

# Alberta Reliability Standards Implementation

Stakeholder Session Sept 3, 2008

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# Agenda

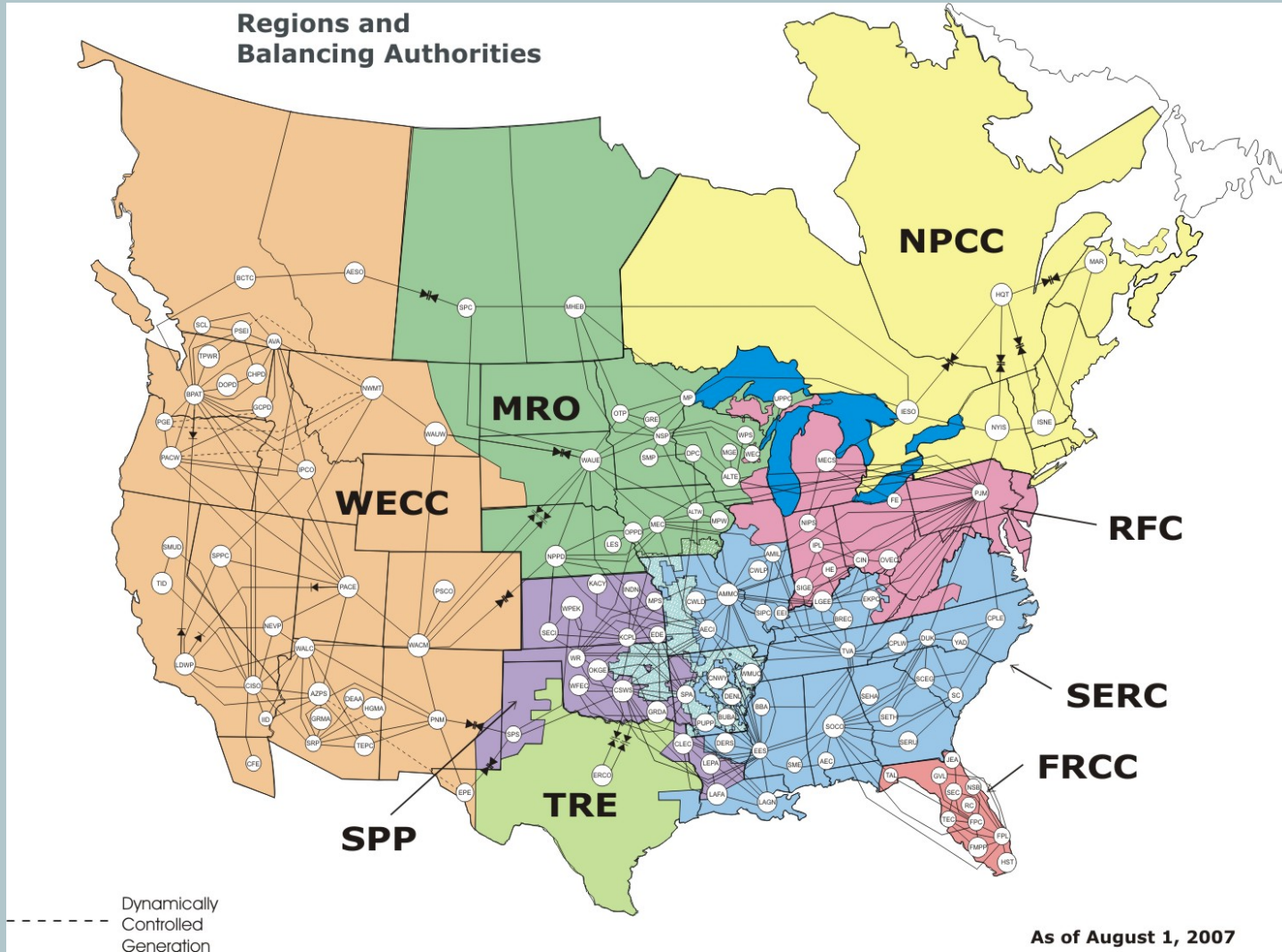
- Background to Reliability Standards
- AESO Reliability Standards Implementation Plan
- ISO Rules Process



