



# **Transmission Interconnection Business Process Redesign**

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# Improving the AESO's interconnection process in 2004

## Short-term steps:

- Developed milestones for all projects and tracked our success in meeting delivery dates.
- All customers with current projects were surveyed for satisfaction at set points.

## Long-term steps:

- Launched a review of the current process with the intent to redesign an improved process.
- Clarified roles for all participants in the process
- Establishing guidelines



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# Enhancing stakeholder relationships in 2004

Improvements on interconnection delivery times and customer satisfaction:

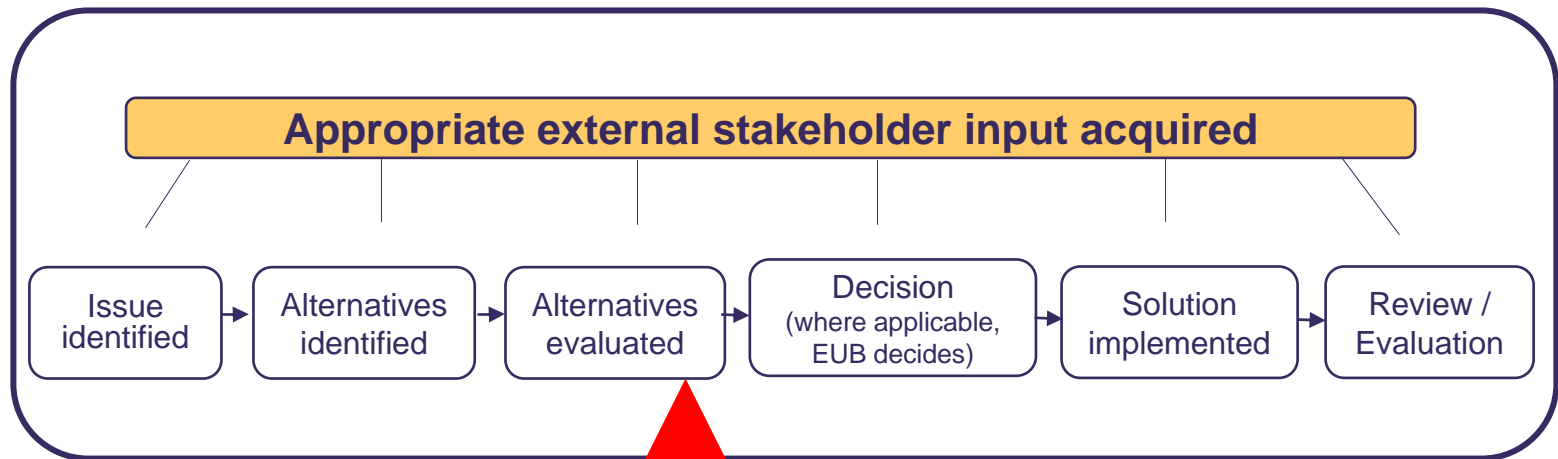
Corporate Goal	Target	Outstanding	2003	2004
Meet major negotiated project deliverables on time for customers.	<b>80%</b>	<b>100%</b>	<b>50%</b>	<b>↑ 89%</b>
Customer satisfaction score	<b>65%</b>	<b>80%</b>	<b>37%</b>	<b>↑ 66%</b>



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# The AESO consultation process



# What I will discuss today

- Overview of new processes
- Process Improvements
- “What’s in it” for stakeholders
- Progress to date
- Work to do before implementation
- Q&A



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# Re-cap: What is the interconnection process?

- To access Alberta's transmission system, customers apply to the AESO for interconnection.
- A customer's project proceeds through a series of steps to put in place the required transmission facilities.
- Those steps are referred to as the interconnection process.
- The customer, AESO, AEUB, Transmission & Distribution Facility Owners typically play a role in the process



THE POWER OF POSSIBILITY



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# Why was process redesign undertaken?

- #1 - stakeholder dissatisfaction with current process
- One “size fits all” process is slow and inefficient
- Process excessively complex, particularly for simple interconnections



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# How will the new processes benefit stakeholders?

- Reduced cycle-time
- Improved industry collaboration to identify, approve and construct the most reasonable cost, reliable transmission facilities



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# Overview of 2004

- January to June 2004 - AESO led a cross-industry team to develop recommendations for process redesign
- June 2004 - recommendations accepted by the AESO
- September 2004 initiated:
  - detailed design of new process workflows
  - development of interconnection guidelines
  - evaluation of IT solutions to enhance workflow



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# March 31<sup>st</sup> Targeted Outcomes

- New processes ready for implementation
- Delivery organizations are ready to provide interconnections through the new processes
- Interconnection participant awareness and understanding
- Industry acceptance of the new guidelines and business processes



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# What are the new processes?

