# 2007 Transmission Regulation: Changes and its Impact on Loss Factors

May 30, 2007

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# 2007 TREG – Part 6, Loss Factors, Operations Forecasting



- Purpose and Scope of Discussion
- Background
- Proposed Timeline
- Transmission Regulation Summary of Changes
- The AESO Plan for Changes to Rule
- Next Steps
- Questions

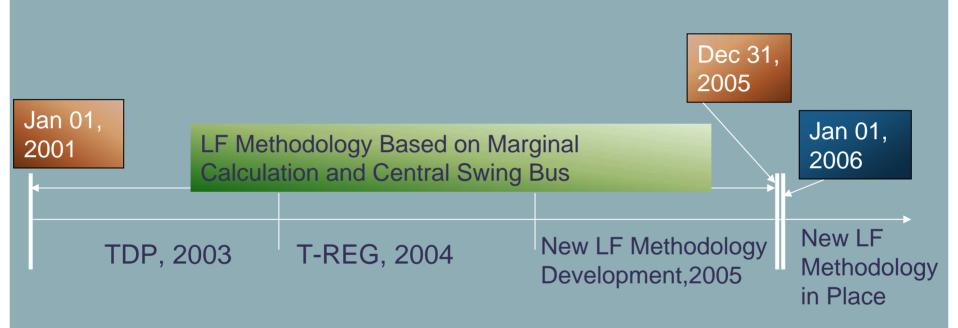
## **Purpose and Scope - Stakeholders**



- The purpose of our discussion today is to identify the main considerations in the 2007 Regulation
  - Changes in the Rule will result
- Policy and position will start to be determined shortly
- Scope:
  - 2007 TREG changes and discussion
  - Other previously discussed options for Rule changes
  - AESO Rule process (Lite) discussion and effects on timeline
  - Discussions on web based calculator (cost and timeframe issue)
  - Other?

## **Background**





# Timeline (High Level) of TREG Change Implementation - Tentative



### April 2007 – CRITICAL PATH:

TREG ready, discussions start

#### May 2007:

- Meeting with Stakeholders start the conversation on changes
- Align TREG Loss Factor changes within AESO TREG initiative

### July 2007:

- Open Rule for LF changes and provide options for Stakeholders
- Other Rule changes examined

### September 2007:

- Close Rule Change Consultation
- Start loss factor software changes

#### October 2007:

ERC Approval

### January 2008:

Test software and integrate

#### March 2008:

Confirm changes, prepare draft results. Then complete project or review as necessary

#### October 2008:

Use new calculation on 2009 loss factors.

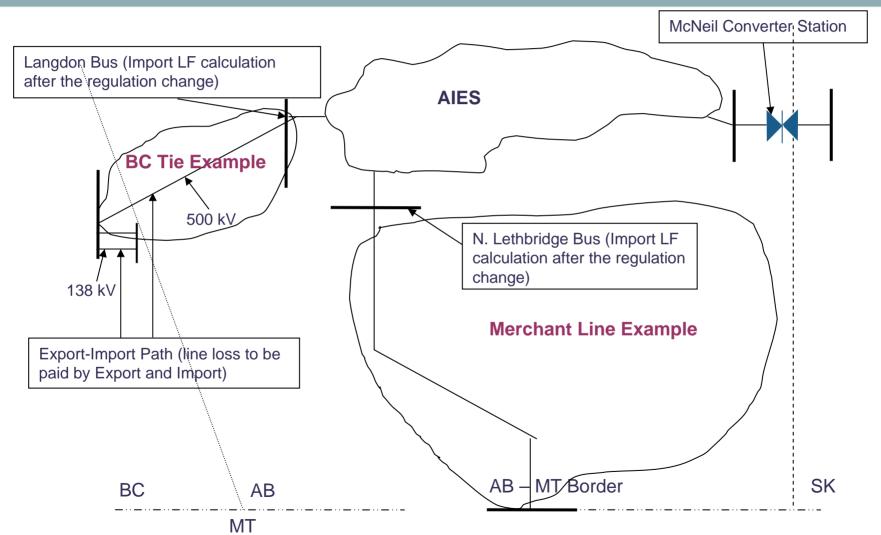
# **Summary of 2007 Transmission Regulation Changes, Loss Factors**



- Current average loss factor methodology will be applied for
  - Generator (existing calculation)
  - Import
  - DOS
- Export will not be charged/credited through loss factor
- Import and Export will pay the average line losses incurred in the defined Import/Export path (path is any line or group of lines)
- The IOS will incur a loss factor and a loss calculation and the EOS will incur a loss calculation
- The IOS/EOS loss calculation in the path yet to be defined
- Changes are effective from January 01, 2009

# **Summary of 2007 Transmission Regulation Changes, Loss Factors...2**





# The Plan - Consultation: 2007 Transmission Regulation AESO Suggested Actions



### Stakeholders' consultation

- We are on the critical path already
- Presentation for Stakeholders and discussion
- Rule changes with 2007 TREG Level 1 change
- Rule changes independent of TREG (multi-year GSO, delta load/generation, etc.)
- Discussion paper can be the existing Rule, with changes tracked
- Teshmont has been retained for technical consultation

# The Plan - Consultation: 2007 Transmission Regulation AESO Suggested Actions...2



- Define Import/Export path for all inter-ties and Merchant lines
- Formulate a method for the recovery of losses incurred in the Import/Export path
- DOE consultation if necessary