# Our Core Business

- **Markets:** develop and operate Alberta's real-time wholesale energy market to facilitate fair, efficient and open competition
- **Transmission System Development:** plan and develop the transmission system to ensure continued reliability and facilitate the competitive market and investment in new supply
- **Transmission System Access:** provide system access for both generation and load customers
- **System Operations:** direct the reliable operation of Alberta's power grid





# Prior to Mandatory Reliability Standards



- NERC was formed in 1968, subsequent to blackouts in 1965 and 1967 (eastern interconnection). NERC is made up of industry representatives. The model is voluntary compliance using peer pressure to compel entities to comply with operating criteria.
- Alberta interconnected to BC and the western interconnection in 1973 and the 500kv intertie was in service by 1986. The Saskatchewan intertie came a few years later.
- The practice for Alberta entities including AESO has been to operate to NERC/WECC criteria as good utility practice.
- This has been verified by previous NERC/WECC control area audits and readiness evaluations of AESO, AltaLink and Atco Electric.
- De-regulation began in the early 90s bringing more entities and more commercial use of transmission systems.
- Blackouts in the WECC in 1996, RMS Agreements follow.

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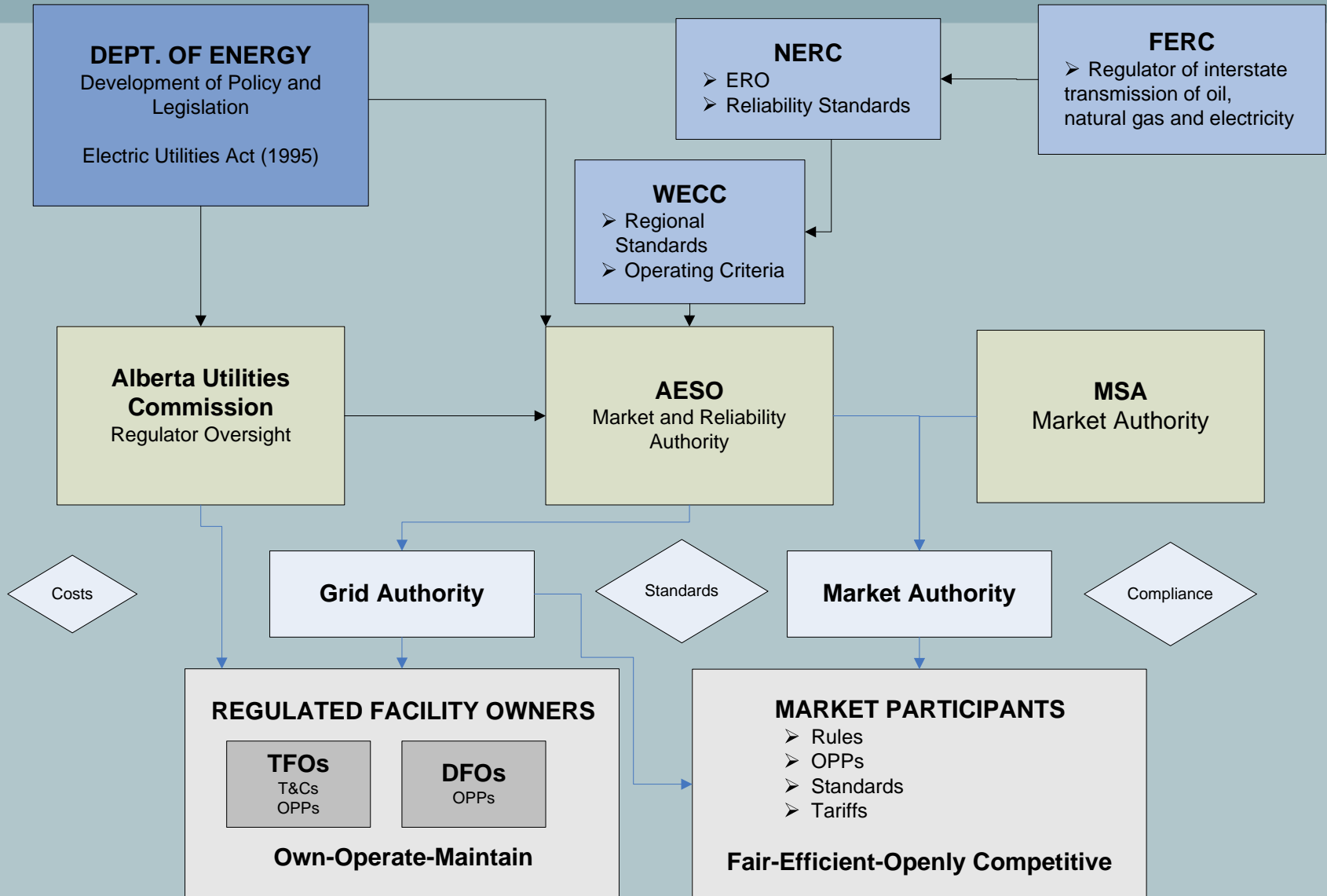
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# The Move to Mandatory Reliability Standards – North America

