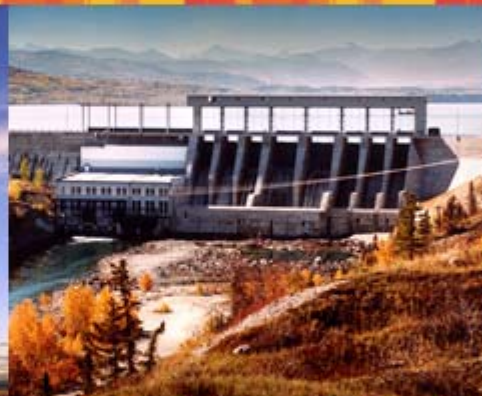


- Topic Areas (Draft - initial cut)
 - Guidelines for measures (review)
 - Components for Alberta (what tools)
 - Rollout of Compliance (transition)
 - Data submission mechanisms (templates, formats, etc)
 - Tools to help work process
- Submit other topics or concerns that you think this group needs to address to Peter Wong for consideration

Questions



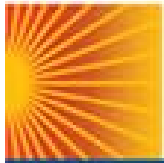
- Questions, please contact:
 - Peter Wong, Director Compliance
 - Peter.Wong@aeso.ca
 - (403) 539-2552



NERC Reliability Standards **TransAlta's Experiences in Other Jurisdictions**

Presentation to ARC Steering Committee May 1, 2008.

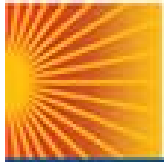
Presented by: Sandy O'Connor



Overview

- TransAlta's assets
 - Differences in different regions
- Preparing for “auditable and enforceable”
- Issues encountered
- 1 Year Later
- Lessons learned





TransAlta's Assets

- United States – auditable and enforceable @ up to **\$1 million/day**
 - WECC – GO/GOP
 - NPCC- GO/GOP
 - PSE in 6 regions
- Canada
 - Ontario
 - Enforceable and *could* be audited
 - Saskatchewan – enforceable but still not clear
 - Alberta – you know the story





Preparing for Auditable and Enforceable



Steps Required

1. Gap Analysis
2. Self Report any violations
3. Mitigation Plans
4. Mitigation Plans Complete

AUDITS



Stats from WEC

Source: WECC CUG August 2007



Compliance Updates

Violations and Mitigation Plan Statistics

- Pre June 18th:
 - # of violations: 3151
 - # of open violations: 3041
 - # of closed violations: 110
- WECC has received a Mitigation Plan for all Pre June 18th violations.
- Post June 18th:
 - # of violations: 387
 - # of open violations: 371
 - # of closed violations: 16
- Mitigation Plans:
 - # of mitigation plans received: 2150
 - # of revised mitigation plans: 143
 - # of accepted mitigation plans: 1811
 - # of rejected mitigation plans: 192
 - # of mitigation plans not yet been reviewed: 25





ISSUES ENCOUNTERED

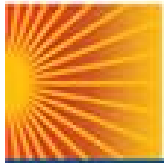




Gap Analysis



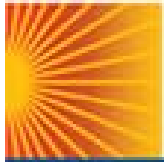
- HUGE Effort
 - 2 months for one large plant (1400 MW coal)
- Cross Functional teams required
 - Operations, Engineering, Legal, Regulatory, Security, IT, Commercial, Internal Audit
- Resourcing issues
 - Educate in advance
 - Accountability
- “It’s all about the documentation”
 - Does it exist?
 - Where is it?



How do I know I'm Compliant?



- Standards may appear clear, but aren't necessarily.
- How do you prove compliance?
- Will your documentation pass an audit?
- No one to answer your questions
 - Compliance department can't comment
 - Can make an interpretation request of NERC but can take months.

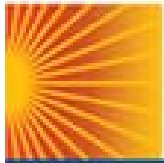


An Example



CIP-001 Sabotage Reporting

R4. Each Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, and Load Serving Entity shall establish communications contacts, as applicable, with local Federal Bureau of Investigation (FBI) or Royal Canadian Mounted Police (RCMP) officials and develop reporting procedures as appropriate to their circumstances.



