

MSA Files: 2017-406 and 2018-316

August 31, 2018

Diana Wilson – Director Interjurisdictional Affairs and Compliance
Alberta Electric System Operator
2500, 300 – 5th Avenue SW
Calgary, AB T2P 0L4

Dear Diana:

Re: AESO Compliance per Section 501.10 of the ISO Rules (“the Rule”)

On November 24, 2017, the MSA published a letter to temporarily forbear in respect of AESO non-compliance with subsection 3(1) of the Rule, conditional upon the AESO posting 2018 loss factors by no later than December 31, 2017.

On December 19, 2017, the AESO indicated to the MSA that publication of 2018 loss factors would be delayed until the end of March 2018, and apply retroactively to January 1, 2018. The 2018 loss factors were published on March 22, 2018. However, data inconsistencies were identified and this release of the 2018 loss factors was not implemented. Following additional stakeholder consultations, the AESO published revised 2018 loss factors on April 24, 2018.

On August 30, 2018, the AESO indicated that the loss factor calculation had been incorrectly applied with respect to hours in which both imports and exports were scheduled on an intertie beginning January 1, 2017. As a result the AESO suspected that it had been non-compliant with subsection 8(5)(a)(i) of the Rule for the periods of 2017 and 2018. The AESO expects that fewer than five percent of hours were affected. However, as the AESO noted, individual impacts will not be known until recalculations have been completed for all loss factors for a year. The AESO informed market participants of this error in a stakeholder meeting held on July 26, 2018.

The MSA intends to temporarily forbear with respect to the AESO contravention of subsection 8(5)(a)(i) of the Rule, conditional upon the AESO posting correct loss factors for 2017 and 2018 by February 28, 2019.

With respect to the suspected contravention of subsection 3(1) of the Rule concerning the publication of 2018 loss factors, the MSA does not intend to pursue the matter further.

The MSA intends to publish this letter by posting it on our website with the AESO's letters dated December 19, 2017 and August 30, 2018 appended. If you have any questions please contact Jecielle Alonso at 403-538-3439.

Sincerely,

/s/ Doug Doll

Director, Corporate Services and Compliance

cc: Jerry Mossing – AESO

December 19, 2017

Market Surveillance Administrator
Suite 500, 400 – 5 Avenue SW
Calgary, Alberta T2P 0L6

Attention: Mr. Doug Doll

Dear Doug:

Re: **Request for Forbearance Related to Section 501.10 of the ISO Rules, *Transmission Loss Factors* (“Loss Factor Rule”)**

This letter provides the details of a forbearance request with regard to subsection 3(1) of the Loss Factor Rule, which requires the AESO to make final loss factors for 2018 available on the AESO website no later than the fifth business day of November, 2017.

On October 6, 2017, the AESO filed with the Market Surveillance Administrator (MSA) the details of a request for forbearance with the above noted section of the ISO rules. That request was due to the fact that the AESO would not be able to publish the 2018 loss factors by the fifth business day of November, 2017.

Pursuant to that forbearance request to the MSA, on November 24, 2017, the MSA issued a letter stating it would temporarily forbear in respect of AESO non-compliance with subsection 3(1) of the Loss Factor Rule, conditional upon the AESO posting 2018 loss factors by no later than December 31, 2017.

The AESO has continued its preparations for the calculation of 2018 loss factors since submitting the earlier forbearance request and has determined it will be unable to meet the December 31, 2017 publication deadline. As anticipated in the earlier forbearance request, the AESO consulted with stakeholders on revised project inclusion criteria and filed an amended Loss Factor Rule with the Alberta Utilities Commission (Commission) on November 27, 2017 that incorporated the revised criteria. The Commission issued a letter on December 8, 2017, confirming the Loss Factor Rule amendment became effective on December 7, 2017.

However, the AESO has encountered unanticipated complexity in preparing the 2016 energy market merit order data required for the 2018 loss factor calculations and now anticipates the required data will not be available until January, 2018. The AESO will then require several weeks to review and validate the input data, calculate the loss factors, and complete quality checks on the results. The AESO accordingly requests further forbearance on the earlier forbearance requirement to post 2018 loss factors by no later than December 31, 2017. The AESO anticipates that it will be in compliance with the Loss Factor Rule no later than the end of March, 2018, following the publication of the 2018 loss factors.

The loss factors that will be published by the end of March will apply retroactively to January 1, 2018. The loss factors can be implemented through the AESO's financial settlement process that issues statements of account in April, 2018 (for initial settlement for March, 2018 and interim settlement for January, 2018) and in May, 2018 (for initial settlement for April, 2018 and interim settlement for February, 2018). This implementation will avoid disruption to the normal billing cycles expected by market participants.

The AESO will closely monitor the preparation of the 2016 energy market merit order data that is expected to be available in January 2018. In the event the finalization of the data is delayed beyond January 2018, the AESO will implement an alternative process to prepare the required data to allow calculation of the 2018 loss factors by the end of March 2018.

As well, if the 2016 energy market merit order data can be finalized earlier than currently expected, or if other steps in the development of 2018 loss factors can be accelerated, the AESO will publish 2018 loss factor as early as possible before the end of March, 2018.