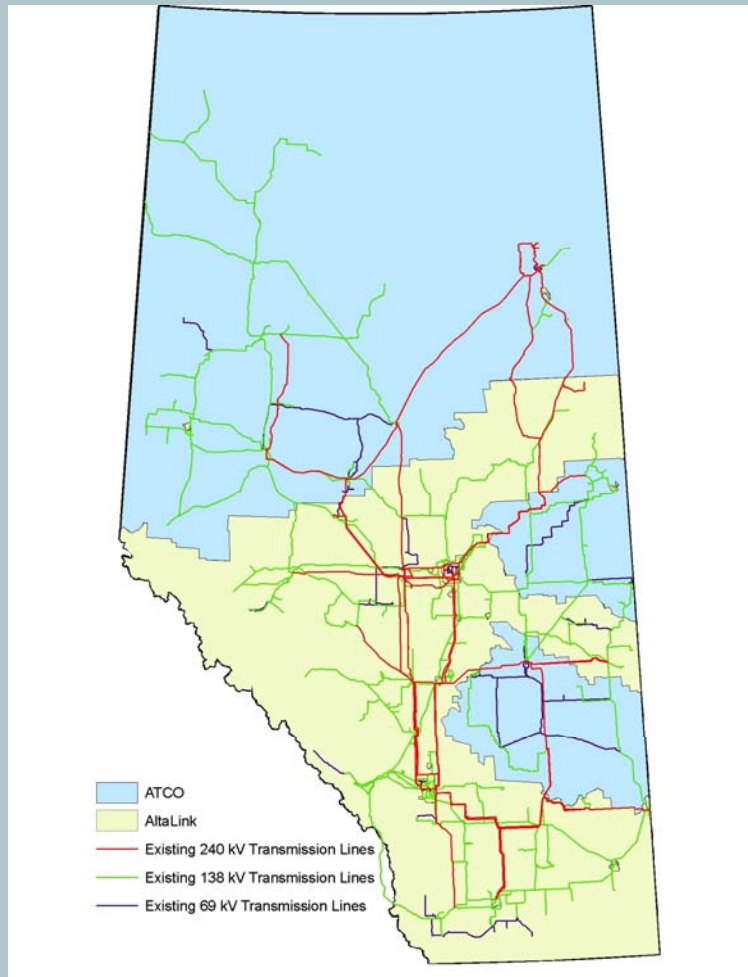


- Industry-wide support to implement consistent set of reliability standards in North America (Energy Policy Act 2005).
- FERC certifies NERC as ERO in US in July/06.
- FERC has approved over 100 reliability standards to date.
- Over 60 FERC approved standards are either currently under revision or are scheduled to be revised in the near future.
- WECC has implemented a compliance enforcement program in US in it's area (the Western interconnection).
- AESO and WECC membership and operating agreement (2008).