Example



PRC-017 Special Protection System Maintenance and Testing

R2. The Transmission Owner, Generator Owner, and Distribution Provider that owns an SPS shall provide documentation of the program and its implementation to the appropriate Regional Reliability Organizations and NERC on request (within 30 calendar days).



ONE YEAR LATER





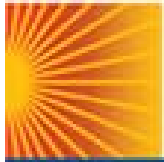
Running Blind

- WECC unable to keep up with the volume
 - Still no final decisions on any Self Reports or Mitigation Plans
 - Penalties?
 - Fines for missing documentation?
 - No Audit results released
- FERC has still not calculated any fines.



We are still living in a world of no precedent, no guidance and high stress.





And on Top of That



1. Backpressure in the US is huge.
 - Enormous pressure from NERC and FERC to find violations
2. Ambiguity of the standards is a major issue.
3. Audits are very onerous



And That

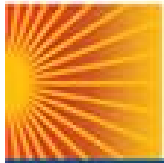
4. Changes to the mapping of standards to Responsible Entities without consultation or notice periods.
 - Generators being registered as Transmission Owner/Transmission Operators (see #5 below)
5. Becoming very litigious
 - Burden on participants to prove why something should not apply to them -> material impact test
 - Costly, time consuming, unfair burden of proof.
 - Appeals all the way to FERC
 - Appeal \$0 violations???





LEARNINGS

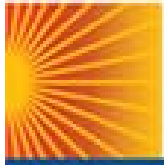




Learnings

- Notice period and implementation phase are critical
 - Implementation phase should have no, or reduced fines, and preferably last through one audit cycle.
- Must set up some area of the AESO where users can go for guidance.
 - WECC has set up Compliance User Group (CUG) Meetings which are very helpful.
 - However we also had to learn to help ourselves
 - Users in WECC have created the Western Interconnection Compliance Forum (WICF).





Learnings

- Need a quick process for clarifying standards
- Mapping right the first time is critical.
 - PPA Owners/Buyers, GO/GOP with TO/TOP
 - Stakeholder process to review any changes.

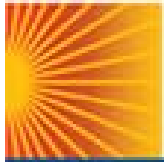




Learnings

- Resourcing:
 - Staff up and get your staff engaged **now**.
 - Senior management buy in is critical.
 - Do not underestimate what is required – we all did.

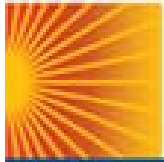




Learnings

- Massive effort to manage.
 - Compliance and reporting timelines
 - Sign offs
 - Updates and new standards
 - Audits
 - On a requirement basis for each asset:
 - Accountabilities
 - Compliance status
 - Data to verify compliance
 - Reporting
 - New business processes, IT solutions will be required.

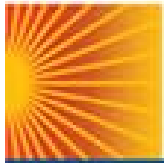




Learnings

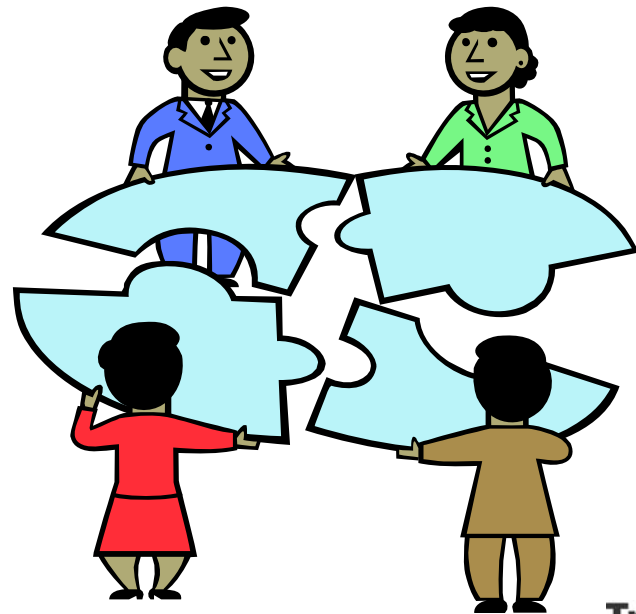


- This is in it's infancy – it will be two or three years before this becomes a smooth process.