1. Load growth within an existing substation
2. New substation & transmission lines
3. Direct Connect (Industrial) Loads & Generators
4. “Mega Project” Interconnection



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# Current vs. New Processes

## Current Process

- ✓ Construction Agreement (or waiver) put in place with AESO before project proceeds
- ✓ SAS agreement with AESO
- ✓ AESO develops proposed interconnection arrangement for all projects
- ✓ 2 separate EUB applications are required

## New Process

- ✓ Customers (directly or via their distribution company) contract for construction directly with Transmission Facility Owners (TFOs)
- ✓ SAS agreement with AESO – no change
- ✓ For simple interconnections TFO and DFO develop proposal; AESO endorses
- ✓ Need and proposed transmission facility are combined in a single application to the AEUB



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# Work In Progress

- Redesign essentially complete for the first two processes (e.g. existing substation and new transmission facility)
- Process design for Direct Connect Customers is well advanced and expect to complete by early February
- Development of cross industry process orientation sessions and a reference guide are well advanced
- Have completed an evaluation of information technology tools in support of business process
- “Canmore” pilot project is underway and results to date are encouraging



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# What remains to be done?

- Completion of process design and acceptance of new processes
- Several guidelines must be put in place to facilitate decision making
- Ongoing communications and change management
- Transition planning
- Finalization of a reference guide
- Orientation sessions – developing a common understanding of new processes within industry



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# Training Program

- Intent is to educate stakeholders & customers:
  - How the new processes work
  - Understand key roles and accountabilities within each process
  - Create an awareness of guidelines & timelines that support the processes
  - Participants will leave with a 'reference guide'
- Five orientation sessions planned throughout March:
  - Training team will be composed of AESO, TFO, & DFO subject matter experts
  - Four sessions in Calgary, one session in Edmonton



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# Guidelines Development Status

Mission:

Develop a set of guidelines/standards that are accepted by the Stakeholder community and that will enable efficiency gains within the customer interconnection process.



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# Organizations represented on the guidelines team

- AESO (Fred Ritter (AESO Management Sponsor) Bob Howland (Team Leader))
- EPCOR (Transmission and Distribution)
- ATCO (Transmission and Distribution)
- ENMAX (Transmission and Distribution)
- AltaLink Management Ltd (Transmission)
- FortisAlberta (Distribution)
- EUB



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# Objectives

- Enhance decision making ability with respect to new interconnections or enhancements to existing facilities
- To provide for optimized solutions to new facilities supplying customers
- Ensure effective coordination between transmission and distribution in order to derive lowest possible cost solutions to interconnections while meeting reliability, performance and safety requirements



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# Outcomes

- Standards/guidelines developed support the implementation of new interconnection process.
- Prioritization of effort to derive early benefit.
- The standards/guidelines are endorsed by industry and stakeholders.
- AESO is committed to continue working on standards/guidelines beyond March 31, 2005.



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# Team Deliverables

Eight guidelines/standards are assigned to the team:

- 1) Standards of Service\*
- 2) Drivers of Need\*
- 3) Guideline for Deciding Transmission versus Distribution Supply
- 4) Existing Substation Upgrade Guideline\*
- 5) Guideline – Distribution point of delivery Circuit Breaker Additions\*
- 6) Guideline for Establishing New Point of Delivery Substations\*
- 7) Guideline for Economic Evaluation\*
- 8) Guideline for Typical Supply Arrangements\*
- 9) Transmission Line Design Guideline

\* Priority for completion by March 31, 2005



# Teams Progress to Date

- Six priority guidelines/standards are in final stages of development within the team (AESO management reviews are in progress). One additional in first draft stage.
- Targeting seven for March 31 completion (includes public consultation via AESO website, AESO management signoff, and website posting)
- Two additional guidelines/standards to be completed in 2005 along with upgrades to AESO technical requirements for interconnection.
- Guidelines/standards page on AESO interconnection process website is created – an introduction and background has been provided to industry.
- Team members have (and will be) contributing much effort to creation of these guidelines/standards.



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# Upcoming Milestones

- Planning AESO website posting of five to six guidelines for broader stakeholder comment/input week of January 24<sup>th</sup>. Expect to post one or two additional guidelines for comment in February.
- AESO management signoff of top priority guidelines/standards for website posting by March 31.
- Defining and implementing a guideline/standard maintenance process in March (for completing remaining guidelines and making updates arising from utilization experience).



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# Upcoming Communications

- **Week of January 24\_** – Look for a communication from AESO notifying stakeholders about five to six guidelines/standards that are posted for comment.
- **End of February** – Planning to post the Guideline Team’s responses to stakeholder input on the AESO website.



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# Questions & Contacts

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