# Regulatory and Reliability Relationships



# Alberta Entities Subject to Reliability Standards



- 7 TFOs (regulated).
  - AltaLink – 38%
  - ATCO – 25%
  - EPCOR (City of Edmonton) – 18%
  - Enmax (City of Calgary) – 17%
  - City of Red Deer – 2%
  - City of Lethbridge – 2%
  - TransAlta
- 14 ISDs, Medicine Hat.
- ~ Over 280 generating units whose owners also own some transmission assets.
- AESO.
- ~ 200 market participants.

# The Move to Mandatory Reliability Standards - Alberta



- Alberta Department of Energy creates policy and legislation to support reliability of the Alberta interconnected electric system.
  - *Transmission Regulation (AR 86 / 2007)* provides direction for the AESO regarding reliability standards in Alberta including;
    - Consultation with affected entities,
    - Application, adoption, publication and modification,
    - Recognition of an ERO,
    - Alberta autonomy,
    - Compliance monitoring and reporting.
- AESO ensures reliability of AIES; plans transmission facilities to meet the needs of load and generation; monitors compliance with Alberta standards and rules.
- The MSA performs the prosecution function of Alberta entities as may be required.
- The Commission regulates the electric industry, approves ARS and verifies the effective date of ISO Rules.

# Implementation Plan

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# The Approach



We have considered:

- T Reg 86/2007 section 5: The ISO may make standards... respecting ... reliability standards
- T Reg 86/2007 section 7: The ISO may make rules respecting any standard ... or may adopt any standard ... as a rule.
- Implications of “reliability standards” vs. “ISO Rules”:

# The Approach

ISO Rule	Reliability Standard
<p><u>Filed</u> with the Commission</p>	<p><u>Forward</u> the Reliability Standard to the Commission with recommendation to <u>approve</u></p>
<p><u>Market participant</u> can object on:</p> <ol style="list-style-type: none"><li>1) ISO did not comply with the Commission's rules</li><li>2) Technically deficient</li><li>3) Does not support FEOC</li><li>4) Not in the public interest</li></ol>	<p>Interested person can file a deficiency claim – must satisfy the Commission that:</p> <ol style="list-style-type: none"><li>1) Technically deficient</li><li>2) Not in the public interest</li></ol>
<p>Defined process regarding filing and dealing with objections</p>	<p>It seems that there is no existing process</p>

# The Approach



The proposed approach is that:

- The AESO will adopt ARS as both Reliability Standards and ISO Rules, i.e. we will comply with:
- T-Reg 86/2007 section 19 on Reliability standards, e.g. to consult with those market participants that are directly affected and forward the proposed reliability standards with the ISO's recommendation that the Commission approve or reject them.
- Electric Utilities Act section 20 on ISO Rules, e.g. filing with the Commission, complying with AUC Rule 017.

Advantage:

- We will be using the well established ISO Rules process, and will not need to create a new process.

# The AESO Reliability Committee (ARC)



- To meet the requirements on stakeholder consultation, the AESO initiated the AESO Reliability Committee (ARC), with representatives from industry, in Dec 2007.
- Several ARC Work Groups have been formed and are tasked with the review of assigned NERC and WECC standards.
- The ARC WGs make recommendations to the ARC, which in turn provides advice to the AESO.
- For more information, visit [www.aeso.ca/Rules & Procedures/Mandatory Reliability Standards Project/Stakeholder Activities/AESO Reliability Committee](http://www.aeso.ca/Rules & Procedures/Mandatory Reliability Standards Project/Stakeholder Activities/AESO Reliability Committee)

# High Level Principles

The AESO will undertake reasonable efforts to recommend the adoption of US Reliability Standards as ARS considering:



# High Level Principles



- ✓ It is consistent with applicable law in Alberta.
- ✓ It is consistent with the safe, reliable and economic operation of AIES.
- ✓ It is consistent with the fair, efficient and openly competitive operation of the markets in Alberta for electricity and ancillary services.
- ✓ It is consistent with the structure of the industry in Alberta.
- ✓ It would not result in an authority being transferred outside of Alberta.
- ✓ It is in the public interest.
- ✓ It is not technically deficient in light of Alberta's industry.
- ✓ It is consistent with business practices in Alberta.