In Summary

- ✓ It won't be easy.
- ✓ We all want to do the right thing.
- ✓ Alberta can learn from others that have gone before us.





QUESTIONS

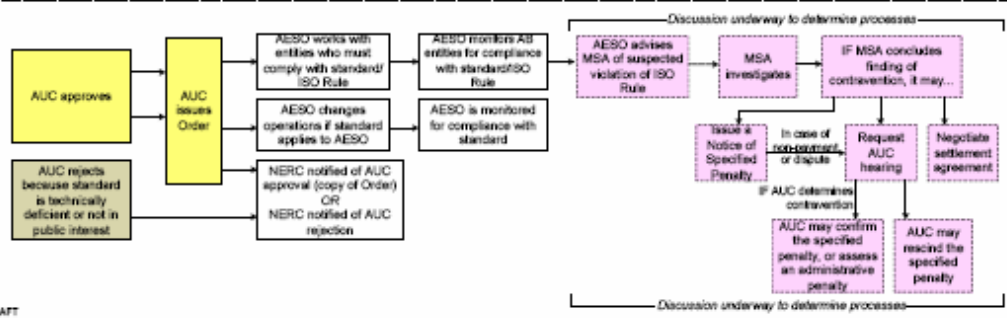
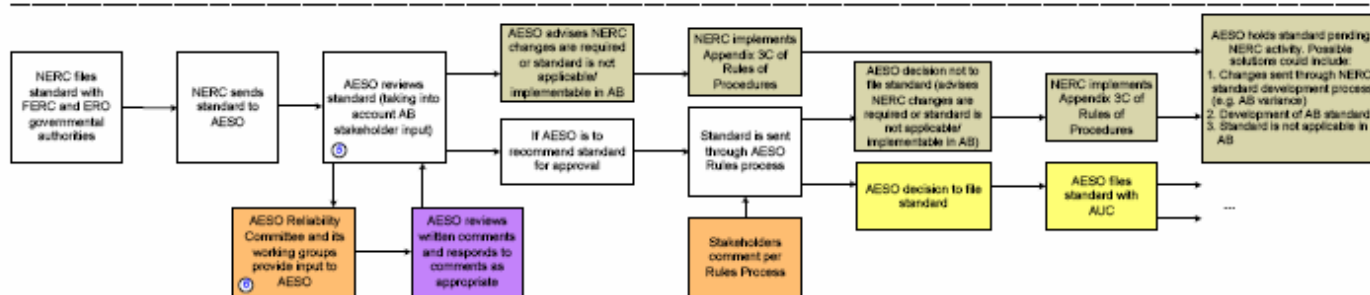


Flow Chart of Standards Development and Approval Process - WECC-developed standards



Alberta Participation in WECC Standards Development Process and Alberta Approval and Remand/Rejection Process for WECC-Developed Standards

DRAFT



- ① All entities may submit own comments to WECC and independently participate in the WECC standard development process and the subsequent NERC process.
 - ② AESO comments represent AESO's technical opinion as to the technical validity and applicability of the standards to the Alberta electric system.
 - ③ AESO identifies issues with standard and advises WECC if changes are required or if standard is not applicable/implementable in AB. AB variance may be requested.
 - ④ AESO could vote "no" if required changes/variances are not included in standard.
 - ⑤ AESO advises NERC if changes are required or if standard is not applicable/implementable in AB. If standard is not acceptable, AESO does not send standard through Rules process.
 - ⑥ May be limited need based on previous consultation and how much the standard has since been changed.
- Note: Referenced WECC Process for Developing and Approving WECC Reliability Standards. See WECC Delegation Agreement for details. May be subject to change.

