

Alberta Electric System Operator AESO 2006 Tariff Effective January 1, 2006

Background Information

Rider E Losses Calibration Factor Rider

The attached documents provide additional background on the Losses Calibration Factor Rider E as implemented on January 1, 2006:

Rider E Rate schedule as approved in Alberta Energy and Utilities Board Order

U2005-464 (December 20, 2005)

Application Section 4.11 of the AESO's 2006 General Tariff Application filed on

January 31, 2005 describing the Calibration Factor (pages 49-51 of Section 4

of the application)

Decision Section 5.11.3 of Alberta Energy and Utilities Board Decision 2005-096

(August 28, 2005) approving Rider E as filed (pages 41-42 of the decision)



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Rider E Losses Calibration Factor Rider

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Purpose: To adjust loss factors to ensure that the actual cost of losses is

reasonably recovered through charges and credits on an annual basis.

Applicable to: Customers receiving service under the following Rate Schedules:

DOS

EOS

STS

IOS

Effective: The rider is effective for all billing periods, effective January 1, 2006.

Rate: An additional calibration factor percentage (%) will be added to or

subtracted from all location-specific loss factors on the DOS, EOS, STS.

and IOS Rate Schedules.

Every quarter a calibration factor is determined to recover or refund all accumulated and forecast differences between the anticipated costs of transmission system losses and the actual costs of transmission system losses, on a calendar year basis. Any balance remaining at the end of a year would carry forward to be recovered or refunded in the following

year.

Terms: The Terms and Conditions form part of this Rate Schedule.



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4.11 Calibration Factor for Transmission System Losses

The Transmission Regulation requires the AESO tariff to recover the difference between the forecast and actual costs of transmission system losses through a calibration factor. The calibration factor is described in sections 19(1) and 21 of the Regulation:

Transmission system loss factors

- 19(1) The AESO must make rules to....
 - (c) establish a means of determining, for each location on the transmission system, loss factors and associated charges and credits, which are anticipated to result in the reasonable recovery of transmission line losses;
 - (d) provide a means by which, annually, a determination will be made of the difference between the anticipated transmission line losses and the actual transmission line losses:
 - (e) subject to section 21, provides a means through the application of a calibration factor to adjust the amounts paid by the application of the loss factor described in clause (c) so that the owners of generating units pay the actual transmission line losses or receive a credit for overpayment.

Adjustment of loss factors

- 21(1) In accordance with the rules, loss factors may be adjusted by a calibration factor to ensure that the actual cost of losses is reasonably recovered through charges and credits under the ISO tariff on an annual basis.
- (2) If the actual cost of losses is over or under recovered in one year, the over or under recovery must be collected or refunded in the next year or subsequent years.

The anticipated cost of transmission system losses is recovered through loss factors established in accordance with ISO Rules. The AESO began development of a loss factor methodology to satisfy the requirements of the Regulation in October 2004, including consultation with customers throughout the process. Development and consultation is continuing in 2005, with the expectation that the rule-making process will begin in February 2005, will include further consultation on the rules themselves, and will result in loss factor rules being published in May 2005.

Although the loss factors will be determined through ISO Rules and not through EUB regulation, the calibration factor to adjust for the recovery of the actual cost of losses is to be addressed in the ISO tariff in accordance with section 21(1) of the Transmission Regulation. In concept, the calibration factor is generally similar to the current recovery of the losses component of the AESO's deferral account through Rider C. As stated on the Rider C rate



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schedule, Rider C's purpose is "to recover or refund all accumulated deferral account balances" and "to restore the deferral account balances to zero...." Since January 1, 2004, Rider C has been calculated by cost category, specifically including the cost of transmission system losses for Supply Transmission Service.

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Effective January 1, 2006, deferral account balances associated with transmission system losses will no longer be recovered or refunded through Rider C, but will be addressed instead through Rider E. Rider E would implement the calibration factor required by the Transmission Regulation, and would include the following characteristics.

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(a) Rider E would address only the calibration factor related to transmission system losses and would apply to Rate STS as well as all opportunity rates (DOS 7 Minutes, DOS Term, EOS, and IOS).

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(b) Rider E's purpose would be "to adjust loss factors to ensure that the actual cost of losses is reasonably recovered through charges and credits on an annual basis" in accordance with section 21(1) of the Transmission Regulation.