# AESO makes Recommendations to the Commission



Following the AESO's review and consultation with stakeholders, the AESO may make one of the following recommendations to the Commission on the adoption of a US Reliability Standard as an ARS:

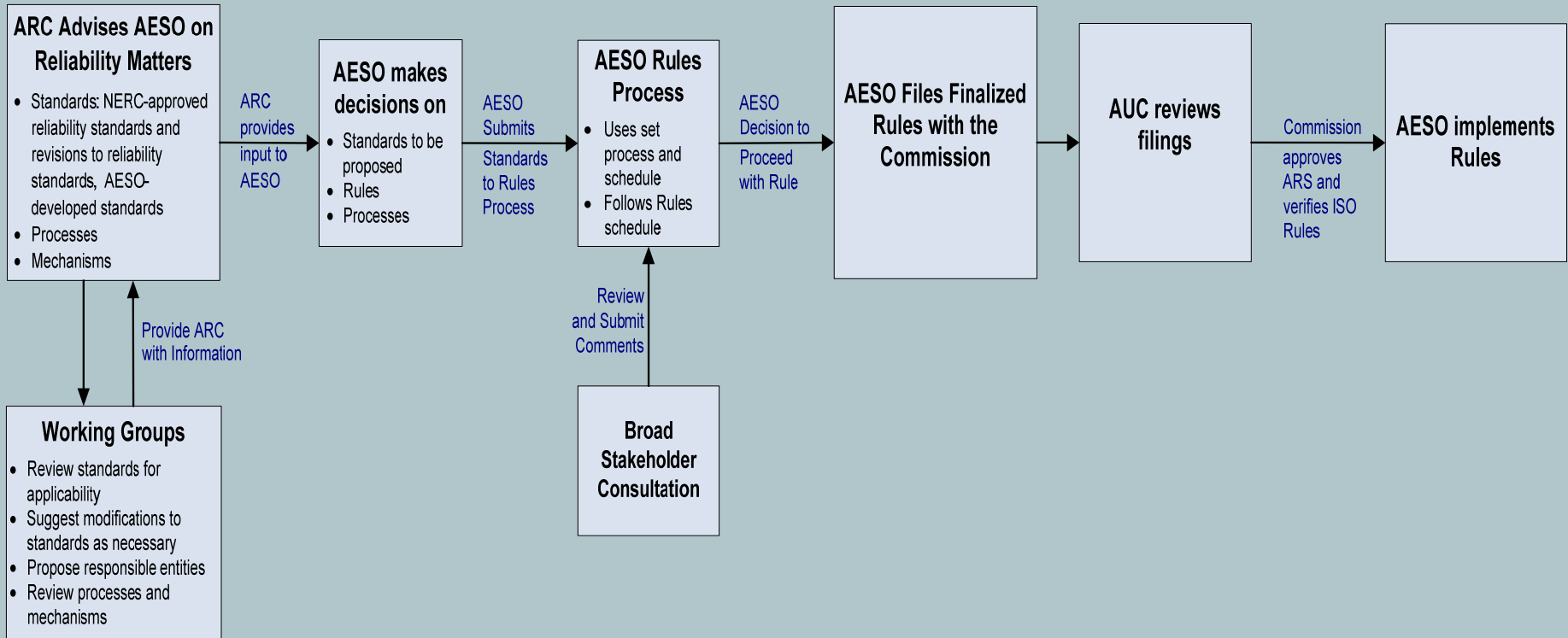


# Recommendation to the Commission



- Recommend approval as an ARS which is consistent with the US Reliability Standard, or
- Recommend approval as an ARS that contains an Alberta Variance (a change from the US Reliability Standard that the AESO has determined is material) to the US Reliability Standard, or
- Recommend to not approve the US Reliability Standard as an ARS

