



Alberta Electric System Operator

**2022 Independent System Operator Tariff Update and Rider J
Amendment Application**

December 17, 2021

Alberta Utilities Commission

Decision 26980-D01-2021

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Proceeding 26980

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Published by the:

Alberta Utilities Commission

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1 Decision summary

1. The Alberta Utilities Commission approves the Alberta Electric System Operator's (AESO) application for its 2022 update to the Independent System Operator (ISO) tariff, subject to the amendments discussed further in this decision, as well as the AESO's request to include the cost of providing solar forecasting services for solar-powered assets in Rider J.

2 Background and process

2. In Decision 2010-606,¹ the Commission approved the AESO's proposal to file major tariff updates in multi-year intervals and much simpler updates on an annual basis. Following from that approval, on November 15, 2021, the AESO filed an application with the Commission requesting approval of its 2022 update to the ISO tariff, pursuant to sections 30 and 119 of the *Electric Utilities Act*.

3. The Commission issued a notice of application on November 16, 2021, requesting interested parties submit a statement of intent to participate (SIP) by November 24, 2021.² No party submitted a SIP by the November 24, 2021, deadline. The Commission required clarification to the AESO's application which was sought through information requests (IRs). For the purposes of this application, the Commission considers the proceeding record to have closed on December 8, 2021, the date the AESO responded to the Commission's IRs.

3 Application and decision

4. The AESO requested approval of the following in its application:³
- (i) the updated 2022 rate calculations included in Appendix B⁴ of the application;
 - (ii) the proposed 2022 ISO tariff Rate DTS (demand transmission service), Rate FTS (Fort Nelson demand transmission service), Rate DOS (demand opportunity service), Rate XOS (export opportunity service), Rate XOM (export opportunity merchant service), Rate PSC (primary service credit) and Rate STS (supply transmission service); and

¹ Decision 2010-606: Alberta Electric System Operator, 2010 ISO Tariff, Proceeding 530, Application 1605961-1, December 22, 2010, paragraphs 546-551.

² Exhibit 26980-X0011, Notice of application.

³ Exhibit 26980-X0002, 2022 ISO Tariff Update and Rider J Amendment Application, paragraph 7.

⁴ Exhibit 26980-X0004, Appendix B - 2022 Rate Calculations.

(iii) the amended Rider J included as Appendix F⁵ of the application.

5. In the following sections, the Commission makes findings on whether the AESO's tariff update application, and the revised rates, are consistent with the methodology approved in Decision 2010-606, and on the AESO's proposal to include the recovery of solar forecasting service costs in Rider J.

6. In reaching the determinations set out within this decision, the Commission has considered all relevant materials comprising the record of this proceeding. References in this decision to specific parts of the record are intended to assist the reader in understanding the Commission's reasoning relating to a particular matter and should not be taken as an indication that the Commission did not consider all relevant portions of the record with respect to this matter.

3.1 Does the AESO's 2022 forecast revenue requirement and rates update comply with Decision 2010-606?

7. The annual ISO tariff updates are to consist of the following three components:⁶

- (i) An annual revenue requirement update using the wires cost forecast methodology described in Section 2.2 of the application, plus forecasts for ancillary services costs, losses costs and administration costs approved by the AESO board for the forecast year.
- (ii) Revised rate levels for each AESO rate calculated from the forecast revenue requirement and forecast billing determinants using rate calculations and the rate design approved in the most recent comprehensive tariff application.
- (iii) Annual updates to investment amounts approved in the most recent comprehensive tariff, reflecting an escalation factor based on the most recent Conference Board of Canada Alberta Consumer Price Index (CPI).

8. The AESO's tariff update application consists, in part, of formulaic updates to its annual revenue requirement; rates, riders and maximum investment levels; and a 2021 escalation factor. Each of these items have been reviewed by the Commission in the current proceeding.

9. The Commission confirms that the AESO's 2022 ISO tariff update application has been updated consistent with the three components detailed above. The Commission will provide comment on each of the components below.