# The Plan: 2007 Transmission Regulation AESO Suggested Actions - Detail



| Item*                          | Change   | <b>Proposed Treatment</b>  |  |  |  |  |
|--------------------------------|--|--|--|--|--|--|
| Generator LF 31(1)             | No Change  | Continue the existing process  |  |  |  |  |
| Import LF 36 (b) and (c)       | LF – pays for average impact rather total impact Loss – pays for average tie line loss | LF – treated as a generator<br>Loss – average loss                                       |  |  |  |  |
| Export LF 36 (c)               | LF – does not apply<br>Loss – pays for average tie line loss                           | LF – no calculation required<br>Loss – average loss                                      |  |  |  |  |
| DOS LF <b>36</b> ( <b>d</b> )  | LF – pays for average impact rather total impact                                       | LF – treated as negative generator   |  |  |  |  |
| Tie Line Loss                  | Recovered by Export/Import   | Average loss   |  |  |  |  |
| Tie Flows in Base Cases        | Tie flows exist in Base Cases  | Ensure in the determination of the inter-tie paths the models are represented accurately |  |  |  |  |
| Charges and Credits 31 (2) (g) | Limits have changed to +/- 12%   | Implement as stated  |  |  |  |  |
| Abnormal Operation 31 (3)      | Explicitly stated  | Implemented previously   |  |  |  |  |

<sup>\*</sup> all references are to the 2007 TREG

# **Rule Maintenance Considerations – Non- Transmission Regulation Related**



| Item*   | Consideration   | Possible Treatment  |
|---|---|---|
| Load or Generation<br>Scaling in Base Case                  | Merits of modifying load or generation to meet base case solution   | May be less of an issue as the tie lines will be able to move with load variations.   |
| Clearer Criteria for<br>Tie-line or Generation<br>additions | For base cases in the next/fifth year additions, do clearer rules for asset additions need be considered? | Suggestions?  |
| Historical Data for GSO                                     | Consideration has been requested previously for multi-year hourly data aggregation                        | The H values as defined will be difficult to address in a multi-year treatment. Further historical data is being used already |
| Threshold for Changes in LF 31 (2) (b)                      | The threshold for changes to the loss factors is not appropriate  | Increase, decrease, remove  |

### **Tie Flows – Historical Data\***



### 2007 Tie Flows (Data June 01, 05 - May 31, 06)

| MPID   | Winter |        |      | Spring |        |      | Summer |        |       | Fall  |        |       |
|--------|--------|--------|------|--------|--------|------|--------|--------|-------|-------|--------|-------|
|        | High   | Medium | Low  | High   | Medium | Low  | High   | Medium | Low   | High  | Medium | Low   |
| BOHEXP | 0.0    | 0.7    | 77.9 | 1.2    | 8.9    | 37.4 | 0.3    | 95.8   | 300.0 | 0.0   | 3.7    | 141.0 |
| BCHMP  | 395.3  | 111.5  | 8.0  | 167.1  | 153.2  | 59.6 | 330.4  | 119.3  | 26    | 381.4 | 226.3  | 36.4  |
| SPCEXP | 1.4    | 1.4    | 4.4  | 1.3    | 4.6    | 4.0  | 23.0   | 4.8    | 0.0   | 0.8   | 0.3    | 0.2   |
| SPAMP  | 66.2   | 57.2   | 41.5 | 58.8   | 43.4   | 51.8 | 27.2   | 63.9   | 60.6  | 76.8  | 721    | 95.1  |

### 2008 Tie Flows (Data June 01, 06 - February 28, 07)

| MPID   | Winter |        |       | Spring |        |     | Summer |        |       | Fall  |        |       |
|--------|--------|--------|-------|--------|--------|-----|--------|--------|-------|-------|--------|-------|
|        | High   | Medium | Low   | High   | Medium | Low | High   | Medium | Low   | High  | Medium | Low   |
| BOHEXP | 3.4    | 60.4   | 342.5 |        |        |     | 0.0    | 48.0   | 48.1  | 6.0   | 14.9   | 158.4 |
| BOHMP  | 223.9  | 88.8   | 12.6  |        |        |     | 428.0  | 172.5  | 148.8 | 320.5 | 175.7  | 48.5  |
| SPCEXP | 9.4    | 8.1    | 121   |        |        |     | 24     | 28     | 0.0   | 5.0   | 2.2    | 3.0   |
| SPAMP  | 30.9   | 36.8   | 35.0  |        |        |     | 84.1   | 57.3   | 88.9  | 28.5  | 42.9   | 24.7  |

<sup>\*</sup> Calculated as per the GSO process

## **Next Steps – Dates Tentative**



- Receive Comments from Stakeholders by June 08, 2007
- 2007 LF re-runs results will be provided regularly based on TREG
- Stakeholders Meeting on Discussion Paper, June 18, 2007. Detailed plan
- Discussion Paper to Stakeholders for Comments by July 4, 2007
- Receive Comments from Stakeholders on Discussion Paper by July 13, 2007
- Submission Draft to IRC3/ERC and stakeholders by July 24, 2007
- Stakeholders Consultation, September 11 September 28, 2007
- Receive Comments from Stakeholders on Draft by October 03, 2007
- Submission Final Draft to IRC/ERC by October 10, 2007
- Rule completion in November 2007 software and normal process in 2008

### **Questions**



- Any areas requiring action not yet identified?
- Frequency and medium of updates (virtual, meetings?)