# Alberta Reliability Standards Development and Approval Process



# High Level description of Process



1. AESO staff review the US Reliability Standard with the ARC and the ARC Work Group.
2. ARC advise the AESO on the adoption of the US Reliability Standard as an ARS.
3. AESO posts its recommendation on the adoption of the US Reliability Standard as an ARS for broad stakeholder consultation:
  - If the recommendation is to not adopt the US Reliability Standard as an ARS, a recommendation letter will be posted for stakeholder comment, or
  - If the recommendation is to adopt the US Reliability Standard as an ARS, either with or without an Alberta Variance, the ARS will be proposed and included in a ISO Rules Process cycle.

# High Level description of Process



4. The ARS will be conducted through the formal ISO Rules Process, including public stakeholder review, responding to stakeholder comments, submitting for AESO ERC approval, and filing with the Commission.
5. Subject to the Commission's approval of the ARS, the Standard takes effect on the effective date as indicated, or as per the Commission requirement.

*Also, WECC and NERC will be notified as these ARS are approved (or not approved).*

# High Level description of Process



*With the significant number of US Reliability Standards that will be reviewed, it is anticipated that the complete process will spread over a number of ISO Rules Process cycles. A “bunch” of reliability standards will be proposed at each ISO Rules Process cycle.*

The list of the current set of NERC and WECC reliability standards (see handout) indicates the volume of work involved.

# ISO Rules Process

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# ISO Rules – Legislative Authority and Obligations



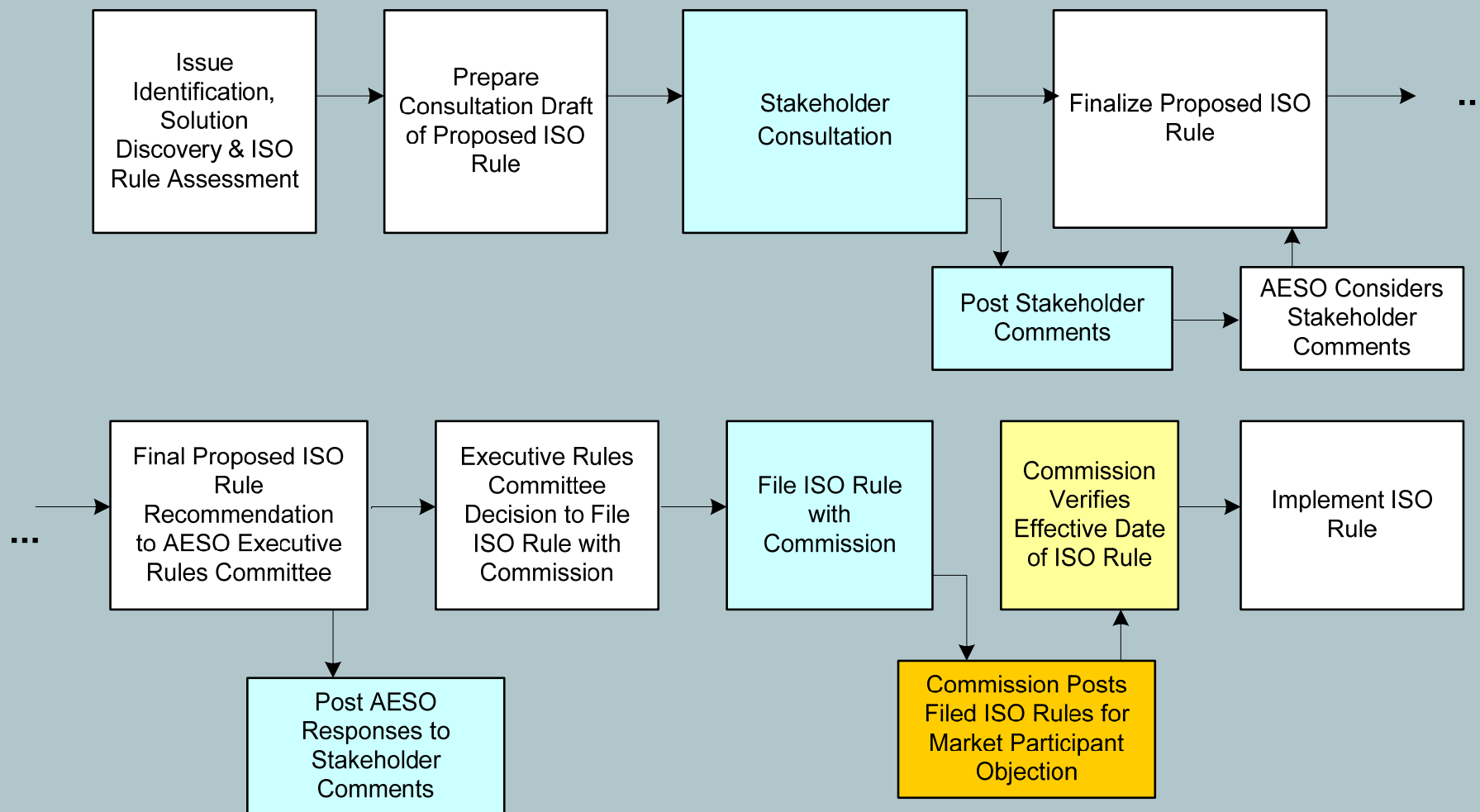
- AESO is authorized to make ISO Rules in accordance with Sections 19 and 20 of the *Electric Utilities Act* (“EUA”).
- AESO is authorized to make ISO Rules respecting any standard or adopt any standard as an ISO Rule in accordance with Section 7 of the Transmission Regulation.
- AESO is required to file amendments to ISO Rules with the Alberta Utilities Commission (“Commission”) pursuant to Section 20.2 (1) of the *EUA*.
- AESO must comply with Commission Rule 017 in developing and filing amendments to ISO Rules with the Commission.