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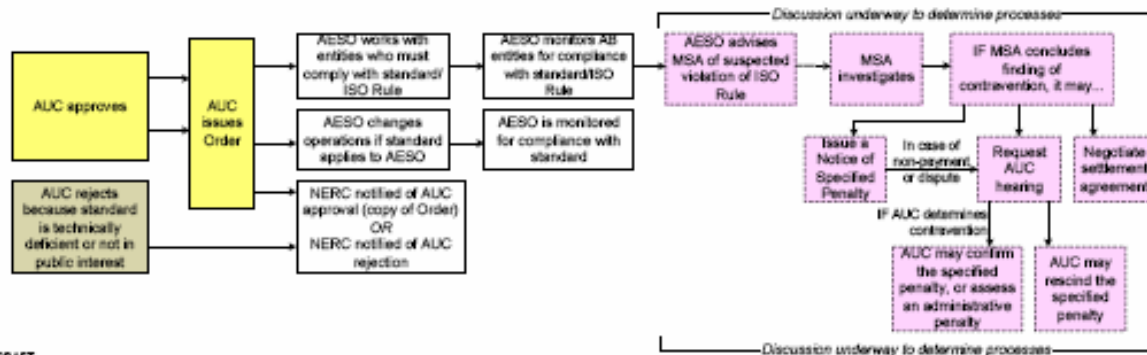
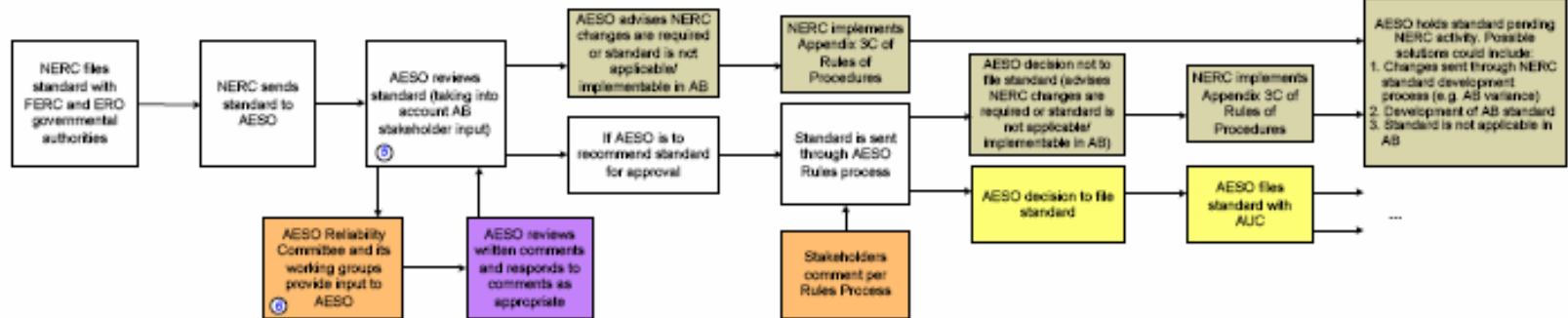
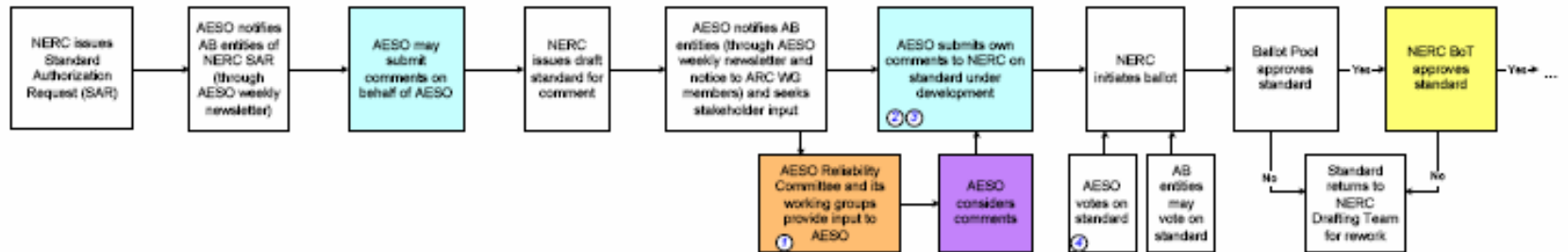
Process 2
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Flow Chart of Standards Development and Approval Process - NERC-developed standards



Alberta Participation In NERC Standards Development Process and Alberta Approval and Remand/Rejection Process for NERC-Developed Standards

DRAFT



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 - ⑥ May be limited need based on previous consultation and how much the standard has since been changed.
- Note: Referenced NERC Reliability Standards Development Process. See NERC Rules of Procedure, Section 300 for details. May be subject to change.