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(c) Rider E would be determined prior to the beginning of each calendar quarter, and would be set at a level that, if applied for the remainder of the calendar year, would result in the full recovery of the actual cost of transmission line losses by the end of the calendar year.

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(d) Rider E would be applied as a calibration factor percentage based on the preceding which would be added to or subtracted from all location-specific loss factors for generators and all opportunity services.

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(e) Rider E would apply on a prospective basis only in accordance with section 21(2) of the Transmission Regulation. However, an annual reconciliation would be filed with the EUB for information purposes only.

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(f) As Rider E will be set in advance based on a forecast year-end balance, there will likely remain some small difference between the anticipated and actual cost of transmission line losses at the end of the year. Any year-end balance will be included in the next year's Rider E in accordance with section 21(2) of the Transmission Regulation.

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Rider E should primarily address variances from forecast of losses volumes. Variances from forecast of pool price should not require Rider E recovery or refund as both the cost of transmission system losses and the recovery (through a percentage of pool price) varies directly with pool price. Establishing Rider E with a purpose of achieving a zero balance at year-end should avoid any seasonal variations that could arise if the rider's purpose was to achieve a zero balance at the end of the following quarter.



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The AESO's expected process for determining calibration factors is summarized in Table 4.12.1:

Table 4.12.1 Process for Determining Rider E calibration factor

Rider Calculated	Forecast Year-End Balance Includes	Calibration Factor Based on	Rider Effective
February	 Any actual balance from prior year Actual losses costs and revenue for Jan Forecast losses costs and revenue for Feb-Dec 	 Forecast year-end balance Forecast volumes for Apr- Dec Forecast pool price for Apr- Dec 	Apr 1
May	 Actual losses costs and revenue for Jan-Apr Forecast losses costs and revenue for May-Dec 	 Forecast year-end balance Forecast volumes for Jul- Dec Forecast pool price for Jul- Dec 	Jul 1
August	 Actual losses costs and revenue for Jan-Jul Forecast losses costs and revenue for Aug-Dec 	 Forecast year-end balance Forecast volumes for Oct- Dec Forecast pool price for Oct- Dec 	Oct 1
November	 Actual losses costs and revenue for Jan-Oct Forecast losses costs and revenue for Nov-Dec 	 Forecast year-end balance Forecast volumes for next year Forecast pool price for next year 	Jan 1 of following year

5.11.3 Rider E

In the Application⁶⁸, the AESO explained that effective January 1, 2006, deferral account balances associated with transmission system losses will no longer be recovered or refunded through Rider C, but will be addressed instead through Rider E. Rider E would implement the calibration factor required by the *Transmission Regulation*, and would include the following characteristics:

Section 4, page 50 and Section 7, page 32

- Rider E would address only the calibration factor related to transmission system losses and would apply to Rate STS as well as all opportunity rates (DOS 7 Minutes, DOS Term, EOS, and IOS).
- Rider E's purpose would be "...to adjust loss factors to ensure that the actual cost of losses is reasonably recovered through charges and credits on an annual basis" in accordance with Subsection 21(1) of the *Transmission Regulation*.
- Rider E would be determined prior to the beginning of each calendar quarter, and would
 be set at a level that, if applied for the remainder of the calendar year, would result in the
 full recovery of the actual cost of transmission line losses by the end of the calendar year.
- Rider E would be applied as a calibration factor percentage based on the preceding which
 would be added to or subtracted from all location-specific loss factors for generators and
 all opportunity services.
- Rider E would apply on a prospective basis only in accordance with Subsection 21(2) of the *Transmission Regulation*. However, an annual reconciliation would be filed with the EUB for information purposes only.
- As Rider E will be set in advance based on a forecast year-end balance, there will likely remain some small difference between the anticipated and actual cost of transmission line losses at the end of the year. Any year-end balance will be included in the next year's Rider E in accordance with Subsection 21(2) of the *Transmission Regulation*.

Rider E should primarily address variances from forecast of losses volumes. Variances from forecast of pool price should not require Rider E recovery or refund as both the cost of transmission system losses and the recovery (through a percentage of pool price) varies directly with pool price. Establishing Rider E with a purpose of achieving a zero balance at year-end should avoid any seasonal variations that could arise if the rider's purpose was to achieve a zero balance at the end of the following quarter.

In reply, the AESO noted that no party had commented upon this Rider proposal and suggested it should be approved as filed. The Board agrees and it is approved as filed.