# Commission Rule 017



- Establish procedures and process for development of ISO Rules and filing of ISO Rules with the Commission.
- Two ISO Rule types – regular and expedited.
- Development:
  - Notification to Market Participants,
  - Posting of Market Participant comments,
  - Posting AESO responses to Market Participant comments.
- Filing:
  - Filing a Notice of Filing with Commission in accordance with Commission Rules of Practice.

# ISO Rules Process



# ISO Rules Process Schedule – ARS Example



Consultation Draft of ARS Prepared	July/Aug 2008
AESO ERC Approves 3 ARS for Consultation	Aug 2008
Letter of Notice Published – Stakeholder Consultation Period	Aug 14 – Sept 12 2008
Post Stakeholder Comments	Sept 17 2008
Post Final Proposed ARS & AESO Response to Stakeholder Comments	Oct 9 2008
Recommend ARS to ERC for Approval to File	Oct 16 2008
File Approved ARS with Commission	Oct 23 2008
Earliest ARS Effective Date	Nov 2008

# 3 Proposed ARS for October Rules Cycle



- 3 RS were recommended by ARC workgroups to ARC in June 2008 and were sent out for broad stakeholder consultation. These 3 are,
  - FAC-003-AB-1 Transmission Vegetation Management Program
    - The purpose of this reliability standard is to improve the reliability of electric transmission systems by preventing outages from vegetation located on a ROW and minimizing outages from vegetation located adjacent to a ROW, maintaining clearances between transmission facilities and vegetation on and along a ROW, and reporting vegetation related outages of electric transmission systems to the ISO and the WECC.
  - TOP-005-AB-1 Operational Reliability Information
    - The purpose of this reliability standard is to ensure entities responsible for reliable power system operation have the operating data needed to monitor system conditions within their areas.
  - INT-003-AB-2 Interchange Transaction Implementation
    - The purpose of this reliability standard is to ensure Balancing Authorities confirm interchange schedules with Adjacent Balancing Authorities prior to implementing the schedules in their area control error equations.

# Questions