3.1.1 The AESO's annual revenue requirement update

10. The AESO's revenue requirement included 2022 forecast costs related to wires, ancillary services, transmission line losses, and the AESO's own administration (which includes other industry costs, and general and administrative costs) that it needs to recover through its rates. The AESO's forecast revenue requirement was included in Appendix B of its application.⁷

⁵ Exhibit 26980-X0008, Appendix F - Proposed Amendments to Rider J.

⁶ Decision 2010-606, paragraph 537.

⁷ Exhibit 26980-X0004, Appendix B - 2022 Rate Calculations, B-1 Rev Req and B-2 TFO Rev Req worksheets.

11. The AESO determined the 2022 wires costs for transmission facility owners (TFOs) using the following method (which was described in Section 2.2.1 of the AESO's 2014 ISO tariff application and 2013 ISO tariff update, approved in Decision 2010-606, referred to in Decision 2014-242⁸ and updated in Decision 22093-D02-2017⁹):

- (a) If a TFO has received final Commission approval for its applicable tariff, the AESO includes the approved cost for that TFO tariff.
- (b) If a TFO has applied for its tariff, the Commission has issued an initial decision on the application, and the TFO has submitted a refiling in compliance with the decision, the AESO includes the TFO tariff costs included in the refiling.
- (c) If a TFO has applied for its tariff but the Commission has not yet issued an initial decision on the application or an initial decision has been issued but the TFO has not yet submitted its compliance refiling, the AESO includes the most recent of the following:
 - (i) the TFO tariff costs last approved by the Commission on a final basis for the TFO plus 72 per cent of any increase or decrease included in the TFO's tariff application above or below the prior approved costs; and
 - (ii) the TFO tariff costs last applied for by the TFO in a compliance refiling plus 72 per cent of any increase or decrease included in the TFO's tariff application above or below the prior approved costs.
- (d) If a TFO has not yet applied for its tariff, the AESO includes the most recent of the following:
 - (i) the TFO tariff costs last approved by the Commission on either a final or interim basis; and
 - (ii) the TFO tariff costs last applied for by the TFO in a compliance refiling.

12. In response to the Commission's IR¹⁰ about the amounts used to calculate AltaLink Management Ltd.'s wires cost forecast, the AESO confirmed that AltaLink's last approved revenue requirement for 2021 was \$848.2 million and AltaLink's 2022 applied-for revenue requirement was \$811.5 million. These amounts are revised from the amounts included to calculate the wires costs in the AESO's application. The AESO had included a 2021 approved amount of \$856.4 million and the 2022 applied-for amount of \$816.2 million. The AESO explained that the 2021 approved amount of \$856.4 million included the 2021 revenue requirement amounts for the PiikaniLink Limited Partnership (PLP) and KainaiLink Limited Partnership (KLP) with the 2021 revenue requirement for AltaLink.

13. The result of the change is a reduction of \$5.7 million¹¹ to the total wires forecast cost and the AESO's 2022 forecast revenue requirement. The revised 2022 forecast revenue requirement

⁸ Decision 2014-242: Alberta Electric System Operator, 2014 ISO Tariff Application and 2013 ISO Tariff Update, Proceeding 2718, Application 1609765-1, August 21, 2014.

⁹ Decision 22093-D02-2017: Alberta Electric System Operator, 2017 ISO Tariff Update, Proceeding 22093, April 4, 2017.

¹⁰ Exhibit 26980-X0013, AUC IR Round 1 to the AESO (001-002), AESO-AUC-2021DEC01-001.

¹¹ Using Section (c)(i) of the AESO's approved methodology to calculate wires costs:
= [848.2 + 0.72(811.5-848.2)] - [856.4 + 0.72(816.2-856.4)] = (5.7)

using the updated wires costs is found in response to Commission IR AESO-AUC-2021DEC01-001(c).¹²

14. The AESO explained that ancillary services costs, the transmission line losses costs, and the AESO's own administration costs are approved by the AESO board in accordance with the *Transmission Regulation*.¹³ The AESO acknowledged that the 2022 forecast ancillary services, losses and administrative costs had not, as of the filing of the application, been approved by the AESO board, and proposed to file a letter to advise the Commission of the AESO board approval once it has been received.

15. The Commission observes that a letter has not been filed onto the record of this proceeding by the AESO advising that the 2022 forecast ancillary services costs, the transmission line losses costs, and the AESO's own administration costs have been approved on a final basis. The Commission directs the AESO to submit, as a post-disposition filing, the letter confirming AESO board approval for these costs by January 31, 2022. Differences arising between the forecast costs included in this application and the final AESO board-approved costs or the AESO's actual costs will have to be settled through Rider C.¹⁴

3.1.2 Rate calculations and billing determinants

16. The AESO explained that the 2022 rate calculations, found in tables B-1 through B-16 of Appendix B to its application, used the following inputs:

- (i) the 2022 forecast revenue requirement discussed in Section 2 of the application;
- (ii) the functionalization and classification of wires costs and the point-of-delivery cost function approved for 2020 in Decision 22942-D02-2019;¹⁵ and
- (iii) the 2022 forecast billing determinants prepared by the AESO.

17. As detailed above, the 2022 forecast revenue requirement was amended in response to Commission IR AESO-AUC-2021DEC01-001(c). The change to the forecast revenue requirement has an effect on the rates that were filed in Appendix B and Appendix D^{16 17} by the AESO in its application.

18. The Commission finds that the AESO's rationale for increasing the 2022 forecast billing determinants used in the tariff update application is reasonable, given the increase in oil prices in 2021.

¹² Exhibit 26980-X0016, Attachment AESO-AUC-2021DEC01-001(c).

¹³ Exhibit 26980-X0002, 2022 ISO Tariff Update and Rider J Amendment Application, paragraph 14.

¹⁴ Rider C - *Deferral Account Adjustment Rider*, applies to system access service provided under Rate DTS, Rate FTS, and Rate PSC. The ISO must recover or refund through Rider C the accumulated deferral account balances which are comprised of differences between revenues and costs incurred in providing system access service to market participants.

¹⁵ Decision 22942-D02-2019: Alberta Electric System Operator, 2018 ISO Tariff Application, Proceeding 22942, September 22, 2019.

¹⁶ Exhibit 26980-X0006, Appendix D - 2022 ISO Tariff Clean.

¹⁷ Appendix D is the ISO Tariff Terms and Conditions that have been updated to include the updated rates.

19. For the above reasons, the Commission approves the 2022 ISO tariff Rate DTS, Rate FTS, Rate DOS, Rate XOS, Rate XOM, Rate PSC and Rate STS as set out in tables B-1 through B-16 of the AESO's response to Commission IR AESO-AUC-2021DEC01-001(c).

20. The AESO is directed to submit for information, as a post-disposition filing, a revised Appendix B to reflect 2022 rate calculations found in tables B-1 through B-16 in the IR response to AESO-AUC-2021DEC01-001(c), and a revised Appendix D on, or before, December 22, 2021.

3.1.3 Annual updates to maximum investment levels

21. In accordance with Decision 2010-606, the tariff update should include an update to maximum investment level amounts that were approved in the 2018 ISO tariff application escalated using additional Statistics Canada cost index values and the most recent Conference Board of Canada forecast of the Alberta CPI. The AESO included the update calculation to the maximum investment levels in Appendix C¹⁸ of its application.

22. The Commission is satisfied that maximum investment level amounts, escalated by a factor of 1.0640 that is based on a composite of specified recent inflation indices, are consistent with the rate calculation methodology previously approved by the Commission in Decision 3473-D01-2015 (Errata)¹⁹ and the investment amount first approved in Decision 22942-D02-2019. These amounts are approved as filed.

3.2 Should Rider J - Wind forecasting service cost recovery rider be amended to include the recovery of solar forecasting services?

23. In 2010, the AESO implemented a centralized wind forecasting service for Alberta. It did so as part of its ongoing efforts to integrate more wind power on the interconnected electric system. The wind forecast service is intended to assist the AESO in making risk assessments and operational decisions to ensure reliable operation of the transmission system. Wind generators pay the cost of the wind forecasting service, similar to other generators that bear their own cost of providing forecast data. The cost of this service is collected through the Rider J charge. The AESO updates Rider J in its annual ISO tariff update application to ensure the revenue and costs for wind forecasting do not result in a shortfall or surplus.

24. In its application, the AESO proposed including the cost of providing solar forecasting services for solar-powered assets in Rider J. The AESO explained that solar assets are causing a need for additional forecasting services because, similar to wind assets, the production of energy from solar assets can be variable in nature and can affect the reliable operation of the transmission system.

25. The estimated cost for the AESO to provide wind and solar forecasting services in 2022 is \$125,000. This is an increase of approximately \$70,000 from the 2021 approved amount for wind forecasting of approximately \$55,000 and is attributable to the increased scope of services being provided with the addition of solar forecasting. This amount would be recovered through a Rider J charge of \$0.01 per megawatt hour (MWh) to the wind and solar power generated.

¹⁸ Exhibit 26980-X0005, Appendix C - 2022 Escalation Factor and Investment Levels.

¹⁹ Decision 3473-D01-2015 (Errata): Alberta Electric System Operator, 2014 ISO Tariff Compliance Filing Pursuant to Decision 2014-242 Module 1, Proceeding 3473, Application 1610935-1, June 17, 2015.

26. In an IR, the Commission sought clarification from the AESO of the mechanics of Rider J, and if it intends to recover wind forecasting and solar forecasting services separately (making sure wind generators are paying for wind forecasting service costs, and solar farms are paying for solar services), or whether the recovery of costs will be in the aggregate. In response, the AESO confirmed that it is “proposing to recover the costs and revenues for wind and solar through Rider J on an aggregated basis.” In support of recovering the costs on an aggregated basis, the AESO stated that “the effort required to recover and settle variances for wind and solar forecasting separately would be disproportionately large in comparison to the quantum of costs in question.”²⁰

27. The Commission finds it is reasonable for the AESO to include both wind and solar forecasting services in Rider J because the solar forecast service, similar to the current wind forecast service, is intended to assist the AESO in making risk assessments and operational decisions to ensure reliable operation of the transmission system. Additionally, the cost of both of these services is not material.

28. The Commission approves the AESO’s proposal to include the cost and recovery of solar forecasting services for solar-powered assets in Rider J. It also finds the AESO’s methodology to calculate the Rider J charge, and the rate of \$0.01/MWh, required to recover the cost of its wind and solar forecasting services is reasonable, and is therefore approved.

4 Order

29. It is hereby ordered that:

- (1) The Alberta Electric System Operator’s 2022 Independent System Operator tariff update application is approved using the rates included in response to IR AESO-AUC-2021DEC01-001(c), effective January 1, 2022.
- (2) The Alberta Electric System Operator’s proposed amendment to include wind and solar forecasting services in Rider J is approved, effective January 1, 2022.

Dated on December 17, 2021.

Alberta Utilities Commission

(original signed by)

Carolyn Dahl Rees
Chair

²⁰ Exhibit 26980-X0015, AESO-AUC-2021DEC01-001 and 002, AESO-AUC-2021DEC01-002, PDF page 4.

Appendix 1 – Proceeding participants

Name of organization (abbreviation) Company name of counsel or representative
Alberta Electric System Operator (AESO)

Alberta Utilities Commission
Commission panel C. Dahl Rees, Chair
Commission staff C. Strasser G. Bourque S. Karim

Appendix 2 – Summary of Commission directions

This section is provided for the convenience of readers. In the event of any difference between the directions in this section and those in the main body of the decision, the wording in the main body of the decision shall prevail.

1. The Commission observes that a letter has not been filed onto the record of this proceeding by the AESO advising that the 2022 forecast ancillary services costs, the transmission line losses costs, and the AESO’s own administration costs have been approved on a final basis. The Commission directs the AESO to submit, as a post-disposition filing, the letter confirming AESO board approval for these costs by January 31, 2022. Differences arising between the forecast costs included in this application and the final AESO board-approved costs or the AESO’s actual costs will have to be settled through Rider C. paragraph 15
2. The AESO is directed to submit for information, as a post-disposition filing, a revised Appendix B to reflect 2022 rate calculations found in tables B-1 through B-16 in the IR response to AESO-AUC-2021DEC01-001(c), and a revised Appendix D on, or before, December 22, 2021. paragraph 20