Accordingly, the AESO is requesting that pursuant to section 57(1) of the *Alberta Utilities Commission Act* the MSA grant forbearance to the AESO for subsection 3(1) of section 501.10 of the ISO rules, *Transmission Loss Factors*, to March 31, 2018. If acceptable to the MSA, the AESO requests written confirmation of the above forbearance.

Please do not hesitate to contact Diana Wilson if you have questions or require anything further from us.

We look forward to hearing from you.

Yours truly,



Jerry Mossing
Vice-President, Transmission

cc: Diana Wilson, Director Interjurisdictional Affairs and Compliance

August 30, 2018

Market Surveillance Administrator
Suite 500, 400 – 5 Avenue SW
Calgary, Alberta T2P 0L6

Attention: Mr. Doug Doll

Dear Doug:

Re: **Request for Forbearance Related to Section 501.10 of the ISO Rules, Transmission Loss Factors (“Loss Factor Rule”)**

This letter provides the details of a forbearance request with regard to subsection 8(5)(a)(i) of the Loss Factor Rule, which requires the AESO to establish loss factors for system access services provided under Rate IOS of the ISO tariff, *Import Opportunity Service*, self-reported to the MSA on July 31, 2018.

The process used to establish loss factors involves hourly calculations which are then averaged over a calendar year. Within subsection 8(5)(a)(i), as one step in the process described in the Loss Factor Rule, the AESO is required to calculate transmission system losses for system access service provided under Rate IOS in an hour based on reducing the volume for metered energy supplied to the transmission system under that service to zero (0).

Through its on-going efforts to optimize and monitor the software solution developed to implement the process described in the Loss Factor Rule, the AESO has discovered that the implementation of the process has resulted in the AESO being non-compliant with subsection 8(5)(a)(i) of the Loss Factor Rule under certain conditions for the calendar years 2017 and 2018. Specifically, when both import and export are scheduled in the same hour on an intertie, the calculation of losses for service under Rate IOS in that hour is incorrectly based on reducing the net flow on the intertie to zero, rather than reducing only the import volume to zero and allowing the export volume to remain. This incorrect implementation of the calculation has affected the loss factors calculated and applied to determine losses charges to market participants since January 1, 2017.

The frequency of import and export being both scheduled in the same hour on an intertie is low. 2017 and 2018 loss factors are based on historical energy market data for 2015 and 2016, respectively. The AESO has examined the frequency of simultaneous import and export on the Alberta-BC intertie in calendar years 2014-2016 and found it existed in about 0.5% of all hours in 2016 and in about 4% of all hours in each of 2014 and 2015. (Although not affecting loss factors within the contravention date range, the AESO included 2014 in its examination because of the disparity in frequency results between 2016 and 2015.)

As the same software solution has been used for loss factor calculations since the current incremental loss factor methodology became effective on January 1, 2017, all loss factors calculated since then have been affected.

The AESO identified a potential concern with the calculation of loss factors for imports at the end of June, 2018. The AESO then confirmed the approach employed in the software solution, assessed its compliance with the Loss Factor Rule, evaluated the potential impact, and investigated options for correction.

As a result, the AESO is proceeding to implement revisions to the software solution such that it will correctly calculate loss factors for imports and anticipates completing the implementation in mid-September. The AESO will then use the corrected software solution to first calculate loss factors for 2019 (no contravention of the Loss Factor Rule is expected to occur for loss factors to be calculated for the calendar year 2019) and then to recalculate loss factors for 2018 and 2017. As market participants have been billed for losses charges in calendar years 2017 and 2018, the recalculated loss factors for 2017 and 2018 will be used to adjust and rebill losses charges to market participants who were impacted by the incorrect calculation.

As explained above, the frequency of hours in which loss factors were incorrectly calculated for imports appears to be less than 5% of total hours for the years 2017 and 2018. The potential impact on loss factors for other system access services, including those for generating units and demand opportunity service, is expected to be very small, as imports comprise less than 5% of annual metered volumes supplied to the transmission system. However, as loss factors are specific to the location and contribution to losses of each source asset and demand opportunity service, the impact on individual services will not be known until all loss factors for a year have been recalculated.

The AESO advised market participants of this matter at a stakeholder technical meeting held on July 26, 2018, and has made the presentation from the meeting publicly available on the AESO's website. The AESO also referred to the matter in its Module C Methodology Filing in Compliance With Decision 790-D06-2017, submitted to the Alberta Utilities Commission (Commission) in Proceeding 790 on August 3, 2018. The compliance filing is publicly available in the eFiling System on the Commission website.

There is no risk to the Alberta interconnected electric system as a result of this contravention.

Accordingly, the AESO is requesting that pursuant to section 57(1) of the *Alberta Utilities Commission Act* the MSA grant forbearance to the AESO for subsection 8(5)(a)(i) of section 501.10 of the ISO rules, *Transmission Loss Factors*, to February 28, 2019. If acceptable to the MSA, the AESO requests written confirmation of the above forbearance.

Please do not hesitate to contact Diana Wilson if you have questions or require anything further from us.

We look forward to hearing from you.

Yours truly,


on behalf of Jerry Mossing

Jerry Mossing

Vice-President, Transmission

cc: Diana Wilson, Director Interjurisdictional Affairs and Compliance