



Alberta Electric System Operator

2023 Independent System Operator Tariff Update

December 21, 2022

Alberta Utilities Commission

Decision 27777-D01-2022

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Proceeding 27777

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Eau Claire Tower

1400, 600 Third Avenue S.W.

Calgary, Alberta T2P 0G5

Telephone: 310-4AUC (310-4282 in Alberta)

1-833-511-4AUC (1-833-511-4282 outside Alberta)

Email: info@auc.ab.ca

Website: www.auc.ab.ca

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1 Decision summary

1. The Alberta Utilities Commission approves the Alberta Electric System Operator's (AESO) application for its 2023 update to the Independent System Operator (ISO) tariff, including its proposed changes to the generating unit owner's contribution (GUOC) rates and its process to update GUOC rates annually.

2 Background

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. On November 14, 2022, the AESO filed an application with the Commission requesting approval of its 2023 update to the ISO tariff, pursuant to sections 30 and 119 of the *Electric Utilities Act*.

3. The Commission issued notice of the application on November 15, 2022, requesting interested parties submit a statement of intent to participate (SIP) by November 22, 2022.² The Alberta Direct Connect Consumers Association (ADC) was the only party to submit a SIP.³ In its SIP, the ADC requested the AESO amend its application to reflect the Commission's direction, set out in Decision 26911-D01-2022,⁴ to revise the payment in lieu of notice terms and conditions. The Commission determined that ADC's request was outside the scope of an annual tariff update.⁵

4. 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 7, 2022, the date the AESO responded to the Commission's IRs.

3 Application and decision

5. The AESO requested approval of the following in its application:⁶

- (i) the updated 2023 rate calculations included in Appendix B⁷ of the application; 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 27777-X0026, Notice of application.

³ Exhibit 27777-X0027, Statement of intent to participate and 27777-X0028, ADC SIP – Supplemental.

⁴ Decision 26911-D01-2022: Alberta Electric System Operator, Bulk, Regional and Modernized Demand Opportunity Service Rate Design Application, Proceeding 26911, November 10, 2022.

⁵ Exhibit 27777-X0030, AUC letter - Ruling on ADC motion and direction on further process.

⁶ Exhibit 27777-X0002, 2023 ISO Tariff Update Application, paragraph 7.

⁷ Exhibit 27777-X0004, Appendix B – 2023 Rate Calculations.

- (ii) the proposed 2023 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), Rate STS (supply transmission service), Rider J, and GUOC rates.

6. In the following sections, the Commission makes findings on whether the AESO's application, and the revised rates, are consistent with the methodology approved in Decision 2010-606. The AESO's revenue requirement is reviewed in other proceedings and processes, and is not considered by the Commission in this proceeding.⁸

7. The Commission reviewed the entire record in coming to this decision; lack of reference to a matter addressed in evidence or argument does not mean that it was not considered.

3.1 Does the AESO's 2023 forecast revenue requirement and rates update comply with Decision 2010-606?

8. The annual ISO tariff updates are to consist of the following three components:⁹

- (i) An annual revenue requirement update using the wires cost forecast methodology approved in Decision 2010-606 and updated in Decision 22093-D02-2017,¹⁰ 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).

9. The AESO's application consists, in part, of formulaic updates to its annual revenue requirement; rates, riders and maximum investment levels; and a 2023 escalation factor. Each of these items were reviewed by the Commission in the current proceeding.

10. The Commission confirms that the AESO's application has been updated consistent with the three components detailed above. The Commission provides its comments on each of the components below.

3.1.1 The AESO's annual revenue requirement update

11. The AESO's revenue requirement included 2023 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.

⁸ See Decision 22942-D02-2019: Alberta Electric System Operator, 2018 ISO Tariff Application, Proceeding 22942, September 22, 2019, Section 3.1, paragraphs 44-48, for a discussion of how the AESO's revenue requirement is considered in various AUC proceedings and/or other processes.

⁹ Decision 2010-606, paragraph 537.

¹⁰ Decision 22093-D02-2017: Alberta Electric System Operator, 2017 ISO Tariff Update, Proceeding 22093, April 4, 2017.

The AESO forecast a 2023 revenue requirement of \$2,548.6 million. This represents an increase of \$203.2 million (or 8.7 per cent) over the 2022 total revenue requirement forecast of \$2,345.5 million. The AESO attributed the increase to a forecast increase in 2023 of \$65.5 million (or 3.5 per cent) in wires costs, an increase of \$92.9 million (or 44.2 per cent) in 2023 ancillary services costs and an increase of \$40.5 million (or 28.3 per cent) in 2023 losses costs. The AESO's forecast revenue requirement was included in Appendix B of its application.¹¹

12. The AESO determined the 2023 wires costs for transmission facility owners (TFOs) using the following method:¹²

- (a) If a TFO has received final Commission approval for its applicable tariff, the AESO includes the approved cost for the 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.

13. 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 2023 forecast ancillary services, losses and administration 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.¹⁴

¹¹ Exhibit 27777-X0004, Appendix B – 2023 Rate Calculations, B-1 Rev Req and B-2 TFO Rev Req worksheets.

¹² This methodology 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 2014-242 and updated in Decision 22093-D02-2017.

¹³ Exhibit 27777-X0002, application, paragraph 14.

¹⁴ Exhibit 27777-X0002, application, paragraph 16.

14. The Commission is satisfied that the AESO's revenue requirement forecast has been prepared in accordance with the approved methodology.

15. The Commission observes that a letter has not been filed onto the record of this proceeding by the AESO advising that the 2023 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, a letter confirming AESO board approval for these costs by January 31, 2023. 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.¹⁵

3.1.2 Rate calculations and billing determinants

16. The AESO explained that the 2023 rate calculations used the following inputs:

- (i) the 2023 forecast revenue requirement;
- (ii) the functionalization and classification of wires costs and the point-of-delivery costs function approved for 2020 in Decision 22942-D02-2019;¹⁶ and
- (iii) the 2023 forecast billing determinants prepared by the AESO.

17. The Commission finds that the AESO's use of its 2021 Long-term Outlook,¹⁷ that forecast relatively flat load growth in 2023, as the basis to determine 2023 billing determinants in the tariff update is reasonable.

18. For the above reasons, the Commission approves the 2023 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 Appendix B to the application.

19. In accordance with Decision 26980-D01-2021,¹⁸ the calculation of the Rider J charge should include both wind and solar annual forecasting services costs. The Commission finds that the AESO's methodology to calculate the Rider J charge, the rate of \$0.00 per megawatt hour, and the use of over-collected amounts from prior years to offset current year Rider J charges to be reasonable, and is therefore approved.

3.1.3 Annual updates to maximum investment levels

20. 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

¹⁵ 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 comprise differences between revenues and costs incurred in providing system access service to market participants.

¹⁶ Decision 22942-D02-2019: Alberta Electric System Operator, 2018 ISO Tariff Application, Proceeding 22942, September 22, 2019.

¹⁷ <https://www.aeso.ca/assets/Uploads/grid/lto/2021-Long-term-Outlook.pdf>.

¹⁸ Decision 26980-D01-2021: Alberta Electric System Operator, 2022 Independent System Operator Tariff Update and Rider J Amendment Application, Proceeding 26980, December 17, 2021, paragraphs 27-28.

Conference Board of Canada forecast of the Alberta CPI. The AESO included the updated calculation to the maximum investment levels in Appendix C¹⁹ of its application.

21. The Commission is satisfied that maximum investment level amounts, escalated by a factor of 1.0979 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)²⁰ and the investment amount first approved in Decision 22942-D02-2019. These amounts are approved as filed.

4 Annual updates to GUOC

22. In Decision 22942-D02-2019,²¹ the Commission approved the AESO's proposed methodology to calculate GUOC rates and the GUOC rates that are currently in effect.²²

23. The AESO proposed updates to the GUOC rates for 2023, using the approved methodology, and included the proposed 2023 GUOC rates in Appendix E²³ of its application. The AESO also stated that it had created a process to update the GUOC rates annually and the process was followed as part of the current ISO tariff update application, and will be applied as part of future tariff update applications.²⁴

24. The AESO developed the proposed 2023 GUOC rates, by region, as follows:²⁵

\$10,000/MW [per megawatt], payable by all Generation Facility Owners (GFOs) regardless of location in the province for upgrades to existing transmission facilities; plus

A charge of not more than \$40,000/MW payable by all GFOs based on the location of the GFO considering the following:

- (a) \$0/MW: generation development in the region can help defer load-driven transmission development
- (b) \$10,000/MW: the region has significant existing or near-term generation integration capability
- (c) \$20,000/MW: the region has limited existing or near-term generation integration capability and limited development interest
- (d) \$30,000/MW: the region has limited existing or near-term generation integration capability and significant development interest

¹⁹ Exhibit 27777-X0005, Appendix C – 2023 Escalation Factor and Investment Levels.

²⁰ Decision 3473-D01-2015 (Errata): Alberta Electric System Operator, 2014 ISO Tariff Compliance Filing Pursuant to Decision 2014-242 Module I, Proceeding 3473, Application 1610935-1, June 17, 2015.

²¹ Decision 22942-D02-2019: Alberta Electric System Operator, 2018 ISO Tariff Application, Proceeding 22942, September 22, 2019.

²² Decision 22942-D02-2019, paragraph 323.

²³ Exhibit 27777-X0014, Appendix E – Clean Section 7.

²⁴ Exhibit 27777-X0002, application, paragraphs 57-58; and Exhibit 27777-X0033, Attachment AESO-AUC-2022NOV30-001(a), PDF pages 6-10.

²⁵ Exhibit 27777-X0002, application, paragraph 55.

- (e) \$40,000/MW: the region does not have existing or near-term generation integration capability. [footnote omitted]

25. The proposed rates for the six planning regions, which the AESO is requesting to be made effective January 1, 2023, are as follows:

Table 1. 2023 generating unit owner's contribution rates

Planning region	Current rate (\$/MW)
Northwest	10,000
Northeast	30,000
Edmonton	20,000
Central	20,000
Calgary	30,000
South	50,000

Source: Exhibit 27777-X0002, application, Table 5-1 – 2023 Generating Unit Owner's Contribution Rates

26. The Commission is satisfied that the GUOC rates are consistent with the rate calculation methodology previously approved by the Commission in Decision 22942-D02-2019. These amounts are approved as filed.

27. The Commission also approves the AESO's proposed yearly GUOC update and process. As explained in the AESO's GUOC Rates and Yearly Updates Process document, "The purpose of the GUOC is to provide a long-term siting signal to generators to site in areas that would be most beneficial to load."²⁶ An annual review of planning region GUOC rates would allow for the AESO to send those signals in a structured and timely manner.

28. In response to an IR,²⁷ the AESO provided further detail why particular planning region GUOC rates changed. For example, in the northeast planning region, the anticipated co-generation development at Suncor Energy Inc. will reduce the available generation integration capability. Therefore, the AESO proposed to increase the GUOC rate from \$20,000/MW to \$30,000/MW in the northeast planning region. The Commission found this information helpful and expects the AESO to provide similar information, when proposing changes to GUOC rates, in future ISO tariff update applications.

²⁶ Exhibit 27777-X0033, Attachment AESO-AUC-2022NOV30-001(a), PDF page 6, and <https://www.aeso.ca/assets/GUOC-Rates-and-Yearly-Updates-Process.pdf>

²⁷ Exhibit 27777-X0032, AESO-AUC-2022NOV30-001(c) and (d).

5 Order

29. It is hereby ordered that:

- (1) The Alberta Electric System Operator's 2023 Independent System Operator tariff update application is approved, effective January 1, 2023.
- (2) The Alberta Electric System Operator's proposed amendment to the methodology of regional assignment of the generating unit owner's contribution rates is approved, effective January 1, 2023.

Dated on December 21, 2022.

Alberta Utilities Commission

(original signed by)

Douglas A. Larder, KC
Vice-Chair

Appendix 1 – Proceeding participants

Name of organization (abbreviation) Company name of counsel or representative
Alberta Electric System Operator (AESO)
Alberta Direct Connect Consumers Association (ADC)

Alberta Utilities Commission
Commission panel D.A. Larder, KC, Vice-Chair
Commission staff M. Anderson (Commission counsel) C. Strasser S. Karim C. Meulenbroek

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 2023 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, a letter confirming AESO board approval for these costs by January 31, 